

CURRICULUM VITAE

NAME: Saif Khairat, PhD, MPH, FAMIA

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ADDRESS:

428 Carrington Hall, Chapel Hill, NC 27514

EDUCATION:

Degree	Institution & Location	Dates	Concentration
M.P.H.	The University of North Carolina at Chapel Hill, Chapel Hill, NC	2017	Health Policy and Management
Ph.D.	University of Missouri, Columbia MO	2011	Health Informatics
M.S.	University of Missouri, Columbia MO	2007	Computer Science
B.S.	University of Missouri, Columbia MO	2005	Computer Science

PROFESSIONAL EXPERIENCE:

ACADEMIC EMPLOYMENT:

Institution	Position/Rank	Dates
The University of North Carolina at Chapel Hill	Associate Professor with Tenure	2021- Present
The University of North Carolina at Chapel Hill	Assistant Professor	2015-2021
University of Minnesota	Clinical Assistant Professor	2012-2014
Harvard Medical School	Research Associate	2010

OTHER EMPLOYMENT:

Institution or Firm	Position/Rank	Dates
Australasian Institute of Digital Health (AIDH)	International Digital Health Advisor, Clinical Informatics Fellowship Program	2022
Eastern Mediterranean Regional Office (EMRO), World Health Organization (WHO)	Digital Health and Innovation Consultant	2022
Lineberger Comprehensive Cancer Center, UNC	Member	2022 – Present
Inter-American Development Bank (IADB)	Telehealth Consultant	2020-2021
Cecil G. Sheps Center for Health Services Research, UNC	Research Fellow	2021 – Present
American College for Education	Informatics Curriculum and Content Developer	2020

BioMerieux Inc.	Global Affairs Consultant	2017
University of Minnesota & University of Michigan	VistA EHR Deployment Coordinator UP-HI (University Partnership for Health Informatics)	2013
University of Minnesota	Clinical and Translational Science Institute Biomedical Health Informatics (CTSI-BMI)	2012-2014
University of Missouri	Research Fellow	2011
Department of Student Life, University of Missouri	Web Programmer / Developer	2007-2010
National Biodiesel Board, Jefferson City, MO	Data / Statistical Modeling Assistant	2007
Vital Incorporated Columbia, MO	Software Developer	2006
Computer Science Department University of Missouri	Course Instructor	2007
Computer Science Department University of Missouri	Teaching Assistant	2006-2007
Computer Science Department University of Missouri	Peer Learning Assistant	2005

Honors, Awards, and Leadership

Date	Honor
2021-2022	Leadership Fundamentals Program Center for Faculty Excellence, UNC Chapel Hill
2019	Third Place, Best Paper Award Competition Knowledge and Data Mining Working Group, AMIA. Washington, DC
2019	Nominated for Best Student Paper Award 17 th World Congress of Medical and Health Informatics, Lyon, France
2019	Fellow of the American Medical Informatics Association (FAMIA). Atlanta, GA
2017	Six Sigma & LEAN Certification, The University of North Carolina at Chapel Hill
2016	Junior Faculty Development Award The University of North Carolina at Chapel Hill
2012	Best of the American Medical Informatics Association (AMIA) 2012 The Paths Toward Informatics Careers in the Post-HITECH Era
2011	Informatics Institute (MUII) Research Fellowship

	Recognized for ICU Clinical Communication Research
2010	Curator's Grant-In-Aid (GIA) Scholarship Recognized for Continued Success in Educational Endeavors
2008–2010	Graduate Assistantship, University of Missouri
2006–2008	Teaching Assistantship, University of Missouri Recognized for Outstanding Teaching Evaluations
2005	General Honors Certificate, University of Missouri Recognized for Completing Honors Courses with Excellent GPA
2004-2005	Computer Science Dean's List, University of Missouri
2004-2005	National Dean's List Recognized for Exceptional Grade Point Average (GPA)
2004	National Scholars Honor Society
2004	National Society of Collegiate Scholars Recognized for Outstanding Academic Achievement
2003	Kappa Mu Epsilon Recognized for Academic Distinction

BIBLIOGRAPHY AND PRODUCTS OF SCHOLARSHIP:

Books and Chapters:

1. **Khairat, S., & Feldman, S.** (2020). Undergraduate health informatics education. In Berner, E.S.(ed.) *Informatics Education in Healthcare*. Springer International Publisher. XVIII, 344. http://doi.org/10.1007/978-3-030-53813-2_6. ISBN: 978-3-030-53812-5.
2. **Khairat, S., & Rudrapatna V.** (2014). Building a telemedicine framework to improve the interactions between cancer patients and oncology triage nurses. In: Duffy V.G. (eds) *Digital Human Modeling. Applications in Health, Safety, Ergonomics and Risk Management*. DHM 2014. Lecture Notes in Computer Science, vol 8529. Springer, Cham. https://doi.org/10.1007/978-3-319-07725-3_38
3. **Khairat S., & Gong Y.** (2011) Clinical communication: human-computer and human-human interactions. In Jacko, J.A. (ed.) *Human-Computer Interaction. Users and Applications*. HCI 2011. Lecture Notes in Computer Science, vol 6764, pp. 182-91. Springer, Berlin, Heidelberg. http://doi.org/10.1007/978-3-642-21619-0_24
4. **Khairat, S.** (2009). *Clinical content tracking system: an efficient request tracking system via a graphical user interface*. VDM Verlag, Saarbrücken, DEU. ISBN: 978-3-639-18530-0.

Refereed Journal Publications:

(*data-based; †publication with student; ‡Corresponding/Senior author; ^Structuring Big-Data)

1. *‡**Khairat, S.**, Zou, B., & Adler-Milstein, J. (2022). Factors and reasons associated with low COVID-19 vaccine uptake among highly hesitant communities in the US. *American journal of infection control*, 50(3), 262–267. <https://doi.org/10.1016/j.ajic.2021.12.013>.
2. *Pruitt, Z., Howe, J. L., Krevat, S. A., **Khairat, S.**, & Ratwani, R. M. (2022). Development and pilot evaluation of an electronic health record usability and safety self-assessment tool. *JAMIA open*, 5(3), ooac070. <https://doi.org/10.1093/jamiaopen/ooac070>
3. *††**Khairat, S.**, Yao, Y., Coleman, C., McDaniel, P., Edson, B., & Shea, C. M. (2022). Changes in Patient Characteristics and Practice Outcomes of a Tele-Urgent Care Clinic Pre- and Post-COVID-19 Telehealth Policy Expansions. *Perspectives in health information management*, 19(Spring), 1k.
4. *††**Khairat, S.**, Wallace, E., Bohlmann, A., Zebrowski, A., Stabile, K., Yao, Y., Lakdawala, A., Edson, B., & Catlett, T. (2022). Digital Health Experiences of Incarcerated Populations Using Telemedicine in North Carolina Prisons. *Journal of patient experience*, 9, 23743735221092611. <https://doi.org/10.1177/23743735221092611>.
5. *††**Khairat, S.**, Coleman, C., Ottmar, P., Bice, T., & Carson, S. S. (2022). Evaluation of Physicians' Electronic Health Records Experience Using Actual and Perceived Measures. *Perspectives in health information management*, 19(1), 1k.
6. ‡ Jalilian, L., & **Khairat, S.** (2022). The Next-Generation Electronic Health Record in the ICU: A Focus on User-Technology Interface to Optimize Patient Safety and Quality. *Perspectives in health information management*, 19(1), 1g..
7. *‡**Khairat, S.**, Zalla, L., Gartland, A., & Seashore, C. (2021). Association Between Proficiency and Efficiency in Electronic Health Records Among Pediatricians at a Major Academic Health System. *Frontiers in digital health*, 3, 689646. <https://doi.org/10.3389/fdgth.2021.689646>.
8. *Mukhopadhyay, S., Basak, R., **Khairat, S.**, & Carney, T. J. (2021). Revisiting Provider Role in Patient Use of Online Medical Records. *Applied clinical informatics*, 12(5), 1110–1119. <https://doi.org/10.1055/s-0041-1740189>.
9. *‡**Khairat, S.**, Zalla, L. C., Adler-Milstein, J., & Kistler, C. E. (2021). U.S. Nursing Home Quality Ratings Associated with COVID-19 Cases and Deaths. *Journal of the American Medical Directors Association*, 22(10), 2021–2025.e1. <https://doi.org/10.1016/j.jamda.2021.07.034>
10. *‡**Khairat, S.**, McDaniel, P., Jansen, M., Francis, T., Edson, B., & Gianforcaro, R. (2021). Analysis of Social Determinants and the Utilization of Pediatric Tele-Urgent Care During the COVID-19 Pandemic: Cross-sectional Study. *JMIR pediatrics and parenting*, 4(3), e25873. <https://doi.org/10.2196/25873>.
11. *†^‡**Khairat, S.**, Bohlmann, A., Wallace, E., Lakdawala, A., Edson, B. S., Catlett, T. L., &

Dorn, S. D. (2021). Implementation and Evaluation of a Telemedicine Program for Specialty Care in North Carolina Correctional Facilities. *JAMA network open*, 4(8), e2121102.

<https://doi.org/10.1001/jamanetworkopen.2021.21102>.

12. †Vaughn, J., Kamkhood, D., Ford, S., Subramaniam, A. P., **Khairat, S.**, & Shah, N. (2021). An Innovative Undergraduate Interdisciplinary Research Course: Development, Implementation, and Student Perspectives. *Computers, informatics, nursing : CIN*, 39(10), 517–523.

<https://doi.org/10.1097/CIN.0000000000000836>.

13. *†^‡Hamad, J., Fox, A., Kammire, M. S., Hollis, A. N., & **Khairat, S.** (2021). Evaluating the Experiences of New and Existing Teledermatology Patients During the COVID-19 Pandemic: Cross-sectional Survey Study. *JMIR dermatology*, 4(1), e25999. <https://doi.org/10.2196/25999>

14. *^**Khairat, S.**, Coleman, C., Teal, R., Rezk, S., Rand, V., Bice, T., & Carson, S. S. (2021). Physician experiences of screen-level features in a prominent electronic health record: Design recommendations from a qualitative study. *Health informatics journal*, 27(1), 1460458221997914.

<https://doi.org/10.1177/1460458221997914>

15. †Griffin, A. C., Xing, Z., Mikles, S. P., Bailey, S., **Khairat, S.**, Arguello, J., Wang, Y., & Chung, A. E. (2021). Information needs and perceptions of chatbots for hypertension medication self-management: a mixed methods study. *JAMIA Open*, 4(2).

<https://doi.org/10.1093/jamiaopen/ooab021>

16. Kistler, C. E., Zimmerman, S., & **Khairat, S.** (2021). Health Information Technology Challenges and Innovations in Long-Term Care. *Journal of the American Medical Directors Association*. <https://doi.org/https://doi.org/10.1016/j.jamda.2021.03.017>

17. *†‡**Khairat, S.**, Metwally, E., Coleman, C., James, E., Eaker, S., & Bice, T. (2021). Association between ICU interruptions and physicians trainees' electronic health records efficiency. *Informatics for health & social care*, 1–10. Advance online publication.

<https://doi.org/10.1080/17538157.2021.1885037>

18. ‡McCall, T., Bolton, C. S., 3rd, Carlson, R., & **Khairat, S.** (2021). A systematic review of telehealth interventions for managing anxiety and depression in African American adults. *mHealth*, 7, 31. <https://doi.org/10.21037/mhealth-20-114>

19. *†‡**Khairat, S.**, Lin, X., Liu, S., Man, Z., Zaman, T., Edson, B., & Gianforcaro, R. (2021). Evaluation of patient experience during virtual and in-person urgent care visits: time and cost analysis. *Journal of Patient Experience*. <https://doi.org/10.1177/2374373520981487>

20. *‡McCall, T., Ali, M. O., Yu, F., Fontelo, P., & **Khairat, S.** (2021). Development of a Mobile App to Support Self-management of Anxiety and Depression in African American Women: Usability Study. *JMIR formative research*, 5(8), e24393. <https://doi.org/10.2196/24393>

21. *Sheets, L. R., Wallach, E., **Khairat, S.**, Mutrux, R., Edison, K., & Becevic, M. (2020). Similarities and Differences Between Rural and Urban Telemedicine Utilization. *Perspectives in*

health information management, 18(Winter), 1e.

22. *†^**Khairat, S.**, Pillai, M., Edson, B., & Gianforcaro, R. (2020). Evaluating the telehealth experience of patients with covid-19 symptoms: recommendations on best practices. *Journal of Patient Experience*, 7(5), 665–672. <https://doi.org/10.1177/2374373520952975>.
23. *Enyioha, C., **Khairat, S.**, & Kistler, C. E. (2020). Adoption of electronic health records by practices of nursing home providers and wi-fi availability in nursing homes. *Journal of the American Medical Directors Association*, S1525-8610(20)30828-8. Advance online publication. <https://doi.org/10.1016/j.jamda.2020.09.028>.
24. †‡McNeil H, & **Khairat S.** (2020). Impact of intensive care unit readmissions on patient outcomes and the evaluation of the national early warning score to prevent readmissions: literature review. *JMIR Perioperative Medicine*, 3(1), e13782. <https://doi.org/10.2196/13782>.
25. *†^**Khairat, S.**, Coleman, C., Ottmar, P., Jayachander, D. I., Bice, T., & Carson, S. S. (2020). Association of electronic health record use with physician fatigue and efficiency. *JAMA Network Open*, 3(6), e207385. <https://doi.org/10.1001/jamanetworkopen.2020.7385>.
26. *‡**Khairat, S.**, Xi, L., Liu, S., Shrestha, S., & Austin, C. (2020). Understanding the association between electronic health record satisfaction and the well-being of nurses: survey study. *JMIR Nursing*;3(1):e13996. URL: <https://nursing.jmir.org/2020/1/e13996>. <http://DOI:10.2196/13996>
27. *†‡Coleman, C., Gotz, D., Eaker, S., James, E., Bice, T., Carson, C., & **Khairat S.** (2020). Analyzing EHR navigation patterns and digital workflows among physicians during ICU pre-rounds. *Health Information Management: Journal of the Health Information Management Association of Australia*, 1833358320920589. Advance online publication. <https://doi.org/10.1177/1833358320920589>
28. *‡**Khairat, S.**, Meng, C., Xu, Y., Edson, B., & Gianforcaro, R. (2020). Interpreting covid-19 and virtual care trends: cohort study. *JMIR Public Health and Surveillance*, 6(2), e18811. <https://doi.org/10.2196/18811>
29. *†‡ McCall, T., Schwartz, T. A., & **Khairat, S.** (2020). The acceptability of text messaging to help African American women manage anxiety and depression: cross-sectional survey study. *JMIR Mental Health*, 7(2), e15801. <https://doi.org/10.2196/15801>
30. *‡**Khairat, S.**, Tirtanadi, K., Ottmar, P., Sleath, B., & Obeid, J. (2019). Evaluating the perceptions of teleconsent in urban and rural communities. *European Journal for Biomedical Informatics*, 15(2), <https://www.ejbi.org/abstract/evaluating-the-perceptions-of-teleconsent-in-urban-and-rural-communities-5201.html>.
31. *‡**Khairat, S.**, Coleman, C., Ottmar, P., Bice, T., Koppel, R., & Carson, S. S. (2019). Physicians' gender and their use of electronic health records: findings from a mixed-methods usability study. *Journal of the American Medical Informatics Association: JAMIA*, 26(12), 1505–1514. <https://doi.org/10.1093/jamia/ocz126>

32. *‡**Khairat, S.**, Haithcoat, T., Liu, S., Zaman, T., Edson, B., Gianforcaro, R., & Shyu, C. R. (2019). Advancing health equity and access using telemedicine: a geospatial assessment. *Journal of the American Medical Informatics Association: JAMIA*, 26(8-9), 796–805. <https://doi.org/10.1093/jamia/ocz108>
33. *‡**Khairat S**, Liu S, Zaman T, Edson B, & Gianforcaro R. (2019). Factors determining patients' choice between mobile health and telemedicine: predictive analytics assessment. *JMIR mHealth and uHealth*, 7(6), e13772. <https://doi.org/10.2196/13772>
34. *‡**Khairat, S.**, Whitt, S., Craven, C. K., Pak, Y., Shyu, C. R., & Gong, Y. (2019). Investigating the impact of intensive care unit interruptions on patient safety events and electronic health records use: an observational study. *Journal of Patient Safety*, 10.1097/PTS.0000000000000603. Advance online publication. <https://doi.org/10.1097/PTS.0000000000000603>
35. *‡ **Khairat, S.**, Coleman, C., Newlin, T., Rand, V., Ottmar, P., Bice, T., & Carson, S. S. (2019). A mixed-methods evaluation framework for electronic health records usability studies. *Journal of Biomedical Informatics*, 94, 103175. <https://doi.org/10.1016/j.jbi.2019.103175>
36. ***Khairat, S.**, & Obeid, J. S. (2018). Teleconsent - a new modality for informed consenting. *European Journal for Biomedical Informatics*, 14(4), 63–64.
37. ^*‡Long, S., Monsen, K. A., Pieczkiewicz, D., Wolfson, J., & **Khairat, S.** (2018). Redesigning an information system that reduces health care accessibility effort and increases user acceptance and satisfaction: a comparative effectiveness study. *Generating Evidence & Methods to improve patient outcomes (EGEMS)* (Wash DC), 6(1), 22. doi:10.5334/egems.240
38. ***Khairat, S.**, Ottmar, P., Sleath, B., Welch, B., Qanungo, S., Nichols, M., & Obeid, J. S. (2018). Facilitating the informed consent process using teleconsent: protocol for a feasibility and efficacy study. *JMIR Research Protocols*, 7(10), e11239. doi:10.2196/11239
39. *Sandefer, R. H., Westra, B. L., **Khairat, S. S.**, Pieczkiewicz, D. S., & Speedie, S. M. (2018). Assessment of personal health care management and chronic disease prevalence: comparative analysis of demographic, socioeconomic, and health-related variables. *Journal of Medical Internet Research*, 20(10), e276. <https://doi.org/10.2196/jmir.8784>
40. *^Ratwani, R. M., Savage, E., Will, A., Arnold, R., **Khairat, S.**, Miller, K., Fairbanks, R. J., Hodgkins, M., & Hettinger, A. Z. (2018). A usability and safety analysis of electronic health records: a multicenter study. *Journal of the American Medical Informatics Association: JAMIA*, 25(9), 1197–1201. <https://doi.org/10.1093/jamia/ocy088>
41. *‡**Khairat, S. S.**, Dukkupati, A., Lauria, H. A., Bice, T., Travers, D., & Carson, S. S. (2018). The impact of visualization dashboards on quality of care and clinician satisfaction: integrative literature review. *JMIR Human Factors*, 5(2), e22. <http://doi:10.2196/humanfactors.9328>
42. *‡**Khairat, S.**, Coleman, G. C., Russomagno, S., & Gotz, D. (2018). Assessing the status quo of EHR accessibility, usability, and knowledge dissemination. *eGEMs (Generating Evidence & Methods to Improve Patient Outcomes)*, 6 (1), 9. doi:http://doi.org/10.5334/egems.228

43. ***Khairat, S.**, Burke, G., Archambault, H., Schwartz, T., Larson, J., & Ratwani, R. M. (2018). Perceived burden of EHRs on physicians at different stages of their career. *Applied Clinical Informatics*, 9(2), 336-347. <http://doi:10.1055/s-0038-1648222>
44. ***Khairat, S.**, Marc, D., Crosby, W., & Al Sanousi, A. (2018). Reasons for physicians not adopting clinical decision support systems: critical analysis. *JMIR Medical Informatics*, 6(2), e24. <http://doi:10.2196/medinform.8912>
45. ***Long, S.**, Monsen, K., Pieczkiewicz, D., Wolfson, J., & **Khairat, S.** (2017). An evaluation of overcoming barriers to engage consumers in the use of health care information technology. *Journal of Consumer Health on the Internet*, 21(4), 369-388. <http://doi:10.1080/15398285.2017.1361715>
46. ***Long, S.**, Monsen, A. K., Pieczkiewicz, D., Wolfson, J., & **Khairat, S.** (2017). Predicting consumer effort in finding and paying for health care: expert interviews and claims data analysis. *JMIR Medical Informatics*, 5(4), e39. <http://doi:10.2196/medinform.7892>
47. ***Long, J. E.**, **Khairat, S.**, Chmelo, E., & Palmer, M. H. (2018). Mind over bladder: women, aging, and bladder health. *Geriatric Nursing*, 39(2), 230–237. <https://doi.org/10.1016/j.gerinurse.2017.09.003>
48. ***Khairat, S.**, Sandefer, R., Marc, D., & Pyles, L. (2016). A review of biomedical and health informatics education: a workforce training framework. *Journal of Hospital Administration*, 5(5). <http://DOI:10.5430/jha.v5n5p10>
49. ***Hultman, G.**, Marquard, J., Arsoniadis, E., Mink, P., Rizvi, R., Ramer, T., **Khairat, S.**, Fickau, K., & Melton, G. B. (2016). Usability testing of two ambulatory EHR navigators. *Applied Clinical Informatics*, 7(2), 502-515. <http://doi:10.4338/aci-2015-10-ra-0129>
50. ***Rafiei, M.**, Pieczkiewicz, D., **Khairat, S.**, Westra, B. L., & Adam, T. (2014). Systemized nomenclature of medicine clinical terms for the structured expression of perioperative medication management recommendations. *American Journal of Health-System Pharmacy*, 71(23), 2020, 2022, 2024, 2026-2027.
51. ***Khairat, S.**, & Gong, Y. A. (2012). Task analysis of ICU attending physicians during rounds: utilizing clinical informatics. *Journal of Selected Areas in Health Informatics (JSAHI)*, 2(10).
52. ***Khairat, S.**, Craven, C. K., & Gong, Y. (2012). Understanding human-computer interactions in intensive care unit clinical communication. *International Journal of Computational Models and Algorithms in Medicine (IJCMAM)*, 14-31.
53. ***Khairat, S.**, & Gong, Y. (2011). ICU communication representation: clinician-clinician and clinician-computer interactions. *Journal Health & Medical Informatics*. S1. <http://doi:10.4172/2157-7420.S1-001>

Refereed Conference Proceedings (PubMed Indexed):

1. * **Khairat, S.**, Zebrowski, A., Kwong, E., Edson, B., & Gianforcaro, R. (2022). Changes in Patient Characteristics in Telehealth Usage During Times of Crisis. *Studies in health technology and informatics*, 294, 905–909. <https://doi.org/10.3233/SHTI220622>. (Nominated Best Paper Award)

2. *Hamad, J., Fox, A., Kammire, M. S., Hollis, A. N., & **Khairat, S.** (2022). Assessing Patient Satisfaction with Tele dermatology Implementation During the COVID-19 Pandemic. *Studies in health technology and informatics*, 290, 465–468. <https://doi.org/10.3233/SHTI220119>
3. ***Khairat, S.**, Zhang, X., Boyd, M., Edson, B., & Gianforcaro, R. (2022). Using Automated Text Processing to Assess the Patient Experience of an On-Demand Tele-Urgent Care. *Studies in health technology and informatics*, 289, 410–413. <https://doi.org/10.3233/SHTI210945>.
4. *Griffin, A. C., Xing, Z., **Khairat, S.**, Wang, Y., Bailey, S., Arguello, J., & Chung, A. E. (2021). Conversational Agents for Chronic Disease Self-Management: A Systematic Review. *AMIA ... Annual Symposium proceedings. AMIA Symposium, 2020*, 504–513.
5. *††Liu, S., Edson, B., Gianforcaro, B., & **Khairat, S.** (2020). Multivariate analysis of physicians' practicing behaviors in an urgent care telemedicine intervention. *American Medical Informatics Association. Annual Symposium proceedings*, 1139–1148.
6. ***Khairat, S.**, Tirtanadi, K., Ottmar, P., Gudhe, R., & Austin, C.A. (2019). Would geriatric patients accept using a telemedicine platform for post-ICU-discharge follow-up visits? *Studies in Health Technology and Informatics*, 264, 1233–1237. <https://doi.org/10.3233/SHTI190423>.
7. *††McCall, T., Schwartz, T., **Khairat, S.** (2019). Acceptability of telemedicine to help African American women manage anxiety and depression. *Studies in Health Technology and Informatics*, 264, 699–703. <https://doi.org/10.3233/SHTI190313>.
8. *††Liu, S., Zaman, T., Edson, B., Gianforcaro, R., **Khairat, S.** (2019). Analyzing the demographics of virtual care users. *Studies in Health Technology and Informatics*, 264, 1710–1711. <https://doi.org/10.3233/SHTI190609>
9. ††McCall, T., Bolton, C.S., McCall, R., **Khairat, S.** (2019). The use of culturally-tailored telehealth interventions in managing anxiety and depression in African American adults: a systematic review. *Studies in Health Technology and Informatics*, 264, 1728–1729. <https://doi.org/10.3233/SHTI190618>
10. ***Khairat, S.**, Jayachander, D., Coleman, C., Newlin, T., & Rand, V. (2019). Understanding the impact of clinical training on EHR use optimization. *Studies in Health Technology and Informatics*, 262, 240–243. <https://doi.org/10.3233/SHTI190063>
11. *††Jayachander, D., Coleman, C., Rand, V., Newlin, T., & **Khairat, S.** (2019). Novel eye-tracking methods to evaluate the usability of electronic health records. *Studies in Health Technology and Informatics*, 262, 244–247. <https://doi.org/10.3233/SHTI190064>
12. *††Peticolas, K., **Khairat, S.**, Seashore, C., & Law, J. (2019). Physician-led EHR customization tracking assessments for pediatric patients with Turner Syndrome. *Studies in Health Technology and Informatics*, 262, 276–279. <https://doi.org/10.3233/SHTI190072>
13. *††Zaman, T., Taneja, T., Edson, B., Gianforcaro, R., & **Khairat, S.** (2019). Evaluation of perceived usability and utilization of a virtual care program among adolescents and geriatrics. *Studies*

In Health Technology and Informatics, 262, 97–100. <https://doi.org/10.3233/SHTI190026>

14. *[^]**Khairat, S.**, Coleman, C., Rand, V., James, E., & Bice, T. (2018). Classifying provider-EHR screen interactions during ICU pre-rounds. *Studies in Health Technology and Informatics*, 251, 265–268.
15. *[†][^]Sun, D., Sarda, G., Skube, S. J., Blaes, A. H., **Khairat, S.**, Melton, G. B., & Zhang, R. (2017). Phenotyping and visualizing infusion-related reactions for breast cancer patients. *Studies in Health Technology and Informatics*, 245, 599–603.
16. *[†]Ammenwerth, E., De Keizer, N., Brender McNair, J., Craven, C. K., Eisenstein, E., Georgiou, A., **Khairat, S.**, Magrabi, F., Nykanen, P., Otero, P., Rigby, M., Scott, P., & Weir, C. (2017). How to teach health it evaluation: recommendations for health it evaluation courses. *Studies in Health Technology and Informatics*, 243, 3–7.
17. *[†][^]Arsoniadis, E. G., Tambyraja, R., **Khairat, S.**, Jahansouz, C., Scheppmann, D., Kwaan, M. R., . . . Melton, G. B. (2015). Characterizing patient-generated clinical data and associated implications for electronic health records. *Studies in Health Technology and Informatics*, 216, 158–162.
18. *[†][^]Sandefur, R. H., Westra, B. L., **Khairat, S. S.**, Pieczkiewicz, D. S., & Speedie, S. M. (2015). Determinants of consumer ehealth information seeking behavior. *AMIA Annual Symposium Proceedings. AMIA Symposium*, 1121–1129.
19. *[†][‡][^]Marc, D. T., Zhang, R., Beattie, J., Gatewood, L. C., & **Khairat, S. S.** (2015). Indexing publicly available health data with medical subject headings (mesh): an evaluation of term coverage. *Studies In Health Technology And Informatics*, 216, 529–533.
20. *[†][^]Sandefur, R. H., **Khairat, S. S.**, Pieczkiewicz, D. S., & Speedie, S. M. (2015). Using publicly available data to characterize consumers' use of email to communicate with healthcare providers. *Studies in Health Technology and Informatics*, 216, 401–405.
21. *[‡]**Khairat, S.**, Wijesinghe, N., Wolfson, J., Scott, R., & Simkus, R. (2014). Building a multicenter telehealth network to advance chronic disease management. *Studies in Health Technology and Informatics*, 202, 299–302.
22. *[†][‡][^]Long, S., & **Khairat, S.** (2014). Roadmap for engaging consumers in using health information technology. *Studies in Health Technology and Informatics*, 202, 177–180.
23. *[†][‡]Marc, D.T. & **Khairat, S.S.** (2014). Medical subject headings (mesh) for indexing and retrieving open-source healthcare data. *Studies in Health Technology and Informatics*, 202, 157–160.
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25. *[†][‡]Filipi, J. M., & **Khairat, S.** (2013). Tracking and visualizing headache trends on a mobile or desktop website. *Studies in Health Technology and Informatics*, 192, 1199.

26. *‡**Khairat, S.**, Craven, C., & Gong, Y. (2012). Representing clinical communication knowledge through database management system integration. *Studies in Health Technology and Informatics*, 180, 1099–1101.
27. *‡**Khairat, S.**, & Gong, Y. (2010). Understanding effective clinical communication in medical errors. *Studies in Health Technology and Informatics*, 160(Pt 1), 704–708.

Refereed Conference Proceedings (non-PubMed, *IEEE Indexed):

1. *‡**Hills, Z.**, & **Khairat, S.** (2014). Teledermatology: using collaborative technologies to enhance public health awareness. *Collaboration Technologies and Systems (CTS)*. International Conference on pp.423-427, 19-23. <http://doi:10.1109/CTS.2014.6867599>
2. ***Khairat, S.**, & Gong, Y. (2011). Enhancing patient safety through clinical communication knowledge representation. *e-Health Networking Applications and Services (Healthcom)*. 13th Institute of Electrical and Electronics Engineers (IEEE) International Conference. 130–3.
3. ***Khairat, S.**, & Gong, Y. (2010). Knowledge representation in ICU communication. *Proceedings of the 1st American Computing Machinery (ACM) International Health Informatics Symposium*. 1883102: ACM, 718-23.
4. ***Khairat, S.**, & Gong, Y. (2010). Towards an effective clinical communication framework. IEEE Engineering in Medicine and Biology Society (EMBS), 5th Cairo *International Conference on Biomedical Engineering (CIBEC)*. (URL: http://www.cibec2010.org/papers/5212_2348_CIBEC.pdf)

Conference Abstracts:

1. Phillips, M., Tignanelli, C., **Khairat, S.**, & Chung, A. (2019). Clinical decision support systems in pediatric surgery: a scoping review. Washington, DC. *AMIA Annual Symposium*.
2. Miller, K., Savage, E., Will, A., **Khairat, S.**, Arnold, R., Fairbanks, R., Hodgkins, M., & Hettinger, A., & Ratwani R. (December 2018). Implementation integrity: a multisite analysis of electronic health record usability and safety. *Academy Health 11th Annual Conference on the Science of Dissemination and Implementation*. Washington, DC. Poster Presentation.
3. Rand, V., Coleman, C., Bice, T., & **Khairat, S.** (2018). Novel mixed-methods analysis of ehr-related information overload on provider workflow in the ICU. *Medical Informatics in Europe*.
4. Adwan, J., Monsen, K., El-Fakahany, E., & **Khairat, S.** (2014). Omaha system in Arabic: application to healthcare providers of children with cystic fibrosis. *American Public Health Association*.
5. Long, S., & **Khairat, S.** (2014). A review of overcoming barriers to engaging consumers in the use of healthcare information technology. *Medical Informatics Europe Conference*.

6. Rafiei, M., Pieczkiewicz, D. S. , Westra, B. L., **Khairat, S.**, Shafizadeh, S., & Adam, T. J. (2013). Perioperative medication management decision heuristics: foundational development of a clinical decision support tool. *American Medical Informatics Association Annual Symposium*.
7. **Khairat, S.**, & Garcia, C. (2012). Introducing a wireless mobile technology to improve diabetes care outcomes among specific minority group. *iProceedings Medicine 2.0*. 170-171.
8. **Khairat, S.**, & Gong, Y. (2013). Improving patient safety through analyzing technology-aided devices interruptions. *Medicine 2.0*.
9. **Khairat, S.**, Monsen, K. A., & Timm, J. E. (April 2013). Feasibility of benchmarking population characteristic and services across program in local public health department using standardized data. *2013 Omaha System International Conference*.
10. Filipi, J., & **Khairat, S.** (2013). Tracking and visualizing headache trends on a mobile or desktop website. *MEDINFO 14th World Congress*.
11. Marc, D., & **Khairat, S.** (2013). Why can't physicians just accept clinical decision support systems? *MEDINFO 14th World Congress*.
12. **Khairat, S.**, & Gong, Y. (2010). A step towards effective clinical communication. *Proceedings of the 2010 AMIA Annual Symposium*. pp.1122.
13. **Khairat, S.**, & Gong, Y. (2009). Understanding communication for critical care incidents. *Proceeding of the 2009 AMIA Annual Symposium*.

Appearances in Popular Media:

New Research: Low Education Levels Strongly Tied to Being Unvaccinated, Major Contributor to Ongoing Hesitancy. The74Million. <https://www.the74million.org/article/new-research-low-education-levels-strongly-tied-to-being-unvaccinated-major-contributor-to-ongoing-hesitancy/>. Published February 2022.

Investigating the impact of intensive care unit interruptions on patient safety events and electronic health records use: an observational study. AHRQ Patient Safety Net. <https://psnet.ahrq.gov/resources/resource/33270/Investigating-the-impact-of-intensive-care-unit-interruptions-on-patient-safety-events-and-electronic-health-records-use-an-observational-study?q=khairat>. Published July 2019.

Study finds need for performance standards for EHR usability, safety. American Medical Association (AMA). <https://www.ama-assn.org/study-finds-need-performance-standards-ehr-usability-safety>.

Human factors need to play bigger role in EHR design and implementation, AMA says. Healthcare It News. <https://www.healthcareitnews.com/news/human-factors-need-play-bigger->

[role-ehr-design-and-implementation-ama-says](#). Published: July, 19 2018.

Struggles with EHR create frustration among physicians. Clinical-Innovation.com. <https://www.clinical-innovation.com/topics/ehr-emr/struggles-ehr-create-frustration-among-physicians>. Published: June, 14 2018.

Visualization dashboards for EHR data improve situational awareness, decrease errors. Clinical-Innovation.com. <https://www.clinical-innovation.com/topics/analytics-quality/visualization-dashboards-ehr-data-improve-situational-awareness-decrease>. Published: June, 4 2018.

Boosting user acceptance could improve utilization of clinical decision support tools. Clinical-Innovation.com. <https://www.clinical-innovation.com/topics/analytics-quality/boosting-user-acceptance-could-improve-utilization-clinical-decision>. Published: May, 3 2018.

Invited presentations

International

2021	Assessing Patient Satisfaction with Tele dermatology Implementation during the COVID-19 Pandemic Medinfo World Congress	Presentation
2021	Using Automated Text Processing to Assess the Patient Experience of an On-Demand Tele-Urgent Care ICIMTH International Conference, Athens, Greece	Presentation
2019	Would Geriatric Patients Accept Using a Telemedicine Platform for Post ICU-Discharge Follow-up Visits? Medinfo World Congress	Presentation
2019	Eye Tracking to study the Gender-based differences in the Usability of Electronic Health Records ICIMTH International Conference, Athens, Greece	Presentation
2019	Understanding the Impact of Clinical Training on EHR Use Optimization ICIMTH International Conference, Athens, Greece	Presentation
2019	Evaluation of Perceived Usability Acceptability and Utilization of a Virtual Care Program Among Adolescents and Geriatrics ICIMTH International Conference, Athens, Greece	Presentation
2018	Towards a Smart, Data-Driven, Integrated Healthcare System American University of Beirut, Lebanon	Invited Speaker
2014	Goals and challenges of Collaboration in Healthcare. International Conference on Collaboration Technologies	Panelist

	and Systems (CTS 2014), Minneapolis, MN	
2014	Teledermatology: Using Collaborative Technologies to Enhance Public Health Awareness. International Conference on Collaboration Technologies and Systems (CTS 2014), Minneapolis, MN	Invited Speaker
2014	Building a Telemedicine Framework to Improve the Interactions between Cancer Patients and Oncology Triage Nurses. 16 th International Conference on Human-Computer Interaction	Presentation
2012	24th International Conference of the European Federation for Medical Informatics Quality of Life through Quality of Information. 24th European Medical Informatics Conference - MIE2012	Presentation
2011	Clinical Communication: Human-Computer and Human-Human Interactions. Human Computer Interaction International Conference, Orlando, FL	Presentation
2011	Enhancing Patient Safety through Clinical Communication Knowledge Representation. IEEE Health Com'11 International Conference, Columbia, MO	Presentation
2010	Knowledge Representation in ICU Communication. 1st ACM International Health Informatics Symposium, Arlington, VA	Presentation
2010	Understanding Clinical Communication in Medical Errors. International Congress on Medical Informatics, Cape Town, South Africa	Presentation

National

2021	Electronic Health Records Usability: Historical pain points and fundamental user-centered design principles HIMSS Minnesota Chapter	Invited Speaker
2021	Improving EHR Quality and Safety through Novel Informatics Applications <i>UNC – University of Pennsylvania Hillman Scholars Program</i>	Invited Speaker
2020	Addressing Engagement and Burnout Among Clinicians Healthcare Business Insights Annual Member Retreat Evaluation: <ul style="list-style-type: none"> • Top 4 of sessions in terms of rating • It received a Net Promoter Score of 65 • 100% said the event materials were relevant and achieved the learning objectives 	Closing Keynote Speaker

- 96% responded that the learning objectives were met
- 96% said the speaker was effective
- 73% of attendees were promoters, or rated it a 9 or 10 on a scale of 10 for “Would you recommend this session to a colleague?”

2020	From the Bedside to the Homes: Using Informatics to Improve Quality of Care Health Services Administration Research Series Seminar, University of Alabama- Birmingham	Invited Speakers
2019	Educational Communities in the Academic Forum: Sharing Knowledge and Promoting Standards AMIA Annual Symposium	Panelist
2019	Health IT Usability Evaluation Methods – Part 2 Clinical Informatics Group, Mount Sinai Health System, New York City, NY.	Invited Speaker
2019	Health IT Usability Evaluation Methods – Part 1 Clinical Informatics Group, Mount Sinai Health System, New York City, NY.	Invited Speaker
2018	Electronic Health Record- a Vital Clinical Faculty Competency From Class to Clinical: Who is Leading the Learning? The Importance of Clinical Faculty Competence. Greensboro, NC	Invited Speaker
2017	What’s after Health IT adoption? Making IT Usable Mayo Clinic, Rochester, MN	Invited Speaker
2016	Report from the ED-WG Frontline: Biomedical and Health Informatics Baccalaureate (BHIB) Course AMIA, Washington DC	Panelist
2016	Biomedical and Health Informatics Baccalaureate (BHIB) Course: Work In Progress Report, Columbus, OH	Panelist
2016	Post Adoption Era: Usability Testing of Ambulatory EHR MU Informatics Institute, Columbia, MO	Invited Speaker
2015	Perspectives on Informatics at the Baccalaureate Level: Interprofessional Programs and Courses for Healthcare Students and the Role of AMIA, Interactive Panel from the AMIA Education Working Group Santa Ana Pueblo, NM	Panelist

2015	ICU Systems: Human-Computer Interaction Fundamentals. Intensive Care Informatics Working Group, AMIA, Washington, D.C.	Panelist
2015	Towards Developing an Undergraduate Interprofessional Biomedical Informatics Course. AMIA Annual Symposium, Washington, D.C.	Panelist
2015	Experiences with use in "academic" EHRs for Education of Informatics Students. AMIA Academic Forum, Ann Arbor, MI	Presenter
2014	Patient Safety: Building an Informatics Culture University of Pittsburgh, PA	Invited Speaker
2014	Evaluating a Telehealth Program: A Case Study. South Central Telehealth Forum 2014, Little Rock, AR	Invited Speaker
2013	Health Informatics: Healthcare Reform Through People, Technology, and Data. School of Nursing and Health Professions, University of San Francisco	Invited Speaker
2013	Medical Informatics and Decision Support Systems in Intensive Care. AMIA, Chicago, IL	Panelist
2013	Health Informatics: A New Science. The Biological Sciences Department, New York City College of Technology	Invited Speaker
2012	Intensive Care Informatics Working Group Pre-Symposia AMIA, Washington, D.C.	Panelist
2011	Understanding ICU Clinical Communication Using Knowledge Representation. Locations: University of Minnesota, Marshfield Clinic, University of Michigan-Flint, Governors State University	Invited Speaker
2010	Understanding Clinical Communication in Medical Errors. Division of Clinical Informatics, Harvard Medical School-Beth Israel Deaconess Medical Center	Invited Speaker
2010	A Step towards Effective Clinical Communication. AMIA Symposium, Washington, D.C.	Presentation
2009	Understanding Communication for Critical Care Incidents. AMIA Symposium, San Francisco, CA	Presentation
Regional 2022	The Digital Divide Cecil G. Sheps Center for Health Services Research	Invited Speaker

2022	Health Informatics AHEC Greensboro, NC	Invited Speaker
2021	Research Excellence Through Innovation and Collaboration in the Era of Digital Health Physical Medicine and Rehabilitation, School of Medicine, UNC	Invited Speaker
2020	Career Journey: Past and Current Work NURS 902 Hillman Scholars, School of Nursing UNC	Guest lecturer
2020	EGYPT: The Cradle of Civilization NURS 320. Culture and Nursing Care, School of Nursing UNC	Guest Lecturer
2020	NURS 963: Writing for Publication, School of Nursing UNC	Guest Lecturer
2020	Usability Testing: Validating Stakeholder Needs Center for Life Long Learning, UNC	Invited Speaker
2019	From the Bedside to the Homes: Applying Informatics Methods to Improve Health Outcomes Wake Forest University	Invited Speaker
2019	Usability: Background, Challenges, and Evaluation Methods Health IT Business Solutions, Duke University	Invited Lecturer
2019	From the Bedside to the Homes: Applying Data Science Methods to Improve Healthcare Research Support Center, SON, UNC	Invited Speaker
2018	Usability: Background, Challenges, and Evaluation Methods Health IT Business Solutions, Duke University	Invited Lecturer
2018	New and Innovative Work with Epic HealthCare Informatics Informatics, UNC	Invited Speaker
2018	Evidence Based Practice: Research Supporting Telehealth The Future of Ambulatory Care is Now. Chapel Hill, NC	Invited Speaker (Rating 4.7/5, n=61)
2018	Electronic Health Record- a Vital Clinical Faculty Competency Consortium for Clinical Education and Practice, Chapel Hill, NC	Invited Speaker
2017	Usability: Background, Challenges, and Evaluation Methods Health IT Business Solutions, Duke University	Invited Lecturer
2017	Health informatics systems Executive Masters Programs, School of Public Health, UNC	Invited Lecturer
2016	Usability: Background, Challenges, and Evaluation Methods Health IT Business Solutions, Duke University	Invited Lecturer

2016	EMR Documentation Area L AHEC	Workshop
2016	The Pitfalls of Electronic Documentation Area L AHEC	Invited Speaker
2016	Healthcare Risks and Opportunities Healthcare IT Forum, NC State University	Invited Speaker
2013	Specific Challenges in evaluating the usability of healthcare solutions. World Usability Day Event, University of Minnesota	Panelist
2013	Health Informatics: Are we on the right path? Investment Forum Group, Minneapolis, MN	Invited Speaker
2012	mHealth: Closing the Gap Between Diabetes Patients in Underserved Populations and Care Providers. Center for Health Equity, University of Minnesota	Invited Speaker
2012	ICU: Clinical Communication and Beyond. Methodist Hospital, Minneapolis, MN	Invited Speaker
2012	Contributing factors to ICU Miscommunication. Amplatz Children's Hospital, Minneapolis, MN	Invited Speaker
2012	Essentials of Clinical Medicine (ECM). University of Minnesota Medical School	Invited Speaker
2011	Effective Clinical Communication: Enhancing Patient Safety. Life Sciences Department, University of Missouri, Columbia, MO	Poster Presentation
2010	Understanding Effective Clinical Communication in Medical Errors. Informatics Institute Seminar	Presentation
2010	A step towards Effective Clinical Communication. Life Sciences Department, University Missouri, Columbia, MO	Poster Presentation
2009	Understanding Clinical Communication. Health Sciences Department, University of Missouri, Columbia, MO	Poster Presentation

TEACHING ACTIVITIES:

Courses Taught

Course No. (Level)	Title	Role	Semester & Year	# of Credits	Teaching evaluations (Mean#)	Institution
NURS 870	Health Care Informatics	Instructor	Fall 2021	3	Mean: 4.16 Median: 4 Students # 19/35 (55%)	University of North Carolina at Chapel Hill
NURS 960	Digital Methods in Health Care and Quality	Instructor	Spring 2021	3		University of North

Course No. (Level)	Title	Role	Semester & Year	# of Credits	Teaching evaluations (Mean#)	Institution
	Improvement					Carolina at Chapel Hill
NURS 870	Health Care Informatics	Instructor	Fall 2020	3		University of North Carolina at Chapel Hill
N730	Introduction to clinical Informatics: Data, Information, and Knowledge	Instructor	Spring 2020	3	Mean: 5/5 Median: 5/5 Students # 2/6	University of North Carolina at Chapel Hill
N879	Introduction to clinical Informatics: Data, Information, and Knowledge	Instructor	Fall 2019	3	Mean: 4.4 Students # 6/10	University of North Carolina at Chapel Hill
N730	Introduction to clinical Informatics: Data, Information, and Knowledge	Instructor	Spring 2019	3	Mean: N/A Median: N/A Students #	University of North Carolina at Chapel Hill
N879	User-Centered Analysis and Design of Health Care Information Systems and Interfaces	Instructor	Fall 2018	3	Mean: 4.5/5 Median: 5 Students # 7/10	University of North Carolina at Chapel Hill
NURS 870	Health Care Informatics	Instructor	Fall 2017	3	Mean: 4.5/5 Median: 5 Students # 12/22	University of North Carolina at Chapel Hill
NURS 730	Introduction to clinical Informatics: Data, Information, and Knowledge	Instructor	Spring 2017	3	Mean: 3.4 Median: 3.3 Students #: 4/6	University of North Carolina at Chapel Hill
NURS 969	Data Analysis: Analyzing Health Care Systems	Co-Instructor	Spring 2017	3	3.3/5 Median=3 Student #: 5/6	University of North Carolina at Chapel Hill
NURS 870	Health Care Informatics	Instructor	Fall 2016	3	Mean: 3.6/5 Median: 3.6 Student # 20	University of North Carolina at Chapel Hill

Course No. (Level)	Title	Role	Semester & Year	# of Credits	Teaching evaluations (Mean#)	Institution
NURS 730	Introduction to clinical Informatics: Data, Information, and Knowledge	Instructor	Spring 2016	3	Mean: 4.7 Median: 5 Student # 6	University of North Carolina at Chapel Hill
HINF 8406	User Interface Design and Usability in Healthcare	Instructor	Spring 2014	2	N/A	University of Minnesota
HINF 5520	Clinical Informatics & Patient Safety	Instructor	Spring 2014	2	N/A	University of Minnesota
HINF 5540	Interprofessional health Informatics	Instructor	Spring & Fall 2013	2	N/A	University of Minnesota
HINF 5520	Clinical Informatics and Patient Safety	Instructor	Spring 2013	2	N/A	University of Minnesota
HINF 8446	Professional Studies in Health Informatics	Instructor	Fall 2012	2	N/A	University of Minnesota
HINF 5520	Clinical Informatics & Patient Safety	Instructor	Spring 2012	2	N/A	University of Minnesota
CS 1040	Intro to Problem Solving and Programming	Instructor	2007	3	N/A	University of Missouri
CS 1040	Intro to Problem Solving and Programming	Graduate Teaching Assistant	Fall 2005 – 2007	3	N/A	University of Missouri
CS 1050	Algorithm Design and Programming I	Graduate Teaching Assistant	Spring 2005	3	N/A	University of Missouri
CS 1040	Intro to Problem Solving and Programming	Peer Learning Assistant	2004	3	N/A	University of Missouri

Student Research Supervision

PhD /Post-doctoral students (Current)

Student	Role (Advisor, Chair or Committee Member)	Graduation Date
Jacqueline Vaughn	Advisor	2021

PhD /Post-doctoral students (Past)

Student	Role (Chair/Committee)	Degree	Dissertation title	Dates	Institution
Terika Mccall	Chair	PhD	mHEALTH For Mental Health: Culturally-Tailored Interventions For Managing Anxiety And Depression In African American Women	2020	University of North Carolina at Chapel Hill
Cam Coleman	Chair	Post-Doc	Behind the Screens: Using Novel Visualization Methods to Analyze EHR Navigation Patterns and Digital Workflows during ICU Pre-Rounds among Physicians	2019	University of North Carolina at Chapel Hill
Sandy Long	Chair	PhD	Designing to Increase Usability in Consumer Health Information: Providing Consumers with Information about Access and Financial Components of Care	2017	University of Minnesota
Mehrdad Rafiei	Committee	PhD	A Perioperative Medicine Clinical Decision Support System: Foundation, Design, Development, Evaluation, and the Standards	2013	University of Minnesota
Sharad Manaktala	Committee	PhD	Patient Driven Clinical Decision Support Tool for Predicting Cardiovascular Complications of Non-Cardiac Surgery - Creation, Implementation, And Evaluation	2014	University of Minnesota

MS/DNP Students

Student	Role	Degree	Project title	Dates
Amber Woodard	Committee	DNP	Missed Nursing Care and Clinical Decision Support: Can Electronic Nursing Reminders Help to Reduce this Quality and Patient Safety Concern?	2020
Rachelle Thomasson	Chair	MSN	Acceptability, Satisfaction, and Barriers in Telehealth Utilization Among the Uninsured Population: Integrative Literature Review and Synthesis	2021
Ashlyn Zebrowski	Chair	PSM	TBD	2021
Erin Wallace	Chair	PSM	TBD	2021

MS/DNP Students (Past)

Student	Role (Chair/Committee)	Degree	Project title	Dates
Rachelle Thomasson	Chair	MSN	Acceptability, Satisfaction, and Barriers in Telehealth Utilization Among the Uninsured Population: Integrative Literature Review and Synthesis	2020
Roshan John	Chair	PSM	Evaluation of Utilization and Outcomes between Phone and Video Urgent Care Visits	2020
Muhammad Ali	Advisor	PSM	Usability Study for A Mobile Health App to Support Anxiety and Depression in African American Women	2020
David Zablocki	Advisor	PSM	Telehealth Reimbursement Analysis and Considerations in the Post-COVID-19 Era	2020
Heidi McNeil	Chair	DNP	Preventing Bounce Backs: ICU Transfers to Medical Units	2019
Lauren Hill	Chair	DNP	Determining Safe Output Thresholds for Chest Tube Removal Following Sub-Pneumectomy Lung Resection	2019
Elaine James	Chair	DNP	The Use of Clinical Data Capture to Improve The Quality of Reporting For Emergency Department Patients Transferred to Facilities Outside of a Healthcare System	2019
Joanna Long	Committee	DNP	Mind over bladder: Women, aging, and bladder health	2017
Trusha Taneja	Chair	MS	Conducting socio-technical system assessments, Contextual Inquiry (CI) to explore burdens, breakdowns and frustrations for specialist physicians.	2020
Josh Brown	Chair	MS	Determining the Clinical Benefit of NGS in Cancer Diagnostics: Liquid Biopsies for Metastatic Castration-Resistant Prostate Cancer	2019
Farrah Hermes	Chair	MS	Using data from a clinical trials to observe gene expression from high salt and low salt diets	2019
Halina Krzystek	Chair	MS	Building a Clinical Genomics Informatics Pipeline as part of the Precision Medicine Initiative a	2019

Madison Ponder	Chair	MS	Product Development and Standardized Patient Rater Reliability	2019
Tanzila Zaman	Chair	MS	Understanding the Perceptions of Adolescent and Geriatric Population in Use of Technology	2019
Paige Ottmar	Chair	MSIS	Understanding EHR Information Overload using Eye-Tracking	2019
Gillian Wedding	Chair (Honors)	BSN	Assessing the Association between EHR and Nursing Burnout	2019
Peter Fleming	Chair	MSN	Understanding Difficulties in Information Finding in the EHR	2019
Amelia Milukas	Chair	MSN	Telemedicine Visit with Pre and Post Liver Transplant Population	2019
Cassie Liu	Chair	MS	Analyzing the difference between younger and older users' information seeking behaviors with a telemedicine website	2019
Thomas Newlin	Chair	MS	Simulation-based testing for EHR Usability in the ICU	2018
Victoria Rand	Chair	MS	Understanding Information Overload in the EHR	2018
Aniesha Dukkipati	Chair	MSN	Design of an Intensive Care Unit Visualization Dashboard: An Integrative Literature Review	2017
Zoi Hills	Chair	MS	Increasing Awareness of Telehealth through Public Service Activities	2014
Jenny Felipi	Chair	MS	Tracking and Visualizing Headache Trends on a Mobile or Desktop Website	2012
Adrian Yardley	Chair	MS	Do Health IT information tools improve communication and collaboration between multiple health care providers on clinical ward rounds?	2012

GRANTS:

Training Grants

Role	Title	Total Award Amount	Percent Effort	Agency	Dates

		(FTE if available)			
Co-I (PI: Soltis-Jarrett, T14HP33207)	ANE - Nurse Practitioner Residency Program	\$6 million	10%	Health Resources and Services Administration (HRSA)	2020 - 2023
Co-I (PI: Soltis-Jarrett, T94HP30882)	Advanced Nursing Education Workforce	\$1.1 million	10%	Health Resources and Services Administration (HRSA)	2020 - 2023

Research Grants
Funded (In Preparation)

Role	Title	Total Award Amount (FTE if available)	Percent Effort	Agency	Dates
PI (Submission date: 05/22)	Center for Virtual Care Equity and Value (ViVE)	\$5,000,000	30%	NIH/NCATS	1/1/2023 – 12/31/2028
PI (Submission date: 06/22)	Improving Nurse Efficiency and Patient Safety through Tailored EHR Coaching and Usability Analysis (SAFE)	\$2,758,129	30%	NIH/ NINR	1/1/2023 – 12/31/2028

Funded (On-going)

Role	Title	Total Award Amount (FTE if available)	Percent Effort	Agency	Dates
PI (Khairat) (1R01LM013606-01)	Improving Providers' Decision-Making and	1,348,653	35%	NIH National Library of Medicine	04/2021 – 01/2025

	Reducing Information Overload Using Information Visualization in Electronic Health Records				
Site-PI (PI: Ancker, Kaushal)	Evaluating the Comparative Effectiveness of Telemedicine in Primary Care: Learning from the COVID-19 Pandemic	\$3 million	15%	Patient Centered Outcomes and Research Institute (PCORI)	9/1/2020 – 8/30/2022
Site-PI (PI: Galarraga)	An EHR-Based Screening Tool to Support Safe Discharges of COVID-19 Patients in the Emergency Department	\$299,449	15%	Agency for Healthcare Research and Quality (AHRQ)	9/16/2021 – 3/23/2023
Co-I (PI: Ward)	Rural Telehealth Research Center	\$950,000	10%	Health Resources and Services Administration (HRSA)	9/1/2020 – 7/31/2024
Co-PI (PI: Seashore)	Promoting Physician Well Being through Improved Epic Experience	\$25,000	N/A	School of Medicine, UNC	3/1/2020 – 3/1/2021

Funded (Completed)

Role	Title	Total Award Amount (FTE if available)	Percent Effort	Agency	Dates
Consultant (Ratwani, 5R01HS023701-02)	Developing Evidence-Based User Centered Design and	\$1,170,7990		Agency for Healthcare Research and Quality (AHRQ)	10/1/2019-06/01/2020

	Implementation Guidelines to Improve Health Information Technology Usability				
Co-PI (2KR1382100)	The Impact of Telemedicine Expansion for Office-Based Opioid Treatment on Health Disparities in North Carolina	\$2,000	--	NC TraCS Institute, UNC	2021-2022
Site-PI (Obeid, 1 R21 3R21TR002088-02S1)	Investigating teleconsent to improve clinical research access in remote communities	\$46,719	15%	NCATS	8/2018-6/2019
Co-I (Ahalt, OT3HL142479)	A Collaboration for the NIH Data Commons	\$1,224,574	10%	National Heart, Lung, and Blood Institute (NIH)	09/27/2017-06/30/2018
PI	Teleconsent to Overcome Barriers and Gaps in Clinical Trial Enrollment	\$2,000	NA	NC TraCS Institute	2018
Co-PI (Site PI) (Obeid, 1 R21 TR002088-01)	Investigating teleconsent to improve clinical research access in remote communities	\$238,125	15%	National Center for Advancing Translational Sciences (NCATS)	08/01/2017-07/31/2019
PI	Clinical Informatics: Secondary Use of EHR Data to Better Train Future	\$6,500	N/A	Data@Carolina University of North Carolina at Chapel Hill	5/1/2016-5/1/2017

	Healthcare Workforce				
PI	VICUT: A Clinician-Centered Visualization Dashboard to Improve ICU Patient Information Representation and Delivery	\$7,500	N/A	UNC Office of the Provost	1/1/2016-12/31/2016
Co-PI (Speedie, G22RH26185)	Telehealth Resource Center Grant Program	\$975,000	20%	Health Resources & Services Administration (HRSA)	09/01/2013-08/31/2016
Consultant (Blazar, UL1TR000114)	University of Minnesota Clinical and Translational Science Award (CTSA)	\$42,747,794	10%	National Institutes for Health (NIH)	01/03/2014-2/28/2015

PROFESSIONAL SERVICE:

Memberships and Positions Held in National and International Professional Organizations

Organization/Activity	Role	Dates
<i>Education Committee AMIA</i>	Chair	2020-2024
<i>mHealth and Telemedicine, AMIA Annual Symposium</i>	Chair	2019
<i>IEEE International Conference on Bioinformatics and AMIA Annual Symposium</i>	Scientific Program Committee (SPC) member	2019
<i>HIMSS TIGER Scholars Workgroup</i>	Committee Member	2019-2021
<i>AMIA Academic Forum</i>	Executive Committee member	2018-2020
<i>AMIA Informatics Summit</i>	Scientific Program Committee (SPC) member	2019
International Symposium on Mathematical and Computational Oncology	Program Committee member	2019
<i>IEEE Bioinformatics and Biomedicine (BIBM) conference</i>	Technical Program Committee	2018
<i>Academy Health</i>	Member	2018-2019
<i>AMIA Membership and Outreach Committee</i>	Member	2018-2019

<i>AMIA Education Committee</i>	Member	2018-2019
<i>AMIA Annual Symposium</i>	Scientific Program Committee (SPC) member	2018
<i>HIMSS TIGER Scholars Workgroup</i>	Program Committee Member	2017-2019
<i>International Conference on Informatics and Assistive Technologies for Health-Care, Medical Support and Wellbeing</i>	Steering Committee	2017
<i>IEEE Bioinformatics and Biomedicine (BIBM) conference</i>	Technical Program Committee	2017
<i>InSpire Academic Forum Annual Conference</i>	Scientific Program Committee	2017
<i>AMIA</i>	ONC Health IT Certification Program: Enhanced Oversight and Accountability Proposed Rule	2016
<i>InSpire Academic Forum Annual Conference</i>	Scientific Program Committee	2016
<i>Seventh International Conference on Intelligent Computing and Information Systems, ICICIS'15</i>	Program Committee	2015
<i>Education Working Group; AMIA</i>	Chair	2015-2016
<i>Working Group steering Committee; AMIA</i>	Member	2014-2019
<i>Telehealth & HIT: Partners in Patient Care Great Plains Telehealth Resource & Assistance Center</i>	Program Advisor Committee and Organizing Committee	2014
<i>AMIA</i>	Treasurer: Evaluation Working Group	2014
<i>AMIA</i>	Clinical Informatics Board Review Course (CIBRC), Item Writing Committee	2013-2014
<i>Telehealth Strategies. Great Plains Telehealth Resource & Assistance Center</i>	Program Advisor Committee and Organizing Committee	2013
<i>AMIA</i>	Intensive Care Informatics Working Group	2012-Present
<i>University of Minnesota</i>	Clinical Translational Science Institute Biomedical Informatics (CTSI-BMI)	2012-Present
<i>AMIA</i>	National Meetings Committee, Student Working Group	2011
<i>AMIA</i>	Communications Committee, Student Working Group	2010
<i>AMIA</i>	Communications Committee, Student Working Group	2009
<i>AMIA</i>	Nominations Committee, Student Working Group	2009

Editorial Activities

Journal	Role	Dates
Annals of Internal Medicine	Reviewer	2022
Journal of American Medicine Association (JAMA) Network Open	Reviewer	2021
Journal of American Medical Informatics Association (JAMIA)	Reviewer	2019
Applied Clinical Informatics (ACI) Journal	Associate Editor	2017
IEEE Bioinformatics and Biomedicine (BIBM) conference	Scientific Reviewer	2017
InSpire Conference 2017	Scientific Reviewer	2017
Journal of Medical Internet Research	Scientific Reviewer	2015
BioMed Central	Scientific Reviewer	2015
Journal of Applied Clinical Informatics	Scientific Reviewer	2014
American Medical Informatics Association (AMIA).2014	Scientific Reviewer	2012; 2014-2015
European Medical Informatics Conference (MIE2014).	Scientific Reviewer	2014
Biomed Central Health Services Research Journal	Scientific Reviewer	2013
Journal for Health and Social Informatics	Scientific Reviewer	2013
Medicine 2.0 World Congress on Social Media, Mobile Apps, Web 2.0.	Scientific Reviewer	2013
American Journal of Critical Care	Scientific Reviewer	2012
HealthITXChange.	Scientific Reviewer	2012
Medicine 2.0 World Congress on Social Media, Mobile Apps, Web 2.0.	Scientific Reviewer	2012
Health Informatics Journal	Scientific Reviewer	2012
Journal of CIN: Computers, Informatics, Nursing	Scientific Reviewer	2012
ACM International Health Informatics Conference	Scientific Reviewer	2011

Other (Grant Review Activities, Site Visits, Review Panels)

Organization/Project	Role	Dates
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Scientific Merit Review Board Subcommittee on Healthcare Informatics Veterans Association	Member	2020- 2024
Combat Readiness – Medical Research Program <i>U.S. Department of Defense</i>	Grant Reviewer	2020
HSR3 - HealthCare Informatics <i>U.S. Department of Veterans Affairs</i>	Grant Reviewer	2020
Health Services Research and Development (HSR&D), <i>U.S. Department of Veterans Affairs</i>	Grant Reviewer	2019
<i>Health Research Board, Ireland</i>	Grant Reviewer	2015
<i>Department of Defense, USA</i>	Grant Reviewer	2014

UNIVERSITY SERVICE

University Committees

Committee	Role	Dates
Data Science Initiative	Graduate Curriculum	2019
Healthcare Informatics Conference	Planning Committee	2018-2020
BBL Advisory Board	Member	2018-2020
PhD Admission Committee CHIP, UNC	Member	2018-2019
Healthcare Systems-APA - UNC	Member	2015-Present
Doctoral Admission Committee – Carolina Health Informatics Program - UNC	Member	2017-2018
SON IIT Governance Board - UNC	Member	2016-2018
Graduate Executive Committee – University of Minnesota (UMN)	Member	2013-2015
Academic Health Center (AHC) Terminology Taskforce - UMN	Member	2013-2015
EHR Task Force Committee - UMN	Member	2013-2014

RESEARCH STATEMENT

Patient safety and quality of care research expand beyond the traditional focus on healthcare services and performance to encompass other qualitative and quantitative criteria of growing importance, such as medical errors, clinical communication, and human factors. Clinical informatics combines qualitative and quantitative methods with information technology solutions to reach better clinical outcomes and enhanced quality of care. Among other goals, informatics aims to detect and understand patterns and associations in complex clinical tasks by combining a set of multidisciplinary theories and methods.

My research strives to bring us closer to the goal of effectively combining and using health sciences to improve clinical practice and outcomes. My research currently focuses on utilizing mixed-method approaches to enhance Patient-Provider and Provider-Provider communication in the areas of cancer and diabetes. In the past, my research included Intensive Care Unit (ICU) clinical communication and the main cause of medical errors, with a concentration on human-human and human-computer interactions. This includes studying interruptive factors during communication, communication task analysis, computer interaction analysis, and effective feedback. Along with continuing my current research, my future goals include developing new research methodologies, conducting comparative-effectiveness studies, and applying knowledge representation and management approaches.

TEACHING STATEMENT

The opportunities to teach and work with students and develop new educational materials and techniques are my primary reasons for seeking an academic career. My academic background, teaching experiences, and career as a scientific researcher make me well-prepared to teach a variety of introductory Health Informatics & Computer Science courses and more advanced courses such as clinical communication, consumer health informatics, usability, database management systems, and knowledge representation and management. For almost a decade, I have dedicated much of my time to teaching and developing courses and educational materials. As a result, I have acquired extensive teaching experiences at the undergraduate and graduate level as a peer learning assistant, teaching assistant, instructor, and faculty for several courses at the University of Minnesota and the University of Missouri. More importantly, I participated in developing several of these courses, and I have created teaching materials for undergraduate and graduate courses.

SERVICE and ENGAGEMENT STATEMENT

Recognizing the importance of significant contributions beyond the individual's level has been the motive to engage in service activities in the past years. I believe that one should focus on developing their career and the institution and organizations they belong to equally. From that perspective, I have been involved in many service roles since my first faculty appointment at the University of Minnesota and now at the University of North Carolina-Chapel Hill. My involvement varies from departmental committees to improve education, structure, and governance; to leading national committees. My current role as Chair of the Education Working Group at the American Medical Informatics Association (AMIA) is an example of my commitment to enhancing the institutions and organizations I belong to. In that role, I lead national efforts to build an undergraduate Informatics course that can be adopted by any higher education institution in the U.S. and worldwide. Looking into the future, I aim to continue my service activities and stay committed to the Informatics community's overall mission around the globe.