



## Alexander Tarlochan Singh Sandhu

Assistant Professor of Medicine (Cardiovascular Medicine)

Medicine - Cardiovascular Medicine

### CLINICAL OFFICE (PRIMARY)

- **Cardiovascular Medicine Falk Center**

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### Bio

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#### BIO

Alex Sandhu, MD, MS is a cardiologist with a special interest in the care of patients with advanced heart failure. He graduated from the seven-year combined BA-MD program at Northwestern with a focus on economics and mathematics. He completed an internal medicine residency at Stanford University, spending 16 weeks at Makerere Hospital in Uganda as part of the Global Health track. He subsequently earned a Masters in Health Services Research at Stanford while acting as a fellow in health services research at the Palo Alto VA and Stanford's Center for Health Policy/Primary Care and Outcomes Research. Next, he completed fellowships in cardiology and advanced heart failure and transplant at Stanford before joining the faculty.

Alex is now an active clinician and heart failure researcher who focuses on health economics, the implementation of high-value care strategies, comparative effectiveness, and innovative clinical trial design. He is passionate about patient care and finding ways to bring meaningful improvements to patients' lives. He is involved in several clinical trials including the K-23 funded PRO-HF (patient centered quality of life assessments), DOT-HF (mobile device based implementation trial), and a CAC notification pilot trial (patient centered coronary artery calcification notification).

In his free time, he enjoys playing soccer as well as entertaining and being entertained by his joyful sons, Kyle and Tyler.

#### CLINICAL FOCUS

- Cardiology
- Heart Failure
- Advanced Heart Failure and Transplant Cardiology

#### ACADEMIC APPOINTMENTS

- Assistant Professor - University Medical Line, Medicine - Cardiovascular Medicine
- Member, Cardiovascular Institute

#### HONORS AND AWARDS

- Wilkerson Award for the best clinical paper published in Circulation, American Heart Association (2023)

- Hearst Health Prize for excellence in data science in Healthcare, UCLA Center for SMART Health (2023)
- Clinical Research Award, Stanford Cardiology Fellowship (2019)

## PROFESSIONAL EDUCATION

- Board Certification: Advanced Heart Failure and Transplant Cardiology, American Board of Internal Medicine (2022)
- Board Certification: Adult Echocardiography, National Board of Echocardiography (2019)
- Residency: Stanford University Internal Medicine Residency (2014) CA
- Fellowship: Stanford University Advanced Heart Failure and Transplant Fellowship (2020) CA
- Medical Education: Northwestern University Feinberg School of Medicine (2011) IL
- Fellowship: Stanford University Cardiovascular Medicine Fellowship (2019) CA
- Board Certification: Cardiovascular Disease, American Board of Internal Medicine (2019)
- Board Certification: Internal Medicine, American Board of Internal Medicine (2014)
- Internship: Stanford University Internal Medicine Residency (2012) CA
- Master of Science, Stanford University , Health Services Research (2016)

## Research & Scholarship

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### CLINICAL TRIALS

- A Comparative Study on the Effectiveness of Video vs Text-Based Education in Heart Failure, Recruiting
- Incidental Coronary Calcification Quality Improvement Project, Not Recruiting
- Mobile Technology-Based System for Patient Engagement and Physician-Directed Remote Management of Heart Failure, Not Recruiting
- Patient-Reported Outcome Measurement in Heart Failure Clinic, Not Recruiting

## Publications

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### PUBLICATIONS

- **Atherosclerosis evaluation and cardiovascular risk estimation using coronary computed tomography angiography.** *European heart journal*  
Nurmohamed, N. S., van Rosendaal, A. R., Danad, I., Ngo-Metzger, Q., Taub, P. R., Ray, K. K., Figtree, G., Bonaca, M. P., Hsia, J., Rodriguez, F., Sandhu, A. T., Nieman, K., Earls, et al  
2024
- **Clinical Impact of Routine Assessment of Patient-Reported Health Status in Heart Failure Clinic.** *Circulation*  
Sandhu, A. T., Calma, J., Skye, M., Kalwani, N. M., Zheng, J., Schirmer, J., Din, N., Brown Johnson, C., Gupta, A., Lan, R., Yu, B., Spertus, J. A., Heidenreich, et al  
2024
- **Healthcare utilization and left ventricular ejection fraction distribution in methamphetamine use associated heart failure hospitalizations.** *American heart journal*  
Manja, V., Sandhu, A. T., Asch, S., Frayne, S., McGovern, M., Chen, C., Heidenreich, P.  
2024; 270: 156-160
- **Assessment of Price Variation in Coronary Artery Bypass Surgery at US Hospitals.** *Journal of the American Heart Association*  
Wei, C., Paranjpe, I., Sharma, P., Milligan, M., Lam, M., Heidenreich, P. A., Kalwani, N., Schulman, K., Sandhu, A.  
2024: e031982
- **Uptake of sodium-glucose cotransporter-2 inhibitors in hospitalized patients with heart failure: insights from the veterans affairs healthcare system.** *Journal of cardiac failure*  
Varshney, A. S., Calma, J., Kalwani, N. M., Hsiao, S., Sallam, K., Cao, F., Din, N., Schirmer, J., Bhatt, A. S., Ambrosy, A. P., Heidenreich, P., Sandhu, A. T.  
2024

- **The economics of heart failure care.** *Progress in cardiovascular diseases*  
Wei, C., Heidenreich, P. A., Sandhu, A. T.  
2024
- **Patient Representativeness With Virtual Enrollment in the PRO-HF Trial.** *Journal of the American Heart Association*  
Gupta, A., Skye, M., Calma, J., Din, N., Azizi, Z., Hernandez, M. F., Zheng, J., Kalwani, N. M., Malunjkar, S., Schirmer, J., Wang, P., Rodriguez, F., Heidenreich, et al  
2024; 13 (2): e030903
- **American Heart Association Focusing Research Rigor on Digital Health.** *Journal of the American Heart Association*  
Weyhenmeyer, J. A., Peterson, E. D., Beam, C., Wayte, P., Marvel, F. A., Bakken, S., Sandhu, A., Nallamothu, B., Martin, S., Beaton, A., Au, R., Brown, N. A.  
2024; 13 (2): e032870
- **Challenge of Optimizing Medical Therapy in Heart Failure: Unlocking the Potential of Digital Health and Patient Engagement.** *Journal of the American Heart Association*  
Azizi, Z., Golbus, J. R., Spaulding, E. M., Hwang, P. H., Ciminelli, A. L., Lacar, K., Hernandez, M. F., Gilotra, N. A., Din, N., Brant, L. C., Au, R., Beaton, A., Nallamothu, et al  
2024; 13 (2): e030952
- **Design and Implementation of an Electronic Health Record-Integrated Hypertension Management Application.** *Journal of the American Heart Association*  
Funes Hernandez, M., Babakhanian, M., Chen, T. P., Sarraju, A., Seninger, C., Ravi, V., Azizi, Z., Tooley, J., Chang, T. I., Lu, Y., Downing, N. L., Rodriguez, F., Li, et al  
2024; 13 (2): e030884
- **Digital Health Interventions for Heart Failure Management in Underserved Rural Areas of the United States: A Systematic Review of Randomized Trials.** *Journal of the American Heart Association*  
Azizi, Z., Broadwin, C., Islam, S., Schenk, J., Din, N., Hernandez, M. F., Wang, P., Longenecker, C. T., Rodriguez, F., Sandhu, A. T.  
2024; 13 (2): e030956
- **Cataract Surgery in the Medicare Merit-Based Incentive Payment System: Episode-Based Cost Measure Development and Evaluation.** *Ophthalmology science*  
Pershing, S., Sandhu, A. T., Uwilingiyimana, A. S., Glasser, D. B., Morgenstern, A. S., Do, R., Choradia, N., Lin, E., Leoung, J., Shah, M., Liu, A., Lee, J., Fairchild, et al  
2023; 3 (4): 100315
- **Opportunistic assessment of ischemic heart disease risk using abdominopelvic computed tomography and medical record data: a multimodal explainable artificial intelligence approach.** *Scientific reports*  
Zambrano Chaves, J. M., Wentland, A. L., Desai, A. D., Banerjee, I., Kaur, G., Correa, R., Boutin, R. D., Maron, D. J., Rodriguez, F., Sandhu, A. T., Rubin, D., Chaudhari, A. S., Patel, et al  
2023; 13 (1): 21034
- **Phased target trial design and meta-analysis in a head-to-head treatment comparison**  
Singh, J. P., Wieloch, M., Reynolds, S. L., Blomstrom-Lundqvist, C., Sandhu, A. T., Camm, A., Kabadi, S. M., Pundi, K., Turakhia, M., Boiron, R., Coudert, M., Din, N., Fan, et al  
WILEY.2023: 444
- **Developing Clinical Risk Prediction Models for Worsening Heart Failure Events and Death by Left Ventricular Ejection Fraction.** *Journal of the American Heart Association*  
Parikh, R. V., Go, A. S., Bhatt, A. S., Tan, T. C., Allen, A. R., Feng, K. Y., Hamilton, S. A., Tai, A. S., Fitzpatrick, J. K., Lee, K. K., Adatya, S., Avula, H. R., Sax, et al  
2023: e029736
- **Association of Coronary Artery Calcium Detected by Routine Ungated CT Imaging With Cardiovascular Outcomes.** *Journal of the American College of Cardiology*  
Peng, A. W., Dudum, R., Jain, S. S., Maron, D. J., Patel, B. N., Khandwala, N., Eng, D., Chaudhari, A. S., Sandhu, A. T., Rodriguez, F.  
2023; 82 (12): 1192-1202
- **Lifting the Veil on Advanced HeartFailure.** *JACC. Heart failure*  
Sandhu, A. T., Khera, R.  
2023

- **Heart Failure Medical Therapy Prior to Mitral Transcatheter Edge-to-Edge Repair: The STS/ACC Transcatheter Valve Therapy Registry.** *European heart journal*  
Varshney, A. S., Shah, M., Vemulapalli, S., Kosinski, A., Bhatt, A. S., Sandhu, A. T., Hirji, S., DeFilippis, E. M., Shah, P. B., Fuzat, M., O'Gara, P. T., Bhatt, D. L., Kaneko, et al  
2023
- **Variation in Methamphetamine-Associated Heart Failure Hospitalizations Across the United States.** *Journal of cardiac failure*  
Manja, V., Sandhu, A. T., Frayne, S., Asch, S., McGovern, M., Chen, C., Heidenreich, P.  
2023
- **Implementation of evidence-based heart failure management: Regional variations between Japan and the USA.** *Journal of cardiology*  
Ichihara, Y. K., Kohsaka, S., Kisanuki, M., Sandhu, A. T., Kawana, M.  
2023
- **Response by Sandhu et al to Letter Regarding Article, "Incidental Coronary Artery Calcium: Opportunistic Screening of Previous Nongated Chest Computed Tomography Scans to Improve Statin Rates (NOTIFY-1 Project)".** *Circulation*  
Sandhu, A. T., Rodriguez, F., Maron, D. J.  
2023; 148 (5): 441
- **Dronedaron Versus Sotalol in Antiarrhythmic Drug-Naive Veterans With Atrial Fibrillation.** *Circulation. Arrhythmia and electrophysiology*  
Pundi, K., Fan, J., Kabadi, S., Din, N., Blomström-Lundqvist, C., John Camm, A., Kowey, P., Singh, J. P., Rashkin, J., Wieloch, M., Turakhia, M. P., Sandhu, A. T.  
2023; e011893
- **Risk of severe Covid-19 in prevalent users of  $\beta$ -1 adrenergic receptor antagonists: a national case-control study of Medicare beneficiaries.** *The American journal of medicine*  
Graham, D. J., Izurieta, H. S., Zhang, D., Avagyan, A., Lyu, H., Wiederhorn, R., Lu, Y., Mosholder, A. D., Smith, E. R., Zhao, Y., Shangguan, S., Tsai, H. T., Pennap, et al  
2023
- **Evaluating Recommendations About Atrial Fibrillation for Patients and Clinicians Obtained From Chat-Based Artificial Intelligence Algorithms.** *Circulation. Arrhythmia and electrophysiology*  
Azizi, Z., Alipour, P., Gomez, S., Broadwin, C., Islam, S., Sarraju, A., Rogers, A. J., Sandhu, A. T., Rodriguez, F.  
2023; e012015
- **The Inflation Reduction Act Expands Prescription Drug Affordability: Decades in the Making.** *Journal of the American College of Cardiology*  
Zheng, J., Sandhu, A. T.  
2023; 81 (21): 2112-2114
- **Long-Term Outcomes of Early Coronary Artery Disease Testing After New-Onset Heart Failure.** *Circulation. Heart failure*  
Zheng, J., Heidenreich, P. A., Kohsaka, S., Fearon, W. F., Sandhu, A. T.  
2023; e010426
- **How to Make the Transplantation Allocation System Better.** *JACC. Heart failure*  
Khush, K. K., Sandhu, A. T., Parker, W. F.  
2023; 11 (5): 516-519
- **Evaluating the Implementation of Patient-Reported Outcomes in Heart Failure Clinic: A Qualitative Assessment.** *Circulation. Cardiovascular quality and outcomes*  
Brown-Johnson, C., Calma, J., Amano, A., Winget, M., Harris, S. R., Vilendrer, S., Asch, S. M., Heidenreich, P., Sandhu, A. T., Kalwani, N. M.  
2023; e009677
- **Pursuing Equity in Performance Measurement.** *Circulation*  
Heidenreich, P., Sandhu, A.  
2023; 147 (15): 1134-1136
- **Pharmacist- and Nurse-Led Medical Optimization in Heart Failure: A Systematic Review and Meta-Analysis.** *Journal of cardiac failure*  
Zheng, J., Mednick, T., Heidenreich, P. A., Sandhu, A. T.  
2023
- **Updating the Accuracy of Administrative Claims for Identifying Left Ventricular Ejection Fraction Among Patients With Heart Failure.** *Circulation. Cardiovascular quality and outcomes*

- Sandhu, A. T., Zheng, J., Skye, M., Heidenreich, P. A.  
2023: e008919
- **METHAMPHETAMINE ASSOCIATED HEART FAILURE HOSPITALIZATIONS AMONG VETERANS IN THE UNITED STATES**  
Manja, V., Sandhu, A., Chen, C., Asch, S., Frayne, S., Heidenreich, P. A.  
ELSEVIER SCIENCE INC.2023: 492
  - **OPPORTUNISTIC SCREENING OF INCIDENTAL CORONARY ARTERY CALCIUM WITH DEEP-LEARNING ALGORITHM ON NON-ECG GATED CHEST CT IMAGING AND ASSOCIATION WITH CARDIOVASCULAR EVENTS AND MORTALITY**  
Peng, A., Dudum, R., Maron, D., Sandhu, A., Rodriguez, F.  
ELSEVIER SCIENCE INC.2023: 2123
  - **PREVALENCE AND PROGNOSTIC VALUE OF VENTRICULAR TACHYCARDIA ON AMBULATORY ECG MONITORING**  
Pundi, K., Fan, J., Din, N., Sandhu, A., Heidenreich, P. A., Turakhia, M.  
ELSEVIER SCIENCE INC.2023: 125
  - **Cost-effectiveness of Sodium-Glucose Cotransporter-2 Inhibitors for Patients With Heart Failure and Preserved Ejection Fraction-Living on the Edge.** *JAMA cardiology*  
Sandhu, A. T., Cohen, D. J.  
2023
  - **Frailty and subsequent adverse outcomes in older patients with atrial fibrillation treated with oral anticoagulants: The Shizuoka study.** *Research and practice in thrombosis and haemostasis*  
Nishimura, S., Kumamaru, H., Shoji, S., Nakatani, E., Yamamoto, H., Ichihara, N., Sandhu, A. T., Miyachi, Y., Miyata, H., Kohsaka, S.  
2023; 7 (3): 100129
  - **Variation in Cost of Echocardiography Within and Across US Hospitals.** *Journal of the American Society of Echocardiography : official publication of the American Society of Echocardiography*  
Wei, C., Milligan, M., Lam, M., Heidenreich, P. A., Sandhu, A.  
2023
  - **Predictors of Incident Heart Failure Diagnosis Setting: Insights From the Veterans Affairs Healthcare System.** *JACC. Heart failure*  
Tisdale, R. L., Fan, J., Calma, J., Cyr, K., Podchiyska, T., Stafford, R. S., Maron, D. J., Hernandez-Boussard, T., Ambrosy, A., Heidenreich, P. A., Sandhu, A. T.  
2022
  - **Disparities in Adoption of New Diabetic Therapies with Cardiovascular Benefits.** *Diabetes research and clinical practice*  
Vasti, E. C., Basina, M., Calma, J., Maron, D. J., Rodriguez, F., Sandhu, A. T.  
2022: 110233
  - **Early Results of the Patient-Reported Outcome Measurement in Heart Failure Clinic (PRO-HF) Trial**  
Sandhu, A. T., Zheng, J., Kalwani, N. M., Gupta, A., Calma, J., Amano, A., Johnson, C., Winget, M., Heidenreich, P. A.  
LIPPINCOTT WILLIAMS & WILKINS.2022: E572
  - **Incidental Coronary Artery Calcium: Opportunistic Screening of Prior Non-Gated Chest Cts to Improve Statin Rates**  
Sandhu, A. T., Rodriguez, F., Ngo, S., Patel, B., Mastrodicasa, D., Eng, D. T., Khandwala, N., Balla, S., Sousa, D., Maron, D. J.  
LIPPINCOTT WILLIAMS & WILKINS.2022: E601-E602
  - **Use of lipid-lowering therapy preceding first hospitalization for acute myocardial infarction or stroke.** *American journal of preventive cardiology*  
Sandhu, A. T., Rodriguez, F., Maron, D. J., Heidenreich, P. A.  
2022; 12: 100426
  - **Disparities in virtual cardiology visits among Veterans Health Administration patients during the COVID-19 pandemic.** *JAMIA open*  
Tisdale, R. L., Ferguson, J., Van Campen, J., Greene, L., Sandhu, A. T., Heidenreich, P. A., Zulman, D. M.  
2022; 5 (4): ooac103
  - **Methamphetamine-associated heart failure: a systematic review of observational studies.** *Heart (British Cardiac Society)*  
Manja, V., Nrusimha, A., Gao, Y., Sheikh, A., McGovern, M., Heidenreich, P. A., Sandhu, A. T., Asch, S.  
2022
  - **Cardiovascular vs. non-cardiovascular deaths after heart failure hospitalization in young, older, and very old patients.** *ESC heart failure*  
Nakamaru, R., Shiraishi, Y., Sandhu, A. T., Heidenreich, P. A., Shoji, S., Kohno, T., Takei, M., Nagatomo, Y., Nakano, S., Kohsaka, S., Yoshikawa, T.

2022

- **Cost-effectiveness of Empagliflozin in Patients With Heart Failure With Preserved Ejection Fraction.** *JAMA internal medicine*  
Zheng, J., Parizo, J. T., Spertus, J. A., Heidenreich, P. A., Sandhu, A. T.  
2022
- **Incidental Coronary Artery Calcium: Opportunistic Screening of Prior Non-gated Chest CTs to Improve Statin Rates (NOTIFY-1 Project).** *Circulation*  
Sandhu, A. T., Rodriguez, F., Ngo, S., Patel, B. N., Mastrodicasa, D., Eng, D., Khandwala, N., Balla, S., Sousa, D., Maron, D. J.  
2022
- **Impact of Patient-Reported Outcome Measurement in Heart Failure Clinic on Clinician Health Status Assessment and Patient Experience: A Sub-Study of the PRO-HF Trial.** *Circulation. Heart failure*  
Sandhu, A. T., Zheng, J., Kalwani, N., Gupta, A., Calma, J., Skye, M., Lan, R., Yu, B., Spertus, J., Heidenreich, P.  
2022
- **Disparities in Hospital Length of Stay Across Race and Ethnicity Among Patients With Heart Failure.** *Circulation. Heart failure*  
Zheng, J., Tisdale, R. L., Heidenreich, P. A., Sandhu, A. T.  
2022; 15 (11): e009362
- **The Patient-Reported Outcome Measurement in Heart Failure Clinic Trial: Rationale and Methods of The PRO-HF Trial.** *American heart journal*  
Kalwani, N. M., Calma, J., Varghese, G. M., Gupta, A., Zheng, J., Brown-Johnson, C., Amano, A., Vilendrer, S., Winget, M., Asch, S. M., Heidenreich, P., Sandhu, A.  
2022
- **Treatment Differences in Medical Therapy for Heart Failure With Reduced Ejection Fraction Between Sociodemographic Groups.** *JACC. Heart failure*  
Witting, C., Zheng, J., Tisdale, R. L., Shannon, E., Kohsaka, S., Lewis, E. F., Heidenreich, P., Sandhu, A.  
2022
- **Medical therapy for patients with recent-onset heart failure with reduced ejection fraction during the COVID-19 pandemic: Insights from the Veteran's affairs healthcare system.** *American heart journal plus : cardiology research and practice*  
Sandhu, A., Zheng, J., Tisdale, R., Kohsaka, S., Turakhia, M. P., Heidenreich, P.  
2022: 100210
- **alpha-1 Adrenergic receptor antagonists and risk of severe COVID-19**  
Smith, E., Graham, D., Izurieta, H., Zhang, D., Avagyan, A., Lyu, H., Wiederhorn, A., Lu, Y., Mosholder, A., Zhao, Y., Shangguan, S., Tsai, H., Pennap, et al  
WILEY.2022: 163-164
- **Potential association with malnutrition and allocation of combination medical therapies in hospitalized heart failure patients with reduced ejection fraction.** *Scientific reports*  
Kawakubo, Y., Shiraishi, Y., Kohsaka, S., Kohno, T., Goda, A., Nagatomo, Y., Nishihata, Y., Saji, M., Takei, M., Ikegami, Y., Niimi, N., Sandhu, A. T., Nakano, et al  
2022; 12 (1): 8318
- **Regional variations in the process of care for patients undergoing percutaneous coronary intervention in Japan.** *The Lancet regional health. Western Pacific*  
Shoji, S., Yamaji, K., Sandhu, A. T., Ikemura, N., Shiraishi, Y., Inohara, T., Heidenreich, P. A., Amano, T., Ikari, Y., Kohsaka, S.  
2022; 22: 100425
- **2022 AHA/ACC/HFSA Guideline for the Management of Heart Failure: A Report of the American College of Cardiology/American Heart Association Joint Committee on Clinical Practice Guidelines.** *Circulation*  
Heidenreich, P. A., Bozkurt, B., Aguilar, D., Allen, L. A., Byun, J. J., Colvin, M. M., Deswal, A., Drazner, M. H., Dunlay, S. M., Evers, L. R., Fang, J. C., Fedson, S. E., Fonarow, et al  
2022: 101161CIR0000000000001063
- **2022 AHA/ACC/HFSA Guideline for the Management of Heart Failure: Executive Summary: A Report of the American College of Cardiology/American Heart Association Joint Committee on Clinical Practice Guidelines.** *Circulation*  
Heidenreich, P. A., Bozkurt, B., Aguilar, D., Allen, L. A., Byun, J. J., Colvin, M. M., Deswal, A., Drazner, M. H., Dunlay, S. M., Evers, L. R., Fang, J. C., Fedson, S. E., Fonarow, et al  
2022: 101161CIR0000000000001062
- **2022 AHA/ACC/HFSA Guideline for the Management of Heart Failure: A Report of the American College of Cardiology/American Heart Association Joint Committee on Clinical Practice Guidelines.** *Journal of the American College of Cardiology*

- Heidenreich, P. A., Bozkurt, B., Aguilar, D., Allen, L. A., Byun, J. J., Colvin, M. M., Deswal, A., Drazner, M. H., Dunlay, S. M., Evers, L. R., Fang, J. C., Fedson, S. E., Fonarow, et al  
2022
- **2022 AHA/ACC/HFSA Guideline for the Management of Heart Failure: Executive Summary: A Report of the American College of Cardiology/American Heart Association Joint Committee on Clinical Practice Guidelines.** *Journal of the American College of Cardiology*  
Heidenreich, P. A., Bozkurt, B., Aguilar, D., Allen, L. A., Byun, J. J., Colvin, M. M., Deswal, A., Drazner, M. H., Dunlay, S. M., Evers, L. R., Fang, J. C., Fedson, S. E., Fonarow, et al  
2022
  - **2022 AHA/ACC/HFSA Guideline for the Management of Heart Failure: Executive Summary: A Report of the American College of Cardiology/American Heart Association Joint Committee on Clinical Practice Guidelines.** *Journal of cardiac failure*  
Heidenreich, P. A., BozkurtChair, B., Aguilar, D., Allen, L. A., Byun, J. J., Colvin, M. M., Deswal, A., Drazner, M. H., Dunlay, S. M., Evers, L. R., Fang, J. C., Fedson, S. E., Fonarow, et al  
2022
  - **Assessment of coding-based frailty algorithms for long-term outcome prediction among older people in community settings: a cohort study from the Shizuoka Kokuho Database.** *Age and ageing*  
Nishimura, S., Kumamaru, H., Shoji, S., Nakatani, E., Yamamoto, H., Ichihara, N., Miyachi, Y., Sandhu, A. T., Heidenreich, P. A., Yamauchi, K., Watanabe, M., Miyata, H., Kohsaka, et al  
2022; 51 (3)
  - **Economic Issues in Heart Failure in the United States.** *Journal of cardiac failure*  
Heidenreich, P. A., Fonarow, G. C., Opsha, Y., Sandhu, A. T., Sweitzer, N. K., Warraich, H. J.  
1800
  - **Perks and Pitfalls of Performance-Linked Reimbursement for Novel Drugs: The Case of Sacubitril-Valsartan.** *Circulation. Cardiovascular quality and outcomes*  
Sandhu, A. T., Heidenreich, P. A., Lin, J., Parizo, J., Bhattacharya, J., Goldhaber-Fiebert, J. D.  
1800; 15 (1): e007993
  - **Variability in Coronary Artery Disease Testing for Patients With New-Onset Heart Failure.** *Journal of the American College of Cardiology*  
Zheng, J., Heidenreich, P. A., Kohsaka, S., Fearon, W. F., Sandhu, A. T.  
2022; 79 (9): 849-860
  - **Opportunistic Incidence Prediction of Multiple Chronic Diseases from Abdominal CT Imaging Using Multi-task Learning**  
Blankemeier, L., Gallegos, I., Chaves, J., Maron, D., Sandhu, A., Rodriguez, F., Rubin, D., Patel, B., Willis, M., Boutin, R., Chaudhari, A. S., Wang, L., Dou, et al  
SPRINGER INTERNATIONAL PUBLISHING AG.2022: 309-318
  - **Utilization of Generic Cardiovascular Drugs in Medicare's Part D Program.** *Circulation. Cardiovascular quality and outcomes*  
Ma, I., Tisdale, R. L., Vail, D., Heidenreich, P. A., Sandhu, A. T.  
2021: CIRCOUTCOMES120007559
  - **Seasonal influenza vaccination is associated with reduced risk of death among Medicare beneficiaries#.** *Vaccine*  
Buchman, T. G., Simpson, S. Q., Sciarretta, K. L., Finne, K. P., Sowers, N., Collier, M., Chavan, S., Do, R., Lin, C., Oke, I., Rhodes, K. E., Santhosh, A., Sandhu, et al  
2021
  - **Development of a Knee Arthroplasty Episode-Based Cost Measure for Evaluating Cost in the Merit-Based Incentive Payment System.** *The Journal of bone and joint surgery. American volume*  
Choradia, N., Lam, J., Luo, B., Bounds, S., Yates, A. J., Quintana, J., Do, R., Feinberg, L., Sandhu, A., Vail, D., MaCurdy, T., Nagavarapu, S., Bhattacharya, et al  
2021
  - **Disparity in the Setting of Incident Heart Failure Diagnosis.** *Circulation. Heart failure*  
Sandhu, A. T., Tisdale, R. L., Rodriguez, F., Stafford, R. S., Maron, D. J., Hernandez-Boussard, T., Lewis, E., Heidenreich, P. A.  
2021: CIRCHEARTFAILURE121008538
  - **DISPARITIES IN VIRTUAL CARDIOLOGY VISITS AMONG VETERANS HEALTH ADMINISTRATION PATIENTS DURING THE COVID-19 PANDEMIC**  
Tisdale, R. L., Ferguson, J. M., Van Campen, J., Greene, L., Sandhu, A., Heidenreich, P., Zulman, D.  
SPRINGER.2021: S168

- **High-Deductible Health Plans and Emergency Care for Chest Pain: To Go or Not to Go?** *Circulation*  
Kalwani, N. M., Sandhu, A. T.  
2021
- **Renin-Angiotensin-Aldosterone System Inhibitors and SARS-CoV-2 Infection: An Analysis from the Veteran's Affairs Healthcare System: Sandhu. ACEI, ARB, and Association with COVID.** *American heart journal*  
Sandhu, A. T., Kohsaka, S., Lin, S., Woo, C. Y., Goldstein, M. K., Heidenreich, P. A.  
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