OMB No. 0925-0001 and 0925-0002 (Rev. 10/2021 Approved Through 09/30/2024)

BIOGRAPHICAL SKETCH

Provide the following information for the Senior/key personnel and other significant contributors.
Follow this format for each person. **DO NOT EXCEED FIVE PAGES.**

NAME: Larry Alexander Allen, MD, MHS

eRA COMMONS USER NAME (credential, e.g., agency login): ALLEN.L

POSITION TITLE: Associate Professor of Medicine, University of Colorado School of Medicine

EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)

| INSTITUTION AND LOCATION | DEGREE(if applicable) | Completion DateMM/YYYY | FIELD OF STUDY |
| --- | --- | --- | --- |
| University of Colorado Boulder, CO | BA | 05/1994 | Chemistry, Biology |
| Harvard Medical School, MA | MD | 06/2001 | Medicine |
| Massachusetts General Hospital, MA | Residency | 06/2004 | Internal Medicine |
| Duke University Medical Center, NC | Fellowship | 02/2007 | Cardiology |
| Duke University Medical Center, NC | Fellowship | 02/2008 | Advanced Heart Failure and Transplantation |
| Duke University, NC | MHS | 06/2008 | Health Sciences |

**A. Personal Statement**

Dr. Larry Allen is the Interim Division Head for Cardiology (2022), Medical Director of Advanced Heart Failure (2014), and Co-Director of the Colorado Program for Patient Centered Decisions at the University of Colorado (2012). Dr. Allen’s interests include anticipating progression into end-stage heart failure and then helping patients make tough choices regarding invasive therapies and palliative options. Dr. Allen lead the PCORI-funded DECIDE-LVAD trial on patient decision support and the AHA-funded EPIC-HF trial on patient engagement in medication prescribing. Meanwhile, Dr. Allen keeps himself clinically grounded by regularly seeing patients with heart failure, LVADs, and transplants, and is consistently voted as one of Denver’s “Top Doctors” in 5280 Magazine.

**B. Positions, Scientific Appointments, and Honors**

 **Positions and Employment**

**2008-Present Professor (2018), Division of Cardiology, Department of Medicine, University of Colorado School of Medicine, Aurora: Tenure track position.**

**• Medical Director of Advanced Heart Failure**

**• Associate Division Head for Clinical Affairs**

**2008-2016 Affiliate Investigator, Kaiser Permanente Colorado, Institute for Health Research**

**2008 Instructor, Duke University Medical Center, Durham.**

**2004-2008 Research Fellow, Duke Clinical Research Institute, Durham: Investigated biomarkers, endpoint measures, resource use, and patient perceptions of prognosis in heart failure.**

**2001-2004 Researcher, under Dr. Donald M. Lloyd-Jones, Massachusetts General Hospital (MGH),**

**Boston: Assessed the relationship of outcomes to guideline-concordant care.**

**1996-1997 Fellow in Not-for-Profit Funding, Boettcher Foundation, Denver.**

**1994-1996 Peace Corps Volunteer/Health Educator, Ghana: Stationed in village of 1,000 inhabitants to**

**develop locally-implemented solutions for community health needs.**

**Other Experience and Professional Membership**

**2021-2023 Vice Chair, Council on Clinical Cardiology, American Heart Association**

**2021 Chair, Annual Scientific Sessions, Heart Failure Society of America**

**2020 Chair, Patient Committee, Heart Failure Society of America**

**2018-2024 Trustee, Presidents Leadership Class, Student Leadership Institute, CU Boulder**

**2017-2019 Chair, Heart Failure and Transplantation Committee, American Heart Association**

**2016-Present Associate Editor (intermittent Deputy Editor), Circulation: Heart Failure**

**2015-2019 Committee for Scientific Sessions Program, American Heart Association**

**2014-2018 Steering Committee, Get With The Guidelines Heart Failure, American Heart Association**

**2014-2015 Merit Reviewer, Patient Centered Outcomes Research Institute**

**2012-2018 Clinical Guidelines Committee, Heart Failure Society of America**

**2012-2016 Associate Editor, American Heart Journal (reviewer since 2004)**

**2010-2012 Associate Editor, Journal of Cardiac Failure**

**2009-2018 Trustee, Boettcher Foundation: $310 million foundation, 1 of 9 board members**

**2007-2008 Chief Fellow, Duke Clinical Research Institute**

**2007-Present Fellow (FHFSA), Heart Failure Society of America**

**2005-Present Fellow (FAHA status 2013), American Heart Association**

**2004-Present Fellow (FACC status 2009), American College of Cardiology**

**Honors**

**2020 American Society for Clinical Investigation (ASCI), inductee**

**2019 Kenneth Poirier Endowed Chair in Medicine, University of Colorado**

**2012-2022 “Top Doctor”, Heart Failure, 5280 Magazine: peer-voted among Colorado physicians**

**2012 Pioneer Award, Medical Staff, University of Colorado Hospital**

**2010 Fellow of the American College of Cardiology (FACC)**

**2009 Good Citizen Award, Division of Cardiology, University of Colorado: voted by faculty**

**2009 Outstanding Cardiology Educator Award, University of Colorado: voted by the fellows**

**2007-2012 Loan Repayment Program, National Institutes of Health**

**2007 Martinez Award, Duke: leadership in cardiac transplant; $50,000 support**

**2006 Floyd Award, Duke: 1 fellow selected annually by the cardiology fellows**

**2006 Best Fellow Award, Duke: 1 fellow selected annually by the medicine house staff**

**2004 Teaching Award, Massachusetts General Hospital: 1 of 2 residents selected annually**

**2001 Massachusetts Medical Society Scholar Award**

**2000 Aesculapian Club member, Harvard Medical School**

**1994 Outstanding Graduate: top graduate University of Colorado Boulder**

**1994 Summa cum laude, University of Colorado Boulder**

**C. Contributions to Science**

1. Medical Decision Making: I have helped extend shared decision making into cardiovascular care. My role as PI of the PCORI DECIDE-LVAD multi-center effectiveness trial (12/1/2014-11/30/2017) and co-I for the I DECIDE LVAD dissemination and implementation study (2019-2023) demonstrates the benefits of patient decision aids for invasive, high-risk, high-reward technologies. As PI for the AHA EPIC-HF trial, I helped prove that patient empowerment in prescribing decisions through flipped classroom delivery of a simple video and checklist before clinic visits can help overcome therapeutic inertia and improve use of high-value medications. I was on the writing committee for the 2022 ACCF/AHA/HFSA Heart Failure Guidelines, and helped infuse patient-centered care and end-of-life decision making into many of the recommendations.

1. **Allen LA**, McIlvennan CK, Thompson JS, Dunlay SM, LaRue SJ, Lewis EF, Patel CB, Blue L, Fairclough DL, Leister EC, Glasgow RE, Cleveland JC Jr, Phillips C, Baldridge V, Walsh MN, Matlock DD. Effectiveness of an Intervention Supporting Shared Decision Making for Destination Therapy Left Ventricular Assist Device: The DECIDE-LVAD Randomized Clinical Trial. JAMA Intern Med. 2018 Apr 1;178(4):520-529.
2. Wallace BC, **Allen LA,** Knoepke CE, Glasgow RE, Lewis CL, Fairclough DL, Helmkamp LJ, Fitzgerald MD, Tzou WS, Kramer DB, Varosy PD, Gupta SK, Mandrola JM, Brancato SB, Peterson PN, Matlock DD. A Multicenter Trial of a Shared DECision Support Intervention for Patients offered implantable Cardioverter-DEfibrillators: DECIDE-ICD; Rationale, Design, Medicare Changes, and Pilot Data. Am Heart J. 2020. Apr 20;226:161-173.
3. **Allen LA**, Venechuk G, McIlvennan CK, Page Ii RL, Knoepke CE, Helmkamp LJ, Khazanie P, Peterson PN, Pierce K, Harger G, Thompson JS, Dow TJ, Richards L, Huang J, Strader JR, Trinkley KE, Kao DP, Magid DJ, Buttrick P, Matlock DD. An Electronically Delivered, Patient-Activation Tool for Intensification of Medications for Chronic Heart Failure with Reduced Ejection Fraction: The EPIC-HF Trial. Circulation. 2020 Nov 17.
4. Heidenreich PA, Bozkurt B, Aguilar D, **Allen LA**, Byun JJ, Colvin MM, Deswal A, Drazner MH, Dunlay SM, Evers LR, Fang JC, Fedson SE, Fonarow GC, Hayek SS, Hernandez AF, Khazanie P, Kittleson MM, Lee CS, Link MS, Milano CA, Nnacheta LC, Sandhu AT, Stevenson LW, Vardeny O, Vest AR, Yancy CW. 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. 2022 May 3;145(18):e895-e1032. doi: 10.1161/CIR.0000000000001063. Epub 2022 Apr 1.

2. Quality and Equity of Care: In the setting of a fractionated health system and movement towards value-based purchasing, my NHLBI K23 award (9/2011-8/2016) focused on patients recently hospitalized with worsening heart failure, aiming to quantify the largest gaps in care, understand barriers and facilitators to evidence-based care, and leverage the electronic heath record to optimize transitions of care. I have also led analyses into large quality improvement registries (AHA GWTG, ACC PINNACLE, INTERMACS) to better understand care patterns and opportunities for improved delivery of evidence-based medicine.

1. Breathett K, **Allen LA**, Helmkamp L, Colborn K, Daugherty SL, Khazanie P, Lindrooth R, Peterson PN. The Affordable Care Act Medicaid Expansion Correlated With Increased Heart Transplant Listings in African-Americans But Not Hispanics or Caucasians. JACC Heart Fail. 2017 Feb;5(2):136-147.
2. Gupta A, **Allen LA**, Bhatt DL, Cox M, DeVore AD, Heidenreigh PA, Hernandez AF, Peterson, ED, Matsouaka RA, Yancy CW, Fonarow G. Implementation of the Hospital Readmissions Reduction Program, Readmissions, and Mortality in Heart Failure. JAMA Cardiology. 2017.

3. Risk Assessment and Anticipating End-of-Life: I have helped refine risk assessment for patients with heart failure. My primary focus has been early identification of patients transitioning to end-stage D heart failure, who may benefit from referral for consideration of transplantation, mechanical circulatory support, or palliative care. This initially involved exploring biomarkers (e.g. red cell distribution width) and other markers of risk (e.g. health status, frailty, and post-discharge environment / social instability). More recently I have been working to quantify the uncertainty of risk modeling, so that individual patients better understand the nature of population-based estimates applied to individual care decisions.

1. **Allen LA**, Matlock DD, Shetterly SM, Xu S, Levy WC, Portalupi LB, McIlvennan CK, Gurwitz JH, Johnson ES, Smith DH, Magid DJ. Use of Risk Model to Predict Death in the Next Year Among Individual Ambulatory Patients with Heart Failure. JAMA Cardiology. 2016.
2. Warraich HJ, Xu H, DeVore AD, Matsouaka R, Heidenreich PA, Bhatt DL, Hernandez AF, Yancy CW, Fonarow GC, Allen LA. Trends in Hospice Discharge and Relative Outcomes Among Medicare Patients in the Get With The Guidelines-Heart Failure Registry. **JAMA Cardiol. 2018.**
3. McIlvennan CK, Grady KL, Matlock DD, Helmkamp LJ, Abshire M, **Allen LA**. End of life for patients with left ventricular assist devices: Insights from INTERMACS. J Heart Lung Transplant. 2019 Apr;38(4):374-381.

**Complete List of Published Work in NCBI MyBibliography:**

<https://www.ncbi.nlm.nih.gov/sites/myncbi/1vES6oSIh9gAA/bibliography/42085868/public/?sort=date&direction=descending>