

Nathan W. Carroll

CONTACT INFORMATION

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School of Health Professions
University of Alabama at Birmingham
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EDUCATION

- 2014** Ph.D. in Health Services Organization and Policy, Finance Cognate
University of Michigan, Department of Health Management and Policy, Ann Arbor MI
Dissertation title: “*Access to Capital and Multihospital System Membership in the U.S. Hospital Industry*”
Dissertation advisors: John R.C. Wheeler and Dean G. Smith
- 2008** Masters in Health Administration, Virginia Commonwealth University, Richmond, VA
- 2004** Bachelor of Science in Commerce (Finance) and Economics
University of Virginia, McIntire School of Commerce, Charlottesville, VA

PROFESSIONAL EXPERIENCE

- 2014-Present** Assistant Professor, Department of Health Services Administration,
University of Alabama at Birmingham
- 2007-2009** Manager of Operations and Medical Informatics, Virginia Premier Health Plan,
Richmond, VA
- 2004-2006** Research and Program Development Consultant, American HealthCare,
Richmond, VA

SCHOLARSHIP AND RESEARCH ACTIVITIES

Peer-reviewed publications:

21. *Lord J, J Blackburn, **NW Carroll**, R Weech-Maldonado. Examination of Nursing Home Financial Distress Via Porter’s Five Forces Framework. *Accepted at Health Care Management Review*
20. **Carroll, NW**, DG Smith. Financial Implications of the COVID-19 Epidemic for Hospitals: A Case Study. *Journal of Healthcare Finance*. 46(4). 2020.

19. **Carroll, NW**, J Clement. Hospital Performance in the First Six Years of Medicare's Value Based Purchasing Program. *Medical Care Research and Review*. 2020.
18. **Carroll, NW**, DG Smith, JRC Wheeler. The Cost of Capital, Leverage and System Membership: Does System Membership Help Hospitals Achieve Optimal Leverage? *Advances in Healthcare Management*. (In press)
17. **Carroll, NW**, AG Hall, S Feldman, M Thirumalai, JT Wade, J Rimmer. Enhancing Transitions from Rehabilitation Patient to Wellness Participant for People with Disabilities: An Opportunity for Hospital Community Benefit. *Frontiers in Public Health*. 8(8). 2020.
16. *Attebery, T, L Hearld, J Szychowski, RM Weech-Maldonado, **NW Carroll**. Better Together? An Examination of the Relationship between Acute Care Hospital Mergers and Patient Experience. *Accepted at the Journal of Healthcare Management*
15. Hearld, LR, **NW Carroll**, AG Hall. The Adoption and Spread of Hospital Care Coordination Activities under Value-based Programs. *American Journal of Managed Care*. 25(8). 2019
14. **Carroll, NW**, LR Hearld, *R Joseph. Hospital Ownership of Post-Acute Care Providers and the Cost of Care. *Health Care Management Review*. 2019.
13. *Puro, N, N Borkowski, L Hearld, **NW Carroll**, J Byrd, DG Smith, *A Ghiasi. Financial Distress and Bankruptcy Prediction: A Comparison of Three Financial Distress Prediction Models in Acute Care Hospitals. *Journal of Health Care Finance*. 46(2). 2019.
12. **Carroll, NW** *R Joseph, *N Puro. Interventions to Address Medication-Related Causes of Hospital Readmissions: A Scoping Review. *Journal of Hospital Administration*. 8(4). 2019.
11. Williams, JH, S Jarosek, **NW Carroll**, Y Fan, AG Hall. Thirty Day Hospital Readmissions after an Acute Myocardial Infarction in Black Men: Does Hospital System Affiliation Matter? *American Journal of Preventative Medicine*. 55(5). 2018.
10. Nadpara P, A Joyce, E Murrelle, **NW Carroll**, NV Carroll, M Barnard, B Zedler. Risk Factors for Serious Opioid-induced Respiratory Depression or Overdose: Comparison of Commercially Insured and Veterans Health Affairs Populations. *Pain Medicine*. 19(1). 2018.
9. Hearld, LR, **NW Carroll**, KR Hearld, *W Opoku-Agyeman. Correlates of Inter-organizational Relationship Strategies among Critical Access Hospitals. *Health Care Management Review*. 43(4). 2018.
8. Huang, SS, J Yang, **NW Carroll**. Taxes, Bankruptcy Costs, and Capital Structure in For-Profit and Not-For-Profit Hospitals. *Health Services Management Research*. 31(1). 2017.
7. **Carroll, NW** and *JC Lord. The Growing Importance of Cost Accounting for Hospitals. *Journal of Health Care Finance*. 43(2). 2016
6. **Carroll, NW**, DG Smith, JRC Wheeler. Cash Reserves and System Membership: Does System Membership Improve Not-For-Profit Hospitals' Access to Internal Capital by Reducing Optimal Cash Balances? *Journal of Health Care Finance*. 43(2). 2016

5. **Carroll NW**, DG Smith. Addressing the Healthcare Finance Faculty Shortage: Perspectives and Paths Forward. *Journal of Health Administration Education*. 33(2). 2016.
4. Hearld LR and **Carroll, NW**. Inter-organizational Relationship Trends of Critical Access Hospitals. *Journal of Rural Health*. 32(1). 2015.
3. **Carroll NW**, DG Smith, JRC Wheeler. Capital Investment by Independent and System Affiliated Hospitals. *Inquiry: The Journal of Health Care Organization, Provision and Financing*. 52(1). 2015.
2. Norton, EC, **NW Carroll**, MM Miller, K Coyne, JJ Wang, LC Kleinman. Computing Risk Ratios from Data with Complex Survey Design. *Health Services Outcomes and Research Methodology*, 14(1). 2014.
1. **Carroll, NW**, MP Dorsch. Costs of Providing Antiplatelet Medication for Percutaneous Coronary Intervention. *American Journal of Managed Care*, 12(17). 2011.

*Reflects paper written with student(s). Student authors are italicized.

Reports

Carroll, NW, R Cowan, S Feldman, AG Hall, Y Harris, C Herman, P Klebine, RG Lanzi, R Lujano, M Thirumalai, JT Wade, S Ward, T Washington, J Wilroy. Integrating Wellness into Health Care and Public Health Practice for Individuals with Recently Acquired Disability and Those Accessing Health Care Services Due to a New Secondary Health Condition: Strategic Directions and Policy Recommendations. *Report funded by the Centers for Disease Control and Prevention Grant #6NU27DD001157*.

Working papers

Meese K, LR Hearld, SJ O'Connor, B Sen, **NW Carroll**. Environmental and Organizational Correlates of Provider Sponsored Health Plans. *Under review at Health Care Management Review*

Baidwan, N, **NW Carroll**, B Ozaydin, N Puro. Analyzing Workers' Compensation Claims and Payments Made Using Data from a Large Insurance Provider. *Under review at the International Journal of Environmental Research and Public Health*

Niranjan, S, W Opoku-Agyeman, A Dorsey, **NW Carroll**, M Tipre, M Baskin, MT Dransfield. Distribution and Geographic Accessibility of Lung Cancer Screening Centers in the U.S.

Carroll, NW, T Burkard, T Posa. Can Including Social Determinant of Health Information Improve the Ability of Traditional Risk Stratification Methods to Identify High-Cost Beneficiaries?

Carroll, NW, AY Landry, C Erwin, P Cendoma. Factors Associated with Hospital Bankruptcy: 2007-2019.

Invited Lectures / Presentations / Posters / Panel Discussions

Carroll NW, AY Landry, CO Erwin, P Cendoma, R Landry. (podium presentation) “Factors Associated with U.S. Hospital Bankruptcies: 2007-2019.” European Academy of Management 2020 Annual Meeting. Originally scheduled for December 2020. Dublin, Ireland.

Carroll NW, AY Landry, CO Erwin, P Cendoma, R Landry. (podium presentation) “Factors Associated with U.S. Hospital Bankruptcies: 2007-2019.” Academy of Management 2020 Annual Meeting. August 2020. Vancouver, BC.

Puro, N, S Feyereisen, DG Smith, **NW Carroll**. (podium presentation) “The Role of Organizational Slack in Buffering Financially Distressed Hospitals from Market Exits.” Academy of Management 2020 Annual Meeting. August 2020. Vancouver, BC.

Niranjan S, W Opoku-Agyeman, **NW Carroll**, A Dorsey, M Baskin, M Dransfield, (poster) “Distribution and Geographic Accessibility of Lung Cancer Screening Centers in the U.S.” American Thoracic Society International Conference. May 2020. Philadelphia, PA.

Carroll NW, N Baidwan, B Ozaydin, N Puro, JJ Schmidt. (poster) “Analyzing Workers’ Compensation Claims and Costs Incurred Across a Spectrum of Occupations and States.” American Public Health Association Annual Meeting and Expo. November, 2019. Philadelphia, PA.

Carroll NW and J Clement. (podium presentation) “Hospital Performance in the First Six Years of Medicare’s Value Based Purchasing Program.” Academy of Management 2019 Annual Meeting. August 2019. Boston, MA.

Carroll NW and LR Hearld. (podium presentation) “Integration of Hospitals and Post-Acute Care Providers and the Cost of Care.” Academy of Management 2018 Annual Meeting. August 2018. Chicago, IL.

Carroll NW (panel moderator), MB Briscoe, K Granger, F Turner. “The Future of Health Care Finance” Health Care Financial Management Association Birmingham One Day Event. November 17, 2016.

Carroll NW, DG Smith, JRC Wheeler. “Access to Capital, Leverage and System Membership: Does System Membership Help Not-For-Profit Hospitals Achieve Optimal Leverage?” (discussion paper) Academy of Management Annual Meeting. August 7, 2016. Anaheim, California.

Carroll NW (panel moderator), MB Briscoe, J Burkhart, R Snead. “The Future of Health Care Finance” (panel) 3th Annual National Symposium for Healthcare Executives. July 28, 2016. Destin, Florida.

Kleinman, LC and **NW Carroll**. “Obtaining Risk Ratios and Risk Differences from Logistic Regression” (invited presentation). Sixth Annual Academic Pediatric Association Conference for Pediatric Quality Improvement Methods, Research and Evaluation. April 29, 2016. Baltimore, Maryland.

Carroll NW (panel moderator), MB Briscoe, R Snead, M Griffin. “Sustaining a Financially Vibrant Healthcare Organization” (panel) 35th Annual National Symposium for Healthcare Executives. July 29, 2015. Destin, Florida.

Carroll NW, DG Smith, JRC Wheeler. “System Membership and Not-for-Profit Hospital Leverage” (poster) Academy Health Annual Research Meeting in Minneapolis, Minnesota, June 2015.

Kleinman, LC and **NW Carroll**. “Obtaining Risk Ratios and Risk Differences from Logistic Regression” (invited presentation). Fifth Annual Academic Pediatric Association Conference for Pediatric Quality Improvement Methods, Research and Evaluation. April 24, 2015. San Diego, California.

Kleinman, LC and **NW Carroll**. “Regression Risk Analysis Breakout Session” at the Fourth Annual Academic Pediatric Association Conference for Pediatric Quality Improvement Methods, Research and Evaluation. (invited presentation) May 2, 2014. Vancouver, Canada.

Carroll, NW. “Capital Investment by Independent and System-Affiliated Hospitals” at Department Symposium “Research to Improve Our Health System: 50 Years of Michigan Excellence.” (poster) May 11, 2012.

Carroll, NW. and D. Smith. “Multihospital System Membership: A Capital Idea?” at Michigan Healthcare Financial Management Association 2012 Fall Conference. (Invited presentation) November 12, 2012.

TEACHING ACTIVITIES

Courses taught

Spring 2019 – Present

HCS 660: Financial Management for Health Care Quality Leaders

University of Alabama at Birmingham, Department of Health Services Administration

Masters in Health Care Simulation and Masters in Health Quality and Safety (online): 3 credit hours

Fall 2017 – Present

HA 623: Application of Health Care Finance Principles

University of Alabama at Birmingham, Department of Health Services Administration

MSHA (residential): 3 credit hours

Spring 2017 – Present (every other year)

AHD 705 – Healthcare Financial Management

University of Alabama at Birmingham, Department of Health Services Administration

DSc (executive doctoral): 3 credit hours

Fall 2015 – Present

HA 621: Healthcare Financial Management II

University of Alabama at Birmingham, Department of Health Services Administration

MSHA (residential): 3 credit hours

Spring 2015 - Present

HA 620: Healthcare Financial Management I

University of Alabama at Birmingham, Department of Health Services Administration

MSHA (residential): 3 credit hours

Fall 2014 - Present

AH 705: Seminar in Healthcare Finance

University of Alabama at Birmingham, Department of Health Services Administration

Doctoral (Ph.D.): 3 credit hours

Spring 2014 (Graduate student instructor)
HMP 606: Healthcare Managerial Accounting
University of Michigan, Department of Health Management and Policy
MHSA (residential): 3 credit hours

Student advising

Doctoral committees

In progress

Phil Cendoma (PhD)- **chair**
Tara Dixon (DSc)- member
Cardwell Feagin (DSc)- member
Terry Knight (DSc)- member
Mark Lombardi (DSc)- member
Jon Law (DSc)- member
Corey Spraberry (PhD)- member
Jeremy Lyman (DSc)- member
Michael Malaise (DSc)- member
Cesar Landeros (DSc)- member
Kena Norris (DSc)- member

Completed

2020 Douglas Whitman (DSc), Committee member
“Impact of Registered Nurse Staffing Ratio on Nursing Home Operating Margins and Quality Measure Star Ratings”

2020 Jennifer Strahan (DSc), Committee member
“Examining the Impact of Baldrige on Hospital Performance”

2020 Robert Peterson (DSc), Committee member
“An Analysis of Hospitalist Programs in Critical Access Hospitals”

2019 Katherine Meese (PhD), Committee member
“Provider-Sponsored Health Plans in the Post-Reform Era”

2019 Neeraj Puro (PhD), Committee member
“Three Essays in Hospital Financial Distress: Prediction, Antecedents, and Organizational Response”

2018 Tim Attebery (DSc), Committee member
“A Study to Examine the Relationship between Hospital Mergers and Patient Experience”

Justin Lord (PhD), Committee member
“Financial Distress- Causes and Consequences: An Examination of the Nursing Home Industry”

2018 Keith Brady (DSc), Committee member
“Effects of Medicaid Expansion on the Financial Performance of Rural Hospitals”

- 2017 Preston Simmons (DSc), Committee member
"A Comparative Multiyear Assessment of Care Utilization Between Existing and Newly Enrolled Medicaid Populations within Washington State"
- 2016 Lucas Higginson (DSc), Committee member
"Examining the Relationship between Surgical Profiles and Financial Performance in Hospitals"
- 2015 Kenneth Cochrane (DSc), Committee member
"The Effect of Health System Membership on Hospital Financial Performance"

Other advising activities

- 2015-present Served as "faculty coach" to 3-6 residential and executive MSHA students each year
 2015-2019 Faculty Coach to UAB's Health Administration Case Competition Team
 2015-present Provide ad hoc advising to other case competition teams including NAHSE, Ohio State and HIMSS

Guest lectures

- "Healthcare Finance I" Lecture to participants in the UAB Health System Certificate in Healthcare Management program. November 2018, 2019
- "Healthcare Finance II" Lecture to participants in the UAB Health System Certificate in Healthcare Management program. January, 2016, 2017, 2018, 2020
- "Things Every Hospital Financial Manager Should Know" Lecture to visiting students from the Masters in Hospital Management Degree program at Tsinghua University Shenzhen Graduate School, Institute for Hospital Management. July, 2015.; July, 2016.

GRANTS AND CONTRACTS

No number assigned UAB Faculty Development Grant Program 5/2020-10/2021

Costs of Secondary Conditions in Patients with Spinal Cord Injury
 Role: PI
 Total budget: \$9,945

No number assigned PI: James Rimmer 4/2020-4/2021

National Center on Health, Physical Activity and Disability (NCHPAD)
 Project title: Mindfulness, Exercise and Nutrition to Optimize Recovery (MENTOR)
 Role: Co-Investigator (5% effort)

NSF1624690 R. Weech-Maldonado, N. Borkowski (site PIs) 7/2018-12/2020

UAB Site Phase 2: I/UCRC for Center for Health Organization Transformation (CHOT).
Project title: Evaluation of case management programs for workers' compensation
Role: CHOT Investigator, Project PI (8% effort)

6NU27DD001157 James Rimmer (PI) 10/2018-3/2020

National Center on Health, Physical Activity and Disability (NCHPAD), Centers for Disease Control and Prevention (CDC). Supplemental Funding for the Lakeshore-UAB Healthcare to Health Promotion MENTOR Project
Role: Co-investigator (5%)

No number assigned Center for Healthcare Leadership (UAB) 3/2019

UAB Department of Pediatric Medicine
Financial Education Initiative for Division Directors (Contract)
Responsibilities: Create and deliver problem-based financial education to division directors within the UAB department of Pediatrics.
Total budget: \$17,600

NSF1624690 R. Weech-Maldonado, N. Borkowski (site PIs) 11/2017-7/2018

UAB Site Phase 2: I/UCRC for Center for Health Organization Transformation (CHOT).
Project title: Identifying Best Practices in Readmission Reduction Programs
Role: CHOT Investigator, Project PI (5% effort)

FELLOWSHIPS AND AWARDS

Agency for Healthcare Research and Quality (AHRQ) Traineeship	2009-2011
Certified as a "Black Belt" in Lean Six Sigma Process Improvement by the George Group Consulting and Virginia Tech University	2008
A.D. Williams Award	2006
Stuart D. Ogren Scholar	2005

SERVICE

To the field

AUPHA Finance Committee Member 2019-Present

Health Care Advisory Committee 2019
National Center for Physical Activity and Disability
Co-chair

Ad Hoc Reviewer

Academy of Management (Annual Meeting)
American Journal of Managed Care
American Journal of Pharmacy Benefits
Clinical Obesity
European Academy of Management (Annual Conference)
Health Care Management Review
Health Services Management Research
Inquiry
Journal of Rural Health
Journal of Health Administration Education
Journal of Health Care for the Poor and Underserved
Medical Care Research and Review

Within UAB

Admissions Committee (MSHA, E-MSHA), Member 2016 - Present
Masters of Science in Health Administration (MSHA) Faculty Committee, Member 2015 – Present
Masters of Science in Healthcare Quality and Safety Faculty Committee, Member 2020 – Present
Faculty Search Committee, Member 2019 – 2020
Academic Affairs Committee (School of Health Professions), Member 2015 - 2019
Health Services Administration Faculty Profile Documentation Work Group, Member 2017 – 2018

PROFESSIONAL ASSOCIATION MEMBERSHIPS

Academy Health Member 2009 – Present
Healthcare Financial Management Association Member 2012 – Present
Assoc. of University Programs in Health Administration (AUPHA) Member 2014 – Present
Academy of Management, Health Care Management Division Member 2016 – Present