

ANDREW R. QUANBECK

1513 University Ave Office # 4115, Madison, WI 53706 | 608-890-1016 |
andrew.guanbeck@chess.wisc.edu

EDUCATION

University of Wisconsin, Madison, WI

Ph.D. in Industrial & Systems Engineering

Specialization: Health systems engineering / health economic analysis 2012

Dissertation: Cost variation in addiction treatment: An examination of process

University of Wisconsin, Madison, WI

M.S. in Industrial & Systems Engineering 2006

University of Wisconsin, Madison, WI

B.S. in Industrial & Systems Engineering 2001

RESEARCH EXPERIENCE

Associate Scientist 2012-present

University of Wisconsin-Madison

Center for Health Enhancement Systems Studies

Honorary Associate

University of Wisconsin-Madison

Department of Industrial & Systems Engineering 2014-present

PROJECTS

Conceptualizing the problem of implementation: a systems engineering perspective applied in substance abuse treatment

Principal investigator 2015-present

I am principal investigator of this NIH-funded career award aimed at launching an independent research career in the field of implementation science. Research has demonstrated that many new practices are effective in healthcare, but very few are ever adopted. The research plan seeks to develop new approaches to assess whether an organization is likely to adopt a new evidence-based practice using multi-attribute utility theory. This new approach may ultimately improve the quality of healthcare by boosting its adoption of proven best practices.

Physician coaching to reduce opioid-related harms 2014-present

Multiple principal Investigator

I am multiple principal investigator of this NIH-funded project that is pilot testing a strategy for promoting the adoption of evidence-based practices in primary care. The strategy will be applied to a pressing public health concern: prescription opioid abuse. The strategy, if it is ultimately more successful in moving evidence-based changes into practice than methods currently used, will not just reduce the burdens caused by opioid misuse and addiction but offer an approach to improve healthcare generally.

Implementing technology-assisted drug treatment in primary care

2012-present

Co-investigator

Redesigning addiction treatment through the use of mobile technology holds the promise to develop a care delivery system that is less expensive, more reliable, and more responsive to individual patients' needs than the current system. I am responsible for the implementation coaching and economic analysis on this NIH-funded study aimed at delivering a mobile technology-based system for managing drug addiction in primary care settings.

Bringing communities and technology together for healthy aging

2011-present

Co-investigator

I am leading the cost-effectiveness analysis for the University of Wisconsin's Active Aging Research Center, a multi-disciplinary group of researchers, policymakers, and healthcare providers collaborating to develop a technology-based system to help elderly persons age in their homes rather than being placed into nursing homes.

NIATx 200: RCT evaluating improvement strategies in addiction treatment

2007-2012

Scientific manager

I was the scientific manager of this NIH-funded research study, which sought to improve the quality of addiction treatment services. NIATx 200 was the largest randomized trial of organizational change ever conducted in the United States' addiction treatment system and among the largest trials of its kind ever conducted in health care. I was responsible for conducting the study's cost-effectiveness analysis, implementing the protocol, managing the evaluation, and writing manuscripts for publication in peer-reviewed journals.

STAR-SI: Strengthening treatment access and retention- state initiative

2006-2010

Data manager

I was responsible for data collection and evaluation of this HHS-funded project that sought to improve quality in addiction treatment by establishing state/provider partnerships in nine states (FL, IA, IL, ME, NY, OH, OK, SC, and WI). States supported provider improvement efforts by leveraging their roles as payers and regulators of addiction treatment to remove systemic barriers to access and retention.

OTHER PROFESSIONAL EXPERIENCE

Research Assistant, Center for Health Enhancement Systems Studies, Madison, WI (2005 – 2006)

Senior Application Engineer, York International Corporation, Denver, CO (2001 -2005)

Quality Improvement Engineer, Harley-Davidson Motor Company, Milwaukee, WI (1999 – 2001)

PUBLICATIONS

Quanbeck, A., Brown, R. T., E Zgierska, A., A Johnson, R., Robinson, J. M., & Jacobson, N. (2016). Systems consultation: protocol for a novel implementation strategy designed to promote evidence-based practice in primary care. *Health Research Policy and Systems*, 14, 8.

Johnson, K., Quanbeck, A., Maus, A., Gustafson, D. H., & Dearing, J. W. (2015). Influence networks among substance abuse treatment clinics: implications for the dissemination of innovations. *Translational Behavioral Medicine*, 1-9.

Molfenter T, Sherbeck C, Zehner M, Quanbeck A, McCarty D, Kim JS, & Starr S. (2015). Implementing buprenorphine in addiction treatment: payer and provider perspectives in Ohio. *Substance Abuse Treatment, Prevention, and Policy*. 10(1), 13.

Gustafson DH, McTavish F, Mahoney JE, Johnson RA, Lee JD, Quanbeck AR, ... & Shah, D. (2015). The effect of an information and communication technology (ICT) on older adults' quality of life: study protocol for a randomized control trial. *Trials*, 16(1), 191.

Quanbeck AR, Chih, MY, Isham, A, Gustafson DH. (2014). Mobile Delivery of Treatment for Alcohol Use Disorders: A Review of the Literature. *Alcohol Research: Current Reviews*. 36(1):111-122.

Quanbeck AR, Gustafson DH, Marsch L, McTavish, F, Brown, R, Mares, ML, Johnson, R, Glass, J. (2014). Integrating addiction treatment with primary care using mobile health technology: Protocol for an implementation research study. *Implementation Science*. 9(65).

Grazier K, Quanbeck AR, Johnson R, Robinson J, Oruoung J, Ford II JH, Pulvermacher A, McCarty D, Gustafson DH. (2014). What Influences Participation in Quality Improvement? A Randomized Trial of Addiction Treatment Organizations. *Journal of Healthcare Quality*.

Quanbeck A, Wheelock A., Ford JH II, Pulvermacher A, Cappocia V., Gustafson D. (2013). Examining Access to Addiction Treatment: Scheduling processes and barriers. *Journal of Substance Abuse Treatment*. 44(3):343-8.

Molfenter T, Kim JS, Quanbeck A, Patel-Porter T, Starr S, McCarty D. (2013). Testing use of payers to facilitate evidence-based practice adoption. Protocol for a cluster-randomized trial. *Implementation Science*, 8(50).

Gustafson DH, Quanbeck AR, Ford JH II, Pulvermacher A, French MT, McConnell KJ, Batalden P, Hoffman K, McCarty D. (2013). Which elements of improvement collaboratives cause improvement? A cluster-randomized trial. *Addiction*. 108(6) 1145–1157.

Quanbeck AR, Madden L, Edmundson E, Ford JH II, McConnell KJ, McCarty D, Gustafson DH. (2012). A business case for quality improvement in addiction treatment: evidence from the NIATx collaborative. *Journal of Behavioral Health Services and Research*. 39(1) 91-100.

Quanbeck AR, Gustafson DH, Ford JH II, Pulvermacher A, French MT, McConnell KJ, McCarty D. (2011). Disseminating quality improvement: study protocol for a large cluster-randomized trial. *Implementation Science*. 6(1) 44.

Hoffman KA, Quanbeck AR, Ford JH II, Wright D, Lambert-Wacey D, Chvojka P, Wrede F, Hanchett D, McCarty D. (2011). Improving substance abuse data systems to measure ‘waiting time to treatment’: Lessons learned from NIATx 200. *Health Informatics Journal*. 17(4) 256-265.

Quanbeck AR, Lang K, Enami K, Brown RL. (2010). A cost-benefit analysis of Wisconsin’s screening, brief intervention, and referral to treatment program: adding the employer’s perspective. *Wisconsin Medical Journal*. 109(1) 9-14.

McConnell KJ, Hoffman KA, Quanbeck AR, McCarty D. (2009). Management practices in substance abuse treatment programs. *Journal of Substance Abuse Treatment*. 37(1) 79-89.

Quanbeck AR. (2009) Managing your way to better addiction treatment outcomes. *Behavioral Healthcare*. 29(9):34-35.

PRESENTATIONS AT ACADEMIC CONFERENCES

Quanbeck, A. Implementing an mHealth technology for addiction treatment in primary care: An engineering perspective. (Oral presentation). AcademyHealth/NIH 8th Annual Conference on the Science of Dissemination and Implementation. December 14-15, 2015. Washington, DC.

Quanbeck, A., Molfenter, T., Brown, R., Mares, M.L., Glass, J. Innovative implementation strategies in addiction health services research. (Symposium chair). *Addiction Health Services Research Annual Meeting*. October 15-17, 2015. Los Angeles, CA.

Quanbeck, A. Return on investment for mHealth. (Panel discussant). *mHealth Summit*. December 7-11, 2014. Washington, DC.

Quanbeck, A. Best practices for implementation of mHealth technologies. (Panel discussant). *mHealth Summit*. December 7-11, 2014. Washington, DC.

Quanbeck, A., Brown, R., Glass, J., Molfenter, T. Using technology to promote integration of care. (Oral presentation). *Addiction Health Services Research Annual Meeting*. October 15-17, 2014. Boston, MA.

Quanbeck, A. Using mobile health technology to treat addiction in primary care. (Oral presentation). *The National Collaborative for Improving Primary Care Through Industrial and Systems Engineering*. March, 2014. Madison, WI.

Quanbeck, A., McTavish, F., Molfenter, T., Brown, R. Evidence based practices and innovative technologies in addiction treatment: Implementation strategies. (Symposium chair). *Addiction Health Services Research Annual Meeting*. October 23-25, 2013. Portland, OR.

Quanbeck AR. NIATx200: Study description and lessons learned. (Oral presentation). *American Public Health Association Annual Meeting*. October 30-November 2, 2011. Washington, D.C.

Quanbeck AR. NIATx200: Impact of the study interventions. (Oral presentation). *American Public Health Association Annual Meeting*. October 30-November 2, 2011. Washington, D.C.

Quanbeck AR. Improving data systems to measure waiting time: Lessons learned (Oral presentation). *Addiction Health Services Research Annual Meeting*. October 4-5, 2011. Fairfax, VA.

Quanbeck AR. NIATx: A quality improvement model that works for the public and nonprofit sectors. (Oral presentation). *Academy of Management*. August 12-16, 2011. San Antonio, TX.

Quanbeck AR. Quality improvement in addiction treatment: results of a multi-center randomized control trial. (Poster presentation). *AcademyHealth Annual Meeting*. June 14-16, 2011. Seattle, WA.

Quanbeck AR. Waiting time reduction in the NIATx 200 research trial. (Oral presentation). *Addiction Health Services Research*. October 25-28, 2010. Lexington, KY.

OTHER INVITED PRESENTATIONS

Visiting scholar presentation. Washington University Network for Dissemination and Implementation Research (WUNDIR). (February 2016). St. Louis, MO.

Workshop presenter, Mayo Clinic Conference on the Science of Service Delivery (September 2015). Rochester, MN.

Colloquium presenter, Department of Industrial & Systems Engineering (December 2014). Madison, WI.

Conference faculty, Norlien Foundation's Recovery from Addiction Symposium (October, 2010). Banff, Alberta, Canada.

Keynote speaker, Maryland Addiction Director's Council (May, 2010). Ocean City, MD.

Keynote speaker, STAR-SI Florida Learning Session (June 2009). Orlando, FL.

TEACHING EXPERIENCE

Quality Coach, Network for the Improvement of Addiction Treatment 2007 - present
I have taught quality improvement to healthcare professionals from 15 organizations across the United States on a one-on-one basis, and facilitated 18 learning sessions that convene multiple organizations to work towards common quality improvement goals.

Lead Faculty, NIATx Business Case Community of Commitment 2008 - present
I developed the curriculum for a 6-month workshop that teaches addiction treatment professionals how to improve financial performance and served as the workshop's lead faculty member for 3 administrations, involving more than 20 organizations.

Guest Lecturer, Introduction to Health Systems Engineering 2012-2013
I lecture on quality improvement in non-profit settings for Industrial & Systems Engineering students at the University of Wisconsin.

PROFESSIONAL SERVICE

Journal peer reviewer: Implementation Science, Health Services Research, Addiction, Journal of Substance Abuse Treatment, Social Science & Medicine, Health Policy, Wisconsin Medical Journal, Journal of Behavioral Health Services and Research

Conference peer reviewer: American Public Health Association, Academy of Management, Addiction Health Services and Research

Grant reviewer: VA HSR&D study section

Conference planning committee: Addiction Health Services and Research (2015). Los Angeles, CA.

Board member: Parents' Advisory Group, Madison (WI) Metropolitan School District

Volunteer: Youth sports coach, Madison, WI area YMCA

Academic staff mentor: University of Wisconsin (2012-2013).

MEMBERSHIPS

American Public Health Association (2011-present)
Academy of Management (2010-present)
AcademyHealth (2010-present)
Addiction Health Services and Research (2010-present)

HONORS & AWARDS

Training Institute for Dissemination and Implementation Research in Health Invitee (2015)
National Academy of Engineering's Frontiers of Engineering Symposium Invitee (2014)
Honorary faculty associate, Department of Industrial & Systems Engineering, UW-Madison (2014)
Executive Committee member, VA Polytrauma & Blast-Related Injuries QUERI (2010-2014)
Advisory Board member, VA Family Care Project (2010 – 2014)
Bollinger Award nominee (2010)
Bleyer Award winner (2001)
Wisconsin Academic Excellence Award winner (1995)