



A Service Campaign to Highlight Peer-Reviewed Outcomes Articles That Illustrate How Continuing Education in the Health Professions Has Improved Health Care Quality

Sandra Haas Binford, MAEd
Full Circle Clinical Education, Inc
Connecting Quality Outcomes to Targeted Instruction™
FullCircleClinicalEducation.com

Donald Harting, MA ELS CHCP
Harting Communications LLC
“Providing people with helpful information since 1876” | www.hartingcom.com

From August 17 – September 17, 2015, we highlighted 30 articles from continuing medical education, quality improvement, and performance improvement initiatives in the peer-reviewed clinical and educational literature. Our goals were to:

- Encourage clinical education professionals to submit articles with educational outcomes data from CEHP (including CME), IPE, PI, and QI* initiatives that worked to change clinicians’ behavior or improve performance in routine, clinical practice
- Use social media to show the past effectiveness and achievements of CEHP initiatives in improving health care quality, as published in educational outcomes studies (“CME Tweet Fest” #CMEtf)

Our guided tour is for those who wish to cite the value of CEHP and learn more about what’s involved in getting educational outcomes data published in the peer-reviewed literature. Target audiences are continuing educators, educational research analysts, clinical education researchers, program managers, proposal writers, medical writers and editors, medical directors, and medical education company officers, and publishers.

* CEHP = continuing education in the health professions; CME = continuing medical education; IPE = interprofessional education; PI = performance improvement; QI = quality improvement

Criteria for Inclusion as a Featured Article

Core Criteria

- Report of a CEHP with a quality or performance improvement objective
- Focus on clinician education, rather than patient education
- An outcomes study, rather than a needs assessment, methodology report, review, discussion, etc.
- Publication in a peer-reviewed journal
- Publication in English

Sandra’s Additional Criteria

- Abstract available in PubMed OR free access to full text
- Historical importance of innovation, thematic relationship to other featured articles, or recent publication
- Influence of the authors, journal, clinical center, or agency/university
- Current topic in clinical care, educational design, or outcomes reporting

Don’s Additional Criteria

- Indexing in PubMed
- Free access to full text
- Publication date 2010-2015

NOT Grounds for Exclusion

- Data not showing change over time (to fairly represent existence of any and all data—*ie*, positive, negative, mixed, or inconclusive findings)

Access the Report

Sign up to receive the complete “Back to School” summary report of featured studies by following FullCircleClinicalEducation.com/blog or [LinkedIn.com/company/full-circle-clinical-education-inc](https://www.linkedin.com/company/full-circle-clinical-education-inc). Follow [Twitter.com/SHB_CMEedit](https://twitter.com/SHB_CMEedit) to stay informed of future service campaigns. Please share ... CEHP matters!

References of Featured Articles and Blog Post Titles

Features Selected by Don Harting

A Healthy Dose of Reality: Amland RC, Dean BB, Yu H, *et al.* Computerized Clinical Decision Support to Prevent Venous Thromboembolism Among Hospitalized Patients: Proximal Outcomes from a Multiyear Quality Improvement Project. *J Healthc Qual.* 2015;37(4):221-31.

A Methods Article That Actually Reports Outcomes: Gold R, Nelson C, Cowburn S, *et al.* Feasibility and impact of implementing a private care system's diabetes quality improvement intervention in the safety net: a cluster-randomized trial. *Implement Sci.* 2015;10:83.

Old Folks Feeling Better in Fort Worth: Fine Quality Improvement Report in *Ann Longterm Care*: Reid C, O'Neil KW, Dancy J, Berry CA, Stowell SA. Pain Management in Long-Term Care Communities: A Quality Improvement Initiative. *Ann Longterm Care.* 2015;23(2):0.

These Investigators Also Sought to Measure Compassion: Hirsch FR, Jotte RM, Berry CA, Mencia WA, Stowell SA, Gardner AJ. Quality of care of patients with non-small-cell lung cancer: a report of a performance improvement initiative. *Cancer Control.* 2014;21(1):90-7.

Significant Difference: P Doesn't Always Equal .05: Investigators Report in *J Oncol Pract*: Marshall JL, Cartwright TH, Berry CA, Stowell SA, Miller SC. Implementation of a performance improvement initiative in colorectal cancer care. *J Oncol Pract.* 2012;8(5):309-14.

This Project Changed Physician Prescribing Patterns: Greenspan SL, Bilezikian JP, Watts NB, *et al.* A clinician performance initiative to improve quality of care for patients with osteoporosis. *J Womens Health (Larchmt).* 2013;22(10):853-61.

Another Scalp on This Lead Author's Belt: Stowell SA, Miller SC, Fonseca V, Trencé D, Berry CA, Blum J. Continuing medical education for promoting shared medical visits in diabetes care. *Clin Diabetes.* 2015;33(1):28-31.

EHRs Frustrate British Docs, Too: Michael E, Patel C. Improving medical handover at the weekend: a quality improvement project. *BMJ Qual Improv Reports.* 2015;4(1):u697.w971.

See commentary on featured articles at dvmw.blogspot.com

A Report on 50 PI-CME Reports: Damiani E, Donati A, Serafini G, *et al.* Effect of performance improvement programs on compliance with sepsis bundles and mortality: a systematic review and meta-analysis of observational studies. *PLoS One.* 2015;10(5):e0125827.

When No Change Is Good News: *BMJ Qual Saf*: Lachman P, Linkson L, Evans T, Clausen H, Hothi D. Developing person-centred analysis of harm in a paediatric hospital: a quality improvement report. *BMJ Qual Saf.* 2015;24(5):337-4.

When CME Becomes Foreign Aid, and Vice Versa: Lowe J, Sibbald RG, Taha NY, *et al.* The Guyana Diabetes and Foot Care Project: a complex quality improvement intervention to decrease diabetes-related major lower extremity amputations and improve diabetes care in a lower-middle-income country. *PLoS Med.* 2015;12(4):e1001814.

They Even Published the Meeting Agenda in *Am J Infect Control*: Nickel W, Saint S, Olmsted RN, *et al.* The Interdisciplinary Academy for Coaching and Teamwork (I-ACT): a novel approach for training faculty experts in preventing healthcare-associated infection. *Am J Infect Control.* 2014;42(10 Suppl):S230-5.

Here's a Rare Published Example of a Failed CME Intervention: Shah BR, Bhattacharyya O, Yu CHY, *et al.* Effect of an educational toolkit on quality of care: a pragmatic cluster randomized trial. *PLoS Med.* 2014;11(2):e1001588.

A Hidden Gem from Reading, Pennsylvania, Courtesy of *J Community Hosp Intern Med Perspect*: Hingorani R, Mahmood M, Alweis R. Improving antibiotic adherence in treatment of acute upper respiratory infections: a quality improvement process. *J Community Hosp Intern Med Perspect.* 2015;5(3):27472.

Quality Improvement: Another Reality Check *BMJ Qual Improv Report*: Good Charting Vs. Good Care: Greene L, Moreo K. Quality improvement education to improve performance on ulcerative colitis quality measures and care processes aligned with National Quality Strategy priorities. *BMJ Qual Improv Report.* 2015;4(1):u208829.w3554.

Informatics and Tags (2+) at fullcircleclinicaleducation.com/blog

MeSH Terms of Featured Articles
Medical Subject Headings Assigned as "Major" Terms by the National Library of Medicine
Education, Medical, Continuing (7); Physician's Practice Patterns (4); Benchmarking (3); Clinical Competence (3); Health Personnel (3); Delivery of Health Care, Integrated (2); Drug Prescriptions (2); Interinstitutional Relations (2); Public Health (2); Drug Interactions (1); General Practice (1); Health Education (1); Interprofessional Relations (1); Models, Educational (1); Outcome Assessment (Health Care) (1); Physicians, Family (1); Program Evaluation (1); Quality Assurance, Health Care (1); Quality Improvement (1)

Blog Labels
educational effectiveness (11), performance (8), quality improvement (9), change data (7), clinical journal (6), guidelines (6), outcomes methods (6), JCEHP (6), chart review (6), implementation science (5), educational journal (4), clinical education (4), competence (4), interprofessional education (4), local (4), MedEd SME (4), pharmacy (4), EHR pop-up (3), ACEHP (2), ACEHP QIE Roadmap (2), AHRQ (2), Almanac (2), attitude (2), Canada (2), CE Measure (2), curriculum (2), diabetes (2), didactic (2), hospital (2), individualized education (2), instructional design (2), knowledge (2), MeSH (2), patient outcomes (2), primary care (2), scope of practice (2), Twitter (2), We Matter (2)

Features Selected by Sandra Binford

Improved Confidence in Pain Management for Minority Populations Can Improve Care Disparities:

Bekanich SJ, Wanner N, Junkins S, *et al.* A multifaceted initiative to improve clinician awareness of pain management disparities. *Am J Med Qual.* 2014;29(5):388-96.

Open-Access Article on Interprofessional Care and Team Learning for Delirium in Hospital:

Peterson ED, Heidarian S, Effinger S, *et al.* Outcomes of an interprofessional team learning and improvement project aimed at reducing postsurgical delirium in elderly patients admitted with hip fracture. *CE Measure.* 2014;8(1):3-7.

ACEHP's President Ed Dellert Coauthors CME Mayo Clinic Article With Robust Follow-Up Data

Adams SG, Pitts J, Wynne J, Yawn BP, Diamond EJ, Lee S, Dellert E, Hanania NA. Effect of a primary care continuing education program on clinical practice of chronic obstructive pulmonary disease: translating theory into practice. *Mayo Clin Proc.* 2012;87(9):862-70.

Mixed-Methods Study Improves Team Communication After Non-Didactic

Interprofessional Education on Cardiac Surgical Crisis: Stevens L-M, Cooper JB, Raemer DB, *et al.* Educational program in crisis management for cardiac surgery teams including high realism simulation. *J Thorac Cardiovasc Surg.* 2012;144(1):17-24.

Pharmacy Education for Hospital Clinicians on VTE Prophylaxis Changed Performance, Bringing

Guideline-Adherent Care To Most Patients: Dobesh PP, Stacy ZA. Effect of a clinical pharmacy education program on improvement in the quantity and quality of venous thromboembolism prophylaxis for medically ill patients. *J Manag Care Pharm.* 2005;11(9):755-62.

Implementation Science Extends Multidisciplinary Education on VTE Prophylaxis at World-Class

Children's Hospital: Raffini L, Trimarchi T, Beliveau J, Davis D. Thromboprophylaxis in a pediatric hospital: a patient-safety and quality-improvement initiative. *Pediatrics.* 2011;127(5):e1326-32.

3-Hospital Quality- and Performance-Improvement CME Project With Systems Change Support for

Diabetes Care, With CE Measure Editor, Derek Dietze: Lapolla J, Morrice A, Quinn S, *et al.* Diabetes management in the hospital setting: a performance improvement continuing medical education program. *CE Meas.* 2013;7(1):54-60.

Today's Landmark NHLBI SPRINT study results

relate to this 2008 PI-CME article by Shershneva, Olson, et al: Shershneva MB, Mullikin EA, Loose A-S, Olson CA. Learning to collaborate: a case study of performance improvement CME. *J Contin Educ Health Prof.* 2008;28(3):140-7.

See commentary and related citations on featured articles at fullcircleclinicaleducation.com/blog.

Medical education with EMR-based reminders reduces antibiotic prescribing and dispensing for respiratory tract infections in Norway:

Hoye S, Gjelstad S, Lindbaek M. Effects on antibiotic dispensing rates of interventions to promote delayed prescribing for respiratory tract infections in primary care. *Br J Gen Pract.* 2013;63(616):e777-e786.

Eight-year Canadian study on opioid prescribing among regulator- and self-referred physicians to intensive medical education workshop:

Kahan M, Gomes T, Juurlink DN, *et al.* Effect of a course-based intervention and effect of medical regulation on physicians' opioid prescribing. *Can Fam Physician.* 2013;59(5):e231-9.

Personalized MD Curriculum in Personalized NSCLC Treatment Produces High, "Clinically Significant" Educational Effect Size Published in JCEHP:

Herrmann T, Peters P, Williamson C, Rhodes E. Educational outcomes in the era of the Affordable Care Act: impact of personalized education about non-small cell lung cancer. *J Contin Educ Health Prof.* 2015;35(Suppl 1):S5-12.

Study Design and Paired Comparisons: Individualized Education Fails to Change

Practice—Or Was It Only Poor Matching? Malone DC, Liberman JN, Sun D. Effect of an educational outreach program on prescribing potential drug-drug interactions. *J Manag Care Pharm.* 2013;19(7):549-57.

Patient-Health Effects of a Performance-Improvement CME Educational Intervention (COSEHC) to Control Cardiometabolic

Risk in the Southeastern U.S. Joyner J, Moore MA, Simmons DR, *et al.* Impact of performance improvement continuing medical education on cardiometabolic risk factor control: the COSEHC initiative. *J Contin Educ Health Prof.* 2014;34(1):25-36.

CS2day: Award-Winning, 9-Collaborator, Performance-Improvement CME With an Outcomes-Based Evaluation Model:

1. Moore DE. Collaboration, best-practice CME, public health focus, and the Alliance for CME competencies: a formula for the new CME? [editorial]. *J Contin Educ Health Prof.* 2011;31(Suppl 1):S1-2.

2. McKeithen T, Robertson S, Speight M. Developing clinical competencies to assess learning needs and outcomes: the experience of the CS2day initiative. *J Contin Educ Health Prof.* 2011;31(Suppl 1):S21-7.

3. Shershneva MB, Larrison C, Robertson S, Speight M. Evaluation of a collaborative program on smoking cessation: translating outcomes framework into practice. *J Contin Educ Health Prof.* 2011;31(Suppl 1):S28-S36.

Recommended Citation: Binford SH, Harting D. *Back to School: A Service Campaign to Highlight Peer-Reviewed Outcomes Articles That Illustrate How Continuing Education in the Health Professions Has Improved Health Care Quality (Executive Summary)* [white paper]. Winston-Salem, NC: Full Circle Clinical Education; 2015.

Curators' Introductions to the "Back to School" Series

Don Harting (twitter.com/CME_Scout)

One of the things I love about the CME field is how the landscape is constantly changing. That's why I call myself @CME_Scout on Twitter. A good example is the new trend of publishing articles containing outcomes of continuing education interventions in peer-reviewed journals. This trend started a few years ago but now seems to be gaining momentum as more articles about quality improvement (QI) and performance improvement (PI) are published. As former editor of a peer-reviewed education journal, I think this is a terrific step forward for our profession. Sandra Binford and I teamed up to give our followers on Twitter a guided tour of this exciting new body of literature during the months of August and September, 2015. Each of our 30 tweets featured a one of our favorite articles, along with a note about why it was worth reading.

Sandra Binford (twitter.com/SHB_CMEedit)

We often hear that there is little evidence of CME's success in teaching clinicians relevant strategies for better patient care, for changing practice through education, and for connecting with the quality improvement (QI) movement. Witness the current initiatives of the Alliance for Continuing Education in the Health Profession (ACEHP), "Why We Matter" and the 10-year Roadmap and 10 complementary Building Blocks of the Quality Improvement Education (QIE) Initiative. While Davis and others have noted historical effectiveness of CEHP, such as in this 1992 article, later articles by Bloom, Davis, and Ratanawongsa have questioned CME effectiveness (e.g., in 1995 and 2005) and identified reporting inconsistencies that reduce the validity of CME outcomes reports.

It is true that our reporting of CEHP methods and outcomes has need of greater readership and better reporting. Yet CME, performance improvement (PI), interprofessional education (IPE), and education-driven QI projects already have many achievements reported, in both initiative-level outcomes reports and the published, peer-reviewed literature. Going beyond *JCEHP*, where articles feature methods and case studies for improving clinical education, and *CE Measure*, which reports on-the-ground initiatives and specific outcomes data, we see that clinical journals and meetings are publishing increasing numbers of CEHP studies. What's more, reporting of these achievements is certain to grow after the ACEHP QIE Initiative launches its custom version of the SQUIRE tool this month, at September 2015's Alliance Quality Symposium. The SQUIRE tool, created by the group developing Standards for Quality Improvement Reporting Excellence, will help all of us doing CEHP research design our studies and publish our findings in a standardized manner ... for later meta-analyses of into CME/CEHP effectiveness as a quality improvement mechanism.

Today our goal is to promote results of the challenging work that goes into measuring health education outcomes, as we prepare—as a profession—to begin reporting CME and IPE initiatives with greater rigor, and to illustrate the effectiveness of certified clinical education by accredited providers on a greater scale.

Submit Your Articles



JCEHP is a peer-reviewed forum for scholarly works addressing all aspects of CME and continuing professional development (CPD) for physicians, nurses, and other health care professionals. The journal serves 3 major audiences: CME/CPD researchers, practitioners, and policy makers. *JCEHP's* scope encompasses a broad range of educational topics, including interprofessional education, organizational learning, program planning and design, workplace learning, practice change, outcomes assessment, etc. Indexed on MEDLINE. See [onlinelibrary.wiley.com/journal/10.1002/\(ISSN\)1554-558X](http://onlinelibrary.wiley.com/journal/10.1002/(ISSN)1554-558X).



CE Measure offers its readership open-access, peer-reviewed articles authored by leading CEHP professionals to address important and current aspects of educational needs and outcomes assessment, methodologies, models, results, practice-based protocols, commentaries, CEHP conference highlights and abstracts, and case histories. The journal provides tangible, real-world examples of how efficient and evidence-based measurement can be done, given all the constraints of time, cost, and resources that affect the reality of CEHP. Content addresses the practical assessment needs of CEHP professionals. See www.cemeasure.com.

Alliance for CE in the Health Professions
Almanac

The Alliance for CE in the Health Professions *Almanac* newsletter offers CEHP professionals space to share many aspects and results of their work. One recommended resource to help us with CEHP outcomes is the 12-article research series, whose purpose is to enhance varied CEHP professionals' knowledge, skills, and confidence in reading and performing basic educational research and statistics through approachable, text-based instruction. Article #1 (Jan/Feb 2015) is at www.acehp.org/p/do/si/topic=216#.