

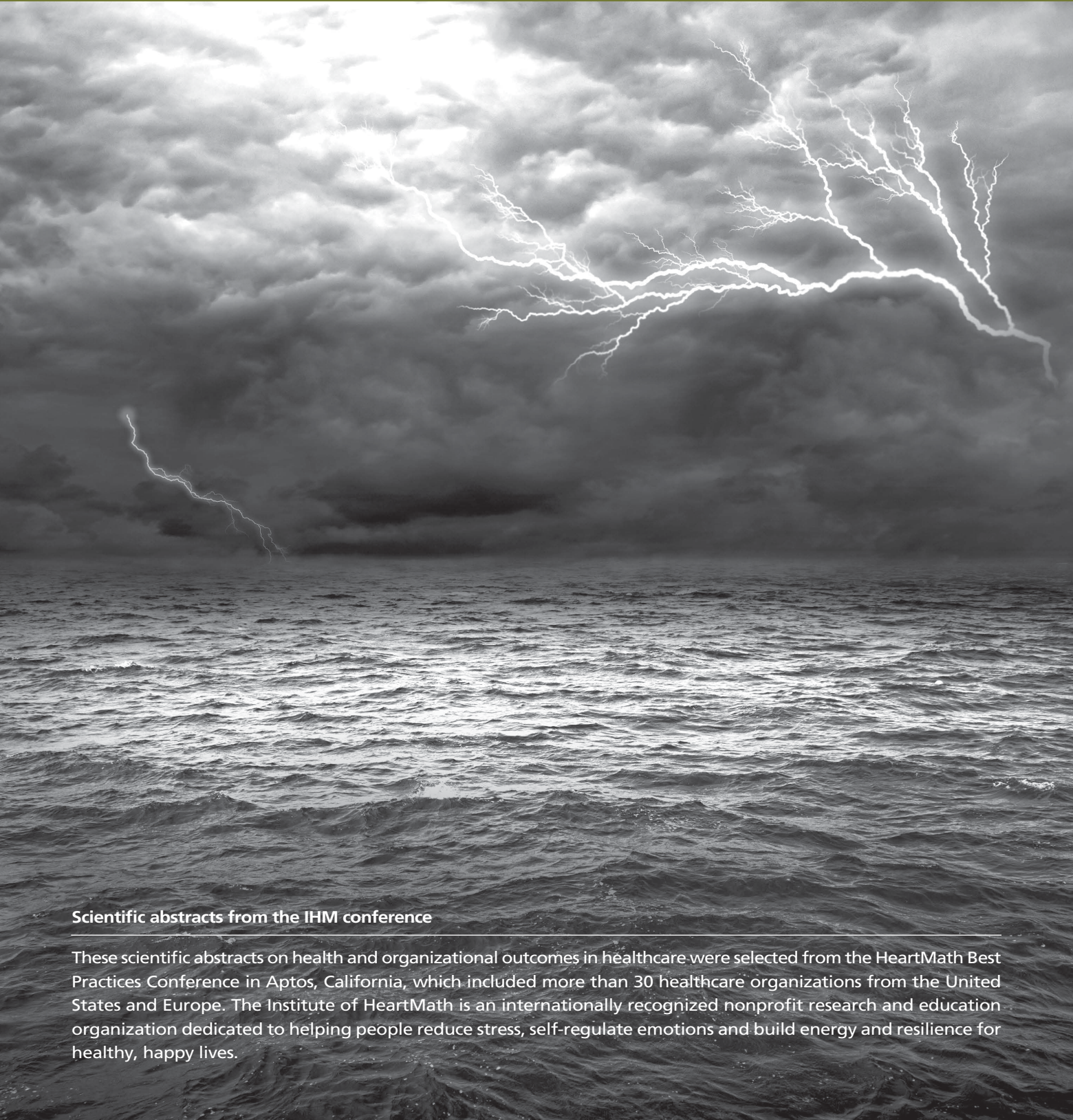
GLOBAL ADVANCES[®]

I N H E A L T H A N D M E D I C I N E

Improving Healthcare Outcomes Worldwide

JANUARY 2014 • VOL. 3, NO. 1 • SUPPL 1

www.gahmj.com



Scientific abstracts from the IHM conference

These scientific abstracts on health and organizational outcomes in healthcare were selected from the HeartMath Best Practices Conference in Aptos, California, which included more than 30 healthcare organizations from the United States and Europe. The Institute of HeartMath is an internationally recognized nonprofit research and education organization dedicated to helping people reduce stress, self-regulate emotions and build energy and resilience for healthy, happy lives.

ABSTRACTS

Changing Job Satisfaction, Absenteeism, and Healthcare Claims Costs In a Hospital Culture

Misty Newsome, MBA, BSN, RN; Cynthia Pearsall, MSN, RN, NEA-BC; Teresa Ryan, MS, BSN, RN; Pamela Starlin

Author Affiliations

Fairfield Medical Center,
Lancaster, Ohio.

Citation

Global Adv Health Med.
2014;3(Suppl 1):BPA01.
DOI: 10.7453/gahmj.2014.BPA01

Key Words

Job satisfaction, absenteeism,
healthcare claims costs,
stress, HeartMath, return on
investment (ROI), biofeedback

Introduction: Fairfield Medical Center is a 222-bed community hospital located in Lancaster, Ohio. Organizational leadership chose to invest in the Transforming Stress Workshop, a 6-hour workshop with a 2-hour follow-up workshop, in order to improve the well-being of its staff and physicians.

Special thought and consideration were given to being able to sustain any benefits and/or improvements long-term. As a result, strategies were developed to integrate the program into our culture.

Methods: Four staff members from a variety of disciplines were selected and sent to HeartMath Train-the-Trainer to gain proficiency in HeartMath methodology and tools, expanding their duties to deliver the classes. Biweekly workshops were offered from August 2007 through December 2010, educating a total of 975 employees, or 48% of the staff.

Other tactics providing a sustainable program included senior leadership support and championing, management team training, positive employee comments published internally, use of tools in committee and department meetings, incorporation into orientation and on-boarding processes, part of major initiative roll-outs, element in clinical ladder, expansion to include Transforming Team Workshops, sharing of Participant and Organizational Quality Assessment-Revised data, a lead HeartMath instructor who provides consulting to other organizations, provision of classes to local educators, and open workshops for employee family members.

Results: Three metrics were selected to measure the success of the program: employee satisfaction, absenteeism rates, and healthcare claims cost. Statistically significant cultural and financial return on investment were demonstrated. Employees who received HeartMath training experienced a 2:1 savings on healthcare claims as compared to employees who had not received training. Employee Opinion Survey results demonstrated that employees who had HeartMath training had higher overall satisfaction scores than those who had not received training (Table and Figure) HeartMath participants demonstrated a lower overall absenteeism rate ($P = 0$), resulting in a \$94,794 savings over a 3-year period. Cultural and financial returns on investment were demonstrated using these indicators.

Conclusion: Investing in HeartMath training and ongoing practice has proven to be a wise decision and continues to be valuable when initiating new concepts in a stressful, changing environment. Sustainability is key to long-term success and true cultural change. Continued employee training of the HeartMath tools and the continued use of the tools enriches the program planning and implementation of new initiatives at Fairfield Medical Center.

Table Healthcare Claims Costs

Year	HeartMath vs Non-HeartMath Participants			
	HeartMath PMPM	Non-HeartMath PMPM	HeartMath PMPY	Non-HeartMath PMPY
2007	\$143.92	\$310.88	\$1727.09	\$3730.53
2008	\$250.93 ^a	\$304.40	\$3011.10 ^a	\$3652.82
2009	\$159.70	\$285.29 ^b	\$1916.37	\$3423.56

Abbreviations: PMPM, per member per month; PMPY, per member per year.

^a HeartMath claims expense excludes five outlier claims in excess of \$20,000 for conditions that could not have been avoided using HeartMath.

^b Non-HeartMath participants' total claims expenses excludes six outlier cases with payments >\$125,000.

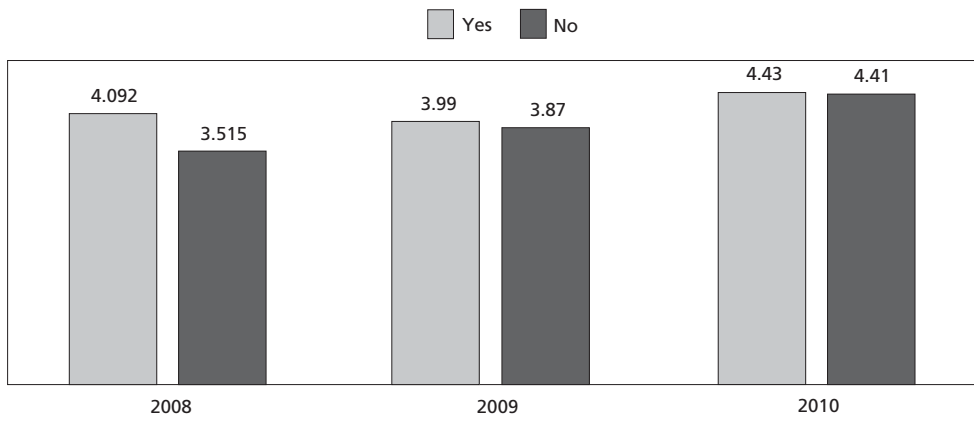


Figure Employee opinion survey: Impact of HeartMath Training, over all scores.

ABSTRACTS

Innovative Practices to Sustain and Renew Service and Patient-centered Outcomes

Nancy Noelke, MS, BS

Author Affiliation

Gundersen Health System,
La Crosse, Wisconsin.

Citation

Global Adv Health Med.
2014;3(Suppl 1):BPA02.
DOI: 10.7453/gahmj.2014.BPA02

Key Words

Patient-centered outcomes,
biofeedback, stress reduction,
HeartMath

Background and Objectives: In integrating HeartMath into our culture at Gundersen Health System, we have a shared focus on delivering workshops and sustaining our HeartMath practices through a variety of innovative approaches. This presentation provides examples of our success in keeping the HeartMath practices alive for our staff.

Gundersen is a fully integrated delivery system of 6500 employees. More than 700 medical, dental, and associate employees are distributed throughout 41 clinic locations, a 325-bed tertiary medical center, a Level II Trauma Center, Gundersen Medical Foundation, residency and medical education programs, and a clinical research program. Our service area covers 19 counties in three states, Western Wisconsin, Southeast Minnesota and Northeast Iowa. We are a physician-led organization embracing a strong administrative/medical partnership.

Three parts of the 2012-2016 strategic plan apply to this initiative: Innovate to achieve service and patient-centered experience outcomes that are best in class (Outstanding Patient Experience); create a culture that embraces a passion for caring and spirit of improvement (Great Place to Work); and engage our staff to create a safe, injury-free, and healing environment for themselves, our patients, and visitors (Great Place to Work).

Rollout Method: Between February 2011 and February 2013, more than 1200 employees completed HeartMath training. This initiative started with two staff members becoming HeartMath-certified trainers in January 2011. To promote leadership support for the program, the department chair MDs received HeartMath education in May 2011. Several units were identified to be the first to receive the training. As positive reviews circulated, requests for trainings were received from other departments. These included requests to customize the HeartMath offerings for leadership summits, manager meetings, new leader on-boarding, and physician and associate staff and to offer HeartMath appetizers. The reception from both senior leaders and staff warranted two additional trainers becoming certified in August 2011. The administrative leaders completed HeartMath education in March 2012 through our Leadership Academy.

Sustainability Method: The importance of sustainability of this type of training and project cannot be overemphasized. Therefore, we adopted a wide-ranging strategy. A HeartMath website was incorporated into our GundU Renewal Center. We set up organization-wide user groups that met regularly and organization-wide self-care events. The participants were made aware of sustainability resources and daily visual reminders (HeartQuotes). Monthly articles and participants' stories were placed in the Gundersen newsletter. Recognition posters were awarded to departments showing the percentage of their employees that have attended the trainings. When Jean Watson was adopted as the nursing theorist, an executive decision was made to strategically align her Caring Theory with the HeartMath program.

Results: Using a 1-to-10 scale (1 = not recommend, 10 = highly recommend), 86% rated 7-10 they would recommend this program to colleagues. A post-workshop research survey pilot consisting of 20 questions sent to 122 participants 3 to 6 months after completion received a 54% response rate, with 86% indicating regular use of techniques.

The following Figure illustrates the results of sustainability and impact research.

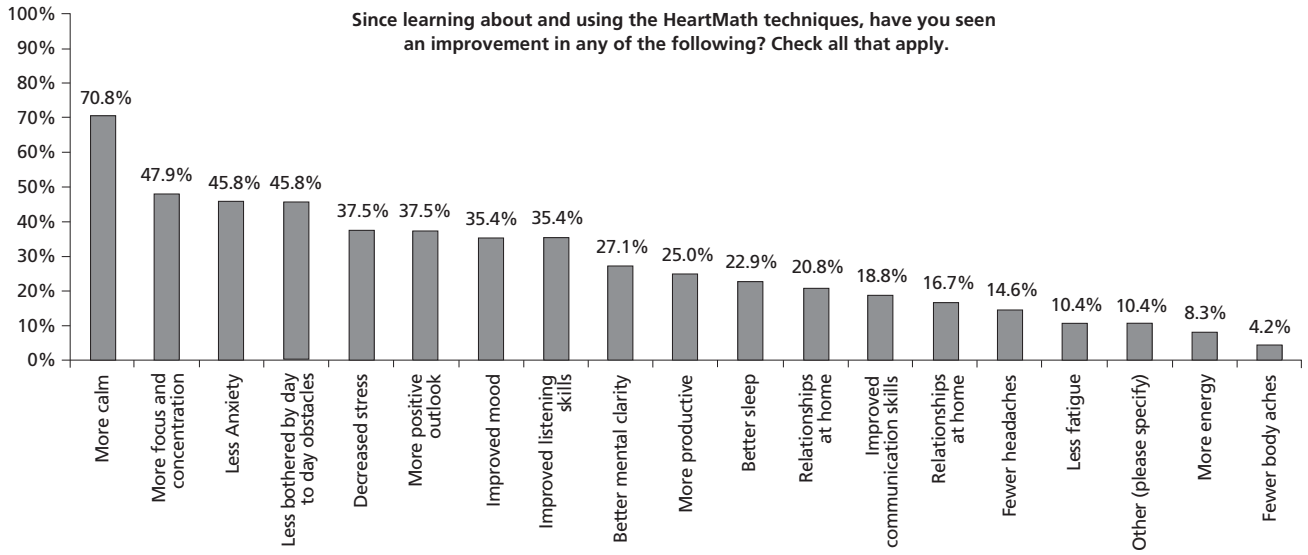


Figure Sustainability and impact research.

ABSTRACTS

From Compassion Fatigue to Resilience: Children's Hospital Colorado

Kelly Johnson, MSN, RN, CRRN, NEA-BC/Dr Dori Biester Chair in Pediatric Care Services; Chris Griffin RN, BSN, CPN

Author Affiliations

Children's Hospital Colorado, Aurora.

Citation

Global Adv Health Med.

2014;3(Suppl 1):BPA03.

DOI: 10.7453/gahmj.2014.BPA03

Key Words

Stress reduction, HeartMath, biofeedback

Background: Healthcare is a stressful profession. The executives at Children's Hospital Colorado are well aware of the affects that caring for sick children and the pressure associated with it have on our entire staff. Understanding what compassion fatigue looks like as well as the importance of stress management and its role in overall wellness for each of our employees led to the interest and support of HeartMath/Caritas workshops.

Methods: HeartMath/Caritas training transformed into a program to help staff connect with why they got into this profession and provides the tools to help staff members function in the immense stress they are faced with every day. Six-hour workshops are offered to every employee of Children's Hospital Colorado, supported and paid for by the wellness program in the human resource department. These trainings intentionally brought Caritas and HeartMath together with an understanding that the two programs match passion with science, trust with hope, and conviction with confidence.

Results: Results illustrate the positive effect the workshops have had on staff. Both qualitative data, in the form of written feedback from participants, and quantitative results (Table) support the continued need for these workshops with more exposure to ensure all employees can attend.

Conclusion: Healthcare providers work in immense levels of stress. HeartMath/Caritas workshops are one way Children's Hospital Colorado supports its staff in dealing with compassion fatigue and burnout. The passion for sustaining this work comes from understanding how these programs have personally affected those employees who have attended and the compelling mission to pay it forward to all staff at Children's Hospital Colorado.

Table Quantitative Results of HeartMath/Caritas Workshops at The Children's Hospital, Aurora, Colorado

Personal Quality: n = 64	% Pre-Workshop	% Post-Workshop	% Change
My life is deeply fulfilling	56	70	14
Calm	29	45	16
Worried	39	22	17
Cynical	17	6	11
It's difficult for me to calm down after I've been upset	13	4	9
Rapid heartbeats	10	5	5=3ppl
Muscle tension	33	23	10

Changing Unit Culture and Fostering Well-being of Staff

Susan Launder MSN, RN, OCN,

Introduction: The key role of healthcare leaders is to create and sustain an environment that optimizes high-quality, safe, and effective patient-centered care. The leader's role is to ensure the best possible physical environment and provide a culture that supports healthcare team members in the stressful work of providing direct care. A positive approach is to empower nurses and other health team members with effective skills and techniques to help them transform stressful situations into more therapeutic scenarios.

Methods: The nursing leadership team decided to test an approach to positive coping and resiliency designed to teach individuals on the oncology unit to recognize their stress symptoms and to use learned skills to counteract the negative impact of stress. Sixty-three participants voluntarily participated in the HeartMath educational class where they were taught techniques that could be used "in the moment" and throughout the day. A champions group was then identified to develop tools that would be used on the oncology unit to keep these techniques at the forefront of the staff's mind throughout each day. Staff members were encouraged to use the tools every day.

Results: Staff members were surveyed using the Personal and Organizational Quality Assessment survey pre-intervention, post-intervention, and again at 7 months post-intervention. Results at the 7-month post-intervention showed statistically significant differences for each of the personal indicators (positive outlook, gratitude, motivation, calmness, fatigue, anxiety, depression, anger management, resentfulness, and stress symptoms). The organizational indicators at the 7 month post-intervention all trended in the expected direction, but only statistically significant differences were found in the indicators of goal clarity, productively, communication effectiveness, and time pressure. Other areas of improvement noted were decreased turnover on the oncology unit, improved employee satisfaction scores, and patient satisfaction scores with nursing care.

Conclusion: Changing unit culture and fostering well-being of staff begins with nursing leadership. Recognizing that nurses and health team members are stressed, we implemented HeartMath as a team approach with staff taking an active role as champions to bring out ideas to keep the techniques at the forefront of everyone's mind everyday. By encouraging use of these tools at work, personal and organizational gains were found that were beneficial for the staff as well as the organization.

Author Affiliation

Mayo Clinic Hospital, Phoenix, Arizona.

Citation

Global Adv Health Med.
2014;3(Suppl 1):BPA04.
DOI: 10.7453/gahmj.2014.BPA04

Key Words

Personal quality assessment,
organizational quality assessment, stress
reduction, HeartMath, biofeedback

ABSTRACTS

Sustained Hospital-based Wellness Program

Karen Danielson, MS, CHES; Katharine Jeffers, MS, RN; Leslie Kaiser, BA; Lee McKinley, MD, FACP; Thomas Kuhn, MSN, ANP-BC, COHN-S, CCM; Gigi Voorhies CTRS, CHMS

Author Affiliations

Indiana University Health Bloomington.

Citation

Global Adv Health Med.

2014;3(Suppl 1):BPA05.

DOI: 10.7453/gahmj.2014.BPA05

Key Words

Hospital wellness program,
stress reduction, HeartMath,
biofeedback

Introduction: Beginning as a grassroots initiative, a community hospital employing 2800 celebrates the stress-transforming benefits of HeartMath for its employees and community. Initially introduced to address the deleterious effects of personal stress experienced by the high healthcare claimants of the organization, HeartMath was eventually introduced to every stratification of the organization's population health management. The ensuing depth and breadth of HeartMath's presence in the organization is a consequence of a deliberate effort to integrate the program at every possible and sensible touch point of the organization and, ultimately, patient care. Today, 5 years later, the success of HeartMath at Indiana University (IU) Health Bloomington continues to be a tribute to the grassroots movement of an established worksite wellness program.

Methods: HeartMath was initiated as an intervention for transforming the stress of a workforce's highest healthcare claimants: those with the complexities of co-morbidities as well as challenging psychosocial and economic realities. This segment of a workforce is invariably the greatest strain to any organization's health plan. As importantly, on an individual level and subsequent to their health status, the respective employees can experience tremendous personal strain in several dimensions of their lives. Further compounding their marginal and worsening physical health, the inherent challenges of the current medical system to integrate and advocate for their care requires that stress be addressed and skills developed for a positive, long-term, and sustainable outcome.

From this small but powerful vantage point, IU Health Bloomington's platinum worksite wellness program (a distinction of the Wellness Council of America) extended HeartMath to every population health management stratification within the organization. This specific program migration happened initially by way of departments and units that expressed, in an employee opinion survey, high levels of stress. In some instances, these highly-stressed departments were also departments with higher staff turnover, attributed most consistently to the acuity of patient care. The critical mass of acquired HeartMath mastery by more than one thousand employees allowed the organization to introduce HeartMath's neutral technique as a non-pharmacological option for patients experiencing pain, anxiety, or sleeplessness.

Wrapping "heart" around self-care (through the worksite wellness program), patient care (at the bedside, laboring mothers, hospice patients and families), and subsequently a culture of care, HeartMath is credited, in part, with the increase in the organization's aggregate "culture of care" index.

Discussion: Transforming stress from a worksite wellness program to a culture of care required a thoughtful internal audit of training and patient touch points that were sensible and appropriate to teach, reinforce, and practice HeartMath. From the mandated training for Giving and Receiving Feedback to patient registration, onboarding to inpatient Behavioral Health group and individual sessions, and Nurse Residency retention programs to the VA Clinic outreach, HeartMath is the stress-transformation technique for employees and patients with the ultimate goal of creating a healthier and more resilient community.

Results: HeartMath has become the stress-transforming practice for IU Health Bloomington. Because of the numerous touch points of integration and the delivery platform of an established employee wellness program, HeartMath is a dimension of employee experience without boundaries—boundaries that are otherwise and previously accepted: departmental, human resource development and performance, as well as clinician and patient. Statistically, from 2009 to 2012 the response to the question regarding employees' perception of the organization's interest in creating a healthy workplace increased overall by 6% in the categories of excellent, high interest, and good interest.

Conclusion: Contrary to the more common launching point of HeartMath by way of senior leader stewardship, the potential for grassroots introduction can lead to rich integration of existing programs, organizational practice, and policy making with an outcome of enhanced culture of care and employee satisfaction.

Navigating a Changing Continuum of Care With Heart

Mary Lush, PhD, RN

Background: The 2010 Patient Protection and Affordable Care Act (ACA) is the most significant change in healthcare since the implementation of Medicare. In the face of reductions in reimbursement, healthcare organizations are seeking creative ways to reduce the cost of care delivery. The Kaiser Permanente Northern California (KPNC) mission is to provide high-quality, affordable healthcare and to improve the health of the members and the communities it serves. In alignment with this work, KPNC values the importance of excellence in care as well as the nurturing of the mind and spirit. The continuum of care, including home health and hospice services, are at the center of the evolving environment. Uncertainties and fast-paced innovations create tension and stress for home care leaders responsible for responding to and implementing change. Meeting these challenges requires incredible creativity and resilience. The framework that best meets these diverse needs is CaritasHeart.¹ CaritasHeart brings together the philosophy, theory and framework of Watson's Caring Science,² the "heart" of Caritas, and the scientifically validated methods of HeartMath.³

Methods: To support the cultural change inherent in CaritasHeart, education was provided to management and staff in Caring Science and HeartMath. The management teams participated in a four-part "Leading with Care" series. Managers also participated with staff in half-day sessions that introduced the philosophy, theory, and framework of the Caring Science as well as self-care practices. The 7-hour HeartMath "Revitalizing Care" program was provided to 200 managers and staff members to enhance self-care, creativity, ease, and resilience and the understanding of how to be authentically present when providing care.

Personal outcomes of participants were measured assessed using the HeartMath validated Personal and Organizational Quality Assessment-R2 (POQA) instrument. Participants completed the initial POQA self-assessment during part I and 2 weeks later during part II of the Revitalizing Care program. Reference values for the POQA are results from 5900 healthcare workers. Member satisfaction with care was measured using the Home Health Consumer Assessment of Healthcare Providers & Services (HH-CAHPS) percent "rate agency 9 or 10" score and the Family Evaluation of Hospice Services (FEHS) "Overall, how would you rate the care the patient received while under the care of hospice?" percent "excellent" score.

Results: POQA results demonstrated each of the positive characteristics were above average at baseline and significantly improved in three areas: positive outlook ($P < .001$), gratitude ($P < .01$) and motivation ($P < .001$). Each of the six stress-related measures were below average at baseline and significantly improved ($P < .001$) and above average following 2 weeks of HeartMath use. HH-CAHPS "rate agency 9 or 10" scores improved 1.7 percentage points to 83.6%. FEHS scores for the period were not yet available at the time of this report.

Conclusion: CaritasHeart was an effective leadership strategy to support the continuum and its staff within a constantly evolving healthcare environment.

REFERENCES

1. Watson J, Browning R. Caring Science: Heart Science as Caritas HeartMath Methodology. Presented in Inaugural Caring Science Summer Institute, July 16, 2012.
2. Watson J. Nursing: The philosophy and science of caring (revised ed). Boulder, CO: University Press of Colorado; 2008.
3. McCraty R, Atkinson M, Tomasino D (2001). Science of the heart: exploring the role of the heart in human performance. HeartMath Research Center, Institute of HeartMath, Publication No. 01-001. Boulder Creek, CA; 2001.

Author Affiliation

Kaiser Permanente
Northern California, Oakland.

Citation

Global Adv Health Med.
2014;3(Suppl 1):BPA06.
DOI: 10.7453/gahmj.2014.BPA06

Key Words

Affordable Care Act (ACA),
employee self-care stress reduction,
Personal and Organizational Quality
Assessment, HeartMath, biofeedback

ABSTRACTS

Getting From Red to Green: A Story of Change

Susan Radcliffe, BSN, MN, MHR, OCN; Sharon Wengier, MS, APRN, CNS, RNC-OB; Deborah Parris, MS, APRN, PCNS-BC; Mandy Nelson, APRN-CNS, MS, ACNS-BC, CCRN

Author Affiliations

Oklahoma University Medical System,
Oklahoma City.

Citation

Global Adv Health Med.
2014;3(Suppl 1):BPA07.
DOI: 10.7453/gahmj.2014.BPA07

Key Words

Personal and Organizational Quality
Assessment, staff turnover, stress reduction,
HeartMath, biofeedback

Background: The turnover rate (employee separations) of healthcare workers has created a cycle of exhaustion and discontent. High turnover affects the institution's ability to consistently provide high-quality care and increases institutional costs related to the recruitment, orientation, and lower productivity of newly hired staff.

Methods: This is an Oklahoma University Medical System (OUMS) performance improvement educational intervention study. We will use a 5-year longitudinal design with repeated measures to examine the effect of diffusion of the HeartMath Healthcare Program Revitalizing Care techniques within OUMS. The variables include pre and post training scores on the Personal and Organizational Quality Assessment questionnaire (POQA-R), scores on the independently administered OUMS Annual Employee Engagement Survey, and separations from OUMS as reported by the human resources department as turnover rates.

Employees of the OUMS were trained in cohorts of less than 20. The training sessions included a 5-hour presentation with a 2-hour follow-up program provided 2 or more weeks later. Participants received an EmWave2 training reinforcement device to use during the time period between the first training and the follow-up training. Data from the emWave2 will provide personal reinforcement to the user and will not be collected or analyzed by the investigators.

Results: The most significant measured result noted after training 90% of the nursing leadership, vice presidents, directors, and managers and 93% of the oncology staff was the continued decline of the turnover rate to <14% for the overall oncology OUMS service line within the first year of the program being instituted. This was an improvement from a 2009 high of 73% for one of the oncology service lines with a 34% at the time of training, when newly hired people were beginning to leave again, plateauing and even increasing the rate at that time. Engagement scores for the Oncology Unit improved from the previous year, and the POQA scores for both the leadership group and the oncology group showed many significant improvements during the time of measurement.

Cultivating and Nurturing a Successful Organizational Stress-management Program: Mission of Unlimited Possibilities

Christine L. Eley, MS; Katherine E. Harris, MS, PHR, DASPR; Barbara Hudak, MS, BSN, RN; Lynne E. Hulvey, MSN, RN; Susan K. Launder, MSN, RN, OCN

Background: Organizations that value their employees and appreciate their contributions strive to create a supportive work environment. Leaders can demonstrate care and support for staff by offering a stress-management program. However, program implementation can be challenging. Leadership endorsement, funding, program development, and assimilation within the organizational culture are important elements. Demonstrating value is critical to success, and even the most effective programs may not provide leaders with the results they anticipated. What gets in the way?

Methods: This presentation provides a retrospective review of situations within Mayo Clinic that propelled its trainers to navigate the waters of uncertainty and rise above adversity. From a leadership perspective, a successful program requires ongoing intentional focus and promotion, not an easy task when resources are at a premium and organizational priorities are constantly vying for attention. When the trainers faced the prospect of program demise due to the loss of an executive sponsor and three of the four original trainers, the remaining members were at a crossroads. Rather than surrender to the lack of a well-defined champion, trainers decided to continue the legacy of sharing the gift of the Transforming Stress program with colleagues. Through the application of HeartMath coherence-building and -sustaining techniques, the remaining trainers listened to their own heart wisdom and found that each trainer possessed a unique skill set to contribute to the group. The information received during several group Heart Lock-In's guided the training team to collaboratively explore new ways of thinking.

Results: A fluid marketing plan includes methods of informing employees about the program, focusing on evidence-based benefits and motivating them to participate. At Mayo Clinic, it is crucial for training programs to create incentives and opportunities for employees to attend stress-management workshops. Trainers rearranged their training schedules, offered evening classes, developed a web and email presence, and created a variety of marketing tools that were highly effective. Individual class registration improved and entire departments (intact teams) were requesting workshops. Similarly, the weeks and months immediately after the workshop, during which the employee is introduced to new techniques and tools, are critical. Answering their questions in real time via email or in person and keeping them engaged in the application of these emotional refocusing techniques were highly valued by individuals and groups alike. These efforts contributed significantly to the ongoing success and evolution of our program.

Conclusion: By the end of the presentation, attendees learned how to identify potential challenges associated with program maintenance and expansion; describe coherence-building strategies for trainers, individuals, and teams; and conceptualize internal marketing approaches and practical applications to grow and sustain a resilient program within an organization. As part of a robust employee benefits package, the perception of a caring work environment may lead to reduced staff turnover, feelings of joy and fulfillment among staff, and increased organizational loyalty, as well as serve as a competitive recruitment tool.

Author Affiliations

Mayo Clinic, Phoenix, Arizona.

Citation

Global Adv Health Med.
2014;3(Suppl 1):BPA08.
DOI: 10.7453/gahmj.2014.BPA08

Key Words

Retrospective review,
stress management,
HeartMath, biofeedback

ABSTRACTS

Science of Human Caring

Anne M. Foss-Durant, RN, MSN, NP, MBA

Author Affiliation
Kaiser Permanente
Northern California.

Citation
Global Adv Health Med.
2014;3(Suppl 1):BPA09.
DOI: 10.7453/gahmj.2014.BPA09

Key Words
Theory of Human Caring,
stress reduction, HeartMath,
biofeedback

Background: When state-mandated ratios were enacted, our leadership team began exploring the care delivery model. Increasing the number of nurses on each unit provided an opportunity to refocus care on the relationship with the patient and family. During the initial phases of this transition work, we engaged frontline staff in dialogue. What surfaced were feelings of being overwhelmed, anxiety about being able to complete everything before the end of the shift, feelings of defeat or illness before starting work and that there just was not enough time.

Nursing has a long history of needing to set the priorities of care; there is always more to do for a patient than there is time. It seemed that the staff's ability to plan and prioritize what is important to the patient—balanced with the needs for safety, comfort, and information—had been lost.

Methods: The leadership turned to nursing theory—specifically, Dr Jean Watson's *Theory of Human Caring*, as a way of providing a framework or guide for the practice. We selected Dr Watson's theory because of the focus on the relational processes that healthcare workers engage in with patients, families, and each other: those processes that facilitate healing vs task completion. As we began our journey, we had some success in staff satisfaction and an increase in our care experience scores. We also learned that you cannot mandate caring. During this time, Dr Watson founded Watson Caring Science Institute, the theory expanded to a philosophy and ethic (Caring Science), and HeartMath began collaborating with Watson Caring Science Institute.

Two principles central to Caring Science are (1) the caregiver must care for himself or herself in order to be available to patients and families and (2) caring (healthcare) occurs (is delivered) at the point in time when two individuals are able to make a heart-to-heart connection, one that impacts both participants in a such a way that each is changed as a result of the interaction.

HeartMath provided the scientific rationale to help explain how this transfer happens and tools to address the stresses and anxieties of the staff, allowing them to be more fully present and authentic, resulting in a more humanistic approach care. We had the privilege of launching the first pilot of the combined program in 2009.

Conclusion: As the healthcare industry enters a historical period of transformation, focusing on health and not just disease and cure, there is and will continue to be great uncertainty, anxiety, and stress. This will overcome our direct care providers if they are not supported and provided with tools to assist them. We are all being asked to find ways of working more efficiently, making a deep connection to our patients and their families to deliver value-based care. In this author's opinion, to be successful and to provide individualized value-based care as an industry, we will need to return to the heart.

Revitalizing Care Program in UK Healthcare: Does It Add Up?

Kay Riley, MBA, CIHCC, RN; Deanna Gibbs, PhD, MOT, Grad Cert Res Meth, BAppSc(OT)

Background: The National Health Service (NHS) is a publicly funded health service in the United Kingdom that provides free point-of-use services for UK residents. In England, the NHS annual budget currently equates to £106 billion. As the global financial climate has changed, so too has the real-terms budget available to meet spiralling healthcare costs in the United Kingdom. There is now unprecedented pressure on NHS Trusts to provide efficiency savings while maintaining the same levels of clinical service availability. In this climate, concerns arise regarding how best to ensure maintenance of the quality of service users experience of their care in addition to efficacy and efficiency targets.

Barts Health NHS Trust is the largest healthcare trust in the United Kingdom. A collaboration of stakeholders was established in 2010 to ensure an increased focus on the provision of compassionate care in all patient services as part of enhancing the overall patient experience. This initiative incorporated the implementation of the HeartMath Revitalizing Care Program in order to build staff resilience and enable workers to more efficiently manage their work and personal stress. Additionally, the project implementation enabled the first trial of the HeartMath Revitalizing Care Program within the context of NHS England services.

Methods: Using a pilot program model, the HeartMath Revitalizing Care Program was provided in four departments in the Trust from August to October 2011. Pilot areas included three clinical wards and one reception area. Over the 3-month period, 97 staff members participated in the workshops. Evaluation of the project was conducted using pre and post measures at two time points through the completion of the Personal and Organizational Quality Assessment – Revised 4 Scale (POQA-R4) and review of staff turnover, sickness absence rates, and complaints.

Results: The evaluation indicated that the participants demonstrated improvements in nine of the 10 personal qualities categories. These changes were statistically significant in eight areas, with fatigue and calmness showing the greatest evidence of change. Only one area in the rating of organizational qualities showed a statistically significant change, which was expected due to the short timeframe of the post-project evaluation. The results of the pre-post comparison of staff turnover, sickness absence, and complaints were inconclusive.

Conclusion: The completion of the pilot project clearly demonstrated both a direct benefit for staff and the transferability of the HeartMath Revitalizing Care program to the UK health provider context. Further evaluation is required to determine the impact of building staff resilience on improving service-user's experience of care.

Author Affiliations

Barts Health National Health Service Trust, London, United Kingdom.

Citation

Global Adv Health Med. 2014;3(Suppl 1):BPA10. DOI: 10.7453/gahmj.2014.BPA10

Key Words

Personal and Organizational Quality Assessment, resilience, stress reduction, HeartMath, biofeedback

ABSTRACTS

Transforming and Sustaining the Care Environment

Anne M. Goldfisher, RN, MA, CENP, CPHQ; Barbara Hounslow; Judi Blank, RN, BSN

Author AffiliationsKaiser Permanente Santa Clara
Medical Center, California.**Citation**Global Adv Health Med.
2014;3(Suppl 1):BPA11.
DOI: 10.7453/gahmj.2014.BPA11**Key Words**Caring Science, absenteeism,
stress reduction, HeartMath,
biofeedback

Background: Caring Science Theory and Practices have been part of the Kaiser Permanente's Strategic Priority for Kaiser Permanente Northern Region since 2010. Their goal is to ensure the continued spread across the medical center of practices guided by the Caring Sciences framework that fosters caring-healing environments and that reinforce helping-trusting relationships between caregivers and between caregivers and patients.

Methods: Gaining senior-level leader sponsorship is an essential element to integrate and sustain a program in our culture and obtain successful outcomes. The senior level leader sponsorship for HeartMath consists of Chris Boyd, senior vice-president/area manager; Sue G. Murphy, chief operating officer; Anne M. Goldfisher, chief nursing officer; and Barbara Hounslow, care experience leader. Effectively selecting the HeartMath Trainers was essential in helping ensure that the program outcomes were obtained. The four key elements determined in the trainer selection process were (1) trainers selected in contextual alignment with our strategic goals; (2) leveraged key leader/RN staff relationships in trainer selection; (3) trainers committed to advance culture of Caring Science with HeartMath; the chief nursing officer becoming a trainer, emphasizing consistent leadership support.

In planning and implementing the training program, an infrastructure was set up to focus on specific units and service lines. This included developing a "pull" message addressing the aspects of staffing realities and the training process. As lessons were learned, adjustments were made in process to suit the culture. A plan was constructed to support the staff on the units to sustain their practice after the training.

Outcomes: During a 12-month period, more than 400 nurses, leaders, and other support staff trained. The response was overwhelmingly positive. The participant perceptions at program completion are described in the Results section. Other benefits included improved relationships between nursing staff and leaders. The trainers reported being deeply impacted on both professional and personal levels.

Results: Of the 400 participants trained from June 2011 to June 2012, 263 completed both the pre and post surveys. Eight of the 14 metrics showed statistically significant changes. They were work attitude, goal clarity, communication effectiveness, time pressure, intention to quit, strategic understanding, and productivity. Improvements were also noted in well-being, quality of life, impacts on patient satisfaction, safety, and reduction of absenteeism.

Stress, Injury, and Healing

Lee McKinley, MD, FACP

Introduction: Patient-centered medical care for chronic diseases increasingly requires physician support for self-management, such as blood glucose monitoring in diabetes. For patients with diseases caused or aggravated by excessive sympathetic nervous system activity, such as anxiety, hypertension, and benign arrhythmias, the current options are cognitive behavioral therapy, medication, or self-regulation. In this exploratory study, I employed personalized one-on-one patient education on the effects of stress on a medical diagnosis and an exercise designed to reduce sympathetic tone. Heart rate variability (HRV) was chosen as an outcome measure based on medical evidence¹ that the lowest HRV tertile is associated with a 2.5 greater risk of early all-cause mortality and a six times greater risk of cardiac death.² Self-measured results and trends were discussed during a routine office visit.

Method: A series of 42 patients with whom I share a doctor-patient relationship gave informed consent to receive additional coaching in the physiology of their illness and were taught a deep inspiratory maneuver, visual imagery, and how to use a device that displays heart rate variability (EMwave PSR, manufactured by Quantum Intech Inc). Office sessions were displayed in a PC version of HeartMath software. The patients were pre-screened, and those with significant arrhythmias, pacemaker dependence, psychosis, active mania, and severe personality disorders were excluded. They were informed that the use of biofeedback in this setting is not medically validated for diagnosis nor approved for treatment. Patients were not charged for the use of the technology or my time. All patients were encouraged to continue current medications, diet, and exercise. All were asked to report any symptoms to my office and not to use the device for any acute condition. A detailed statistical analysis was not performed.

Results: Of the 42 patients, 36 had an improvement in HRV amplitude and/or reduction in the very low frequency spectrum, consistent with decreased sympathetic autonomic activity. Most patients reported an increased “feeling of control”; three patients were nervous about the meaning of the waveforms and returned the device. Nine of 18 patients taking benzodiazepine medications were successfully weaned during the study period. There were no complications attributed to this intervention. Eleven of the patients have continued using this technique on their own.

Conclusion: This exploratory study used HRV as a biofeedback tool for patients with autonomic sensitive disease states. It appears to be safe in the type of patients studied. This was not a controlled study and is no doubt heavily influenced by the fact that the author spent additional time and effort with this cohort. In addition, a strong patient-physician relationship is likely necessary due to the patient expectation that medical therapy requires “a pill.” This tool is not validated, but neither is the stethoscope, which has similar risks of use. The use of biofeedback tools including glucometers, blood pressure cuffs, accelerometers, oximetry, and now HRV may be key to empowering patients and motivating them for health behavior change.

REFERENCES

1. Sosnowski M, MacFarlane PW, Czyz Z, Skrzypek-Wa ha J, Boczkowska-Gaik E, Tendera M. Age-adjustment of HRV measures and its prognostic value for risk assessment in patients late after myocardial infarction. *Int J Cardiol.* 2002;86(2-3):249-58.
2. La Rovere MT, Pinna GD, Maestri R, et al. Short-term heart rate variability strongly predicts sudden cardiac death in chronic heart failure patients. *Circulation.* 2003;107(4):565-70.

Author Affiliation

Indiana University Health Bloomington.

Citation

Global Adv Health Med.
2014;3(Suppl 1):BPA12.
DOI: 10.7453/gahmj.2014.BPA12

Key Words: Patient-centered outcomes, non-pharmacological therapies, biofeedback, stress reduction, HeartMath

ABSTRACTS

Hospital Personal and Organizational Quality Assessment Entry Data 2003-2012: The Case for Coherence Contagion

Linda Larkey, PhD; Richard Hector, PhD

Author Affiliations

Office of Cancer Prevention and Integrative Medicine (Dr Larkey), College of Nursing and Health Innovation (Drs Larkey and Hector); Arizona State University, Phoenix, Arizona.

Citation

Global Adv Health Med. 2014;3(Suppl 1):BPA13. DOI: 10.7453/gahmj.2014.BPA13

Key Words

Personal and Organizational Quality Assessment, stress reduction, biofeedback, HeartMath

Background: HeartMath heart coherence training (HCT) in hospitals helps staff to reduce stress while building a culture for genuine, heartfelt care for patients. A set of validated scales, the Personal and Organizational Quality Assessment (POQA-R4) is used to assess factors at baseline (pre-HCT) and again after practicing coherence techniques for 2 to 4 weeks.

HCT is posited to transmit a sense of positive affect to other workers via (1) shifts toward more heart-centered communication and (2) nonverbal transmission via the electromagnetic field of the heart. Two questions were addressed: (1) Is there a trend for improvement in baseline POQA-R4 scores over time (indicating “coherence contagion”) even when taking into account other trends affecting hospital environment? And (2) Are program implementation factors associated with variation in trends per hospital?

Method: Mean POQA-R4 scale scores for personal (eg, positive outlook, fatigue) and organizational (eg, commitment, intention to quit) factors were assessed for participants in hospitals who adopted HeartMath training. Data across 12 hospitals participating for 3 or more years (total n = 4862; 89% female, median income, \$40,000-\$49,000) were examined for overall and individual hospital trends. The overall recession-related decline leading into 2008 and overall steady increases after the recession were taken into account. In addition, data for national scores on the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) were examined for indicators of a secular trend in the hospital environments. Factors associated with program implementation were indexed for each hospital, including level of initiation/ sponsorship and expectations and support to attend.

Results: Four hospitals showed steady, moderate to large improvements (8% to 20% changes) in baseline scores for “positive attitude,” “depression,” “fatigue,” “anxiety,” and “calmness”; four showed minimal improvements (1% to 5%); and four showed steady declines. HCAHPS scores showed a small but steady increase in the years captured, 2007 to 2012 (eg, 73% increasing to 78% “always” for nurse communication ratings). The best hospital scores were associated with (1) a high level of initiation/sponsorship, and (2) indications that either high-level managers or supervisors sponsored workgroups to attend as a whole (ostensibly creating a high level of saturation of workgroups receiving HCT and practicing heart rhythm coherence). Hospitals with minimal improvement had sporadic patterns of implementation. Hospitals with declining scores had either an open enrollment method of implementation or a combination of open enrollment and hospital-wide groups attending but with little information on level of saturation of groups.

Conclusions: The differing patterns for personal POQA-R4 score improvements or declines over the years suggest that there may be an advantage to implementing with strong leadership and by workgroup. Sponsoring workgroups to attend in larger proportions and maximizing exposure to “contagion” appears to make a difference in baseline personal stress-related measures over time. This pattern is stronger than would be expected with the secular trends of the recession (decrease in 2008, then steady increases), and HCAHPS trends. Next steps would be to more specifically measure implementation/sponsorship factors and document the percent of workgroups attending (as well as practicing) over time and examine correlations of these with changes in baseline POQA-R4 scores.

Aligning Heart Intelligence for Strategic Impact

George Soper, PhD; Barbara Walsh, MA; Deborah Drendall, MA

Background: Memorial Hospital & Health System is a midwestern, level 2 trauma center and health system with more than 4000 employees. We are a community-owned, not-for-profit hospital/health system with a more than 100-year history of serving with innovative excellence. Memorial began its partnership with HeartMath in 2002 as part of our Wellness initiative, reconnecting in 2008 to invigorate our “Great Place to Work” journey.

Introduction: We highlighted the fertile ground we prepared over 20 years to ensure a healthy, well-integrated reception for the concept/practice of coherence. The evolution of the organization included a strategic focus on leadership development and intentional people-related tactics.

Method: We believe that “stand alone” programs have strength by themselves but can be even stronger and more sustainable when linked or integrated with other like concepts or ideas. We summarized our 20-year journey of striving to become the “best place to work.” In 1992, we partnered with Stephen Covey and introduced *The 7 Habits of Highly Effective People* to all of our senior and mid-level leaders. We emphasized emotional and spiritual intelligence, building on the concept of the whole-person paradigm.

We built the Memorial brand around the flame of individual passion ignited by the four intelligences: spiritual, emotional, intellectual, and physical. We enlisted the executive leaders as our “fire starters,” charging them with being the “Keepers of the Flame.” Building on the primary principle of effectiveness—Be Proactive—we added the concept of coherence as the basis for decision-making and action in the organization.

Adding Covey’s notion of *Holistic Renewal*, we held leaders accountable for self-renewal and work regeneration. In 2000, we introduced the Hartman Value Profile. This tool assesses one’s value system, measuring critical-thinking skills, morale, and amount of stress. It also measures self-care and self-criticism. We believe you can’t improve what you can’t measure. We now had a tool that could measure progress in managing personal and work-related stress. This opened the door in 2002 to a formal partnership with HeartMath as the experts on “The Power to Change Performance.” We offered workshops on a twice-monthly basis; participants volunteered to attend. Pleased with the number of registrants, we realized we were only touching the tip of the iceberg. Soon after, HeartMath created the POQA, which gave us another measure of the workshops’ impact. We finally had the combination of assessment tools to guarantee progress and scientific rigor for our journey.

Results: Two events ignited our Coherence Journey: (1) implementation of the Baron EQ-I assessment for leaders (2005); among the strong predictors of success are stress management and general mood and (2) HeartMath introduced Transforming Stress (2008) to our executive leadership team. As our champions, these team members enlisted their teams in learning the skills.

Conclusion: We reached more than 900 individuals and continue to offer a variety of learning formats. We adapt to the pressures our healthcare associates experience in these changing times. Coherence is the heart of our healing environment.

Author Affiliations

Memorial Hospital & Health System,
South Bend, Indiana.

Citation

Global Adv Health Med.
2014;3(Suppl 1):BPA14.
DOI: 10.7453/gahmj.2014.BPA14

Key Words: Personal and
Organizational Quality
Assessment, biofeedback,
stress reduction, HeartMath

ABSTRACTS

Empowering the Impoverished and Reducing Healthcare Costs

Kimberlie J. Warren, PhD, MPA

Author AffiliationBeacon Health System,
South Bend, Indiana.**Citation**Global Adv Health Med.
2014;3(Suppl 1):BPA15.
DOI: 10.7453/gahmj.2014.BPA15**Key Words**Personal and Organizational
Quality Assessments, biofeedback,
stress reduction, HeartMath

Background: Socioeconomic disadvantage is a major risk factor for poor health and a consistent contributor to chronic stress, both of which are disempowering to individuals and communities. Poverty has been linked to a higher prevalence of many health conditions, including increased risk of chronic disease, injury, deprived infant development, anxiety, depression, premature death, and the negative impact of allostatic load associated with chronic stress. With the rising costs of healthcare, there is an urgent and ongoing need for effective strategies for the impoverished to diminish the negative impact of the stress response and enhance their level of empowerment.

Method: Individuals associated with a community-based organization that assists impoverished individuals to move toward self-sufficiency were invited to attend a HeartMath (HM) two-session workshop series (4 weeks apart), and an additional discussion-only session was scheduled 4 weeks after the second session. Participants completed Personal and Organizational Quality Assessments (POQAs) at both workshop sessions to gather pre- and post-intervention data. Each session 1 participant received a Quiet Joy CD and was asked to practice the techniques that they learned between sessions 1 and 2. A third session was scheduled 4 weeks after session 2 as a check-in with participants to determine if they continued to use the HeartMath techniques and for them to share their experiences as a result of exposure to the information.

Results: Twenty individuals participated in workshop session 1; 14 participated in workshop session 2; and 11 individuals attended session 3. Although an equal-pair comparison was not possible, pre and post POQA analysis results demonstrated a general improvement in emotional well-being and reduction in stress symptoms for the group. However, there was a slight but notable reduction in two areas: positive outlook and gratitude. Individuals showed reduced symptoms in the six General Health Stress Symptoms categories, and the Group Average Stress Score was reduced by 40 on the post assessment. In the third, group-discussion-only session, participants shared anecdotally their experiences with emotion regulation and stress transformation since participation in the two-session workshop. The majority reported that they continued to use the HeartMath techniques and generally reported that they felt at ease more often and, in most cases, were better able to regulate their stress responses associated with the challenges of their lower socioeconomic status.

Conclusion: Although HeartMath cannot be solely depended upon to resolve all matters associated with poverty, it is believed that it holds potential as an additional resource for those facing the daily stressors and the negative biopsychosocial impacts associated with it. Consistent practice and application of the HeartMath techniques hold potential to enhance people's emotion-regulation ability, to build and sustain psychophysiological resilience, and to increase some level of control in their lives. Thus, HeartMath is being promoted as an intermediate pathway to improve physical health and psycho-emotional well-being, increase individual and community empowerment, and ultimately reduce healthcare costs among those of lower socioeconomic status.

The Effects of Various Comfort Food on Heart Coherence in Adults

Madeline Matar Joseph, MD, FAAP, FACEP; Mark S. McIntosh, MD, MPH, FACEP; Christine Marie Joseph

Background: Some of the nutrients in food are precursors to neurotransmitters, accounting for its effects on mood. Heart coherence (HC), which relates to the optimal psycho-physiological conditions for human body functions, is affected by a person's emotional status.

Objectives: (1) To determine the effects of various comfort food on HC and heart rate (HR) in adult females 20 to 50 years of age and (2) to evaluate if body mass index (BMI) has an effect on HC and HR when eating various comfort foods.

Methods: The researcher obtained consent from participants after explaining the project. The subjects' height and weight were measured using standardized methods to calculate their BMI. Participants sat in a comfortable chair in a quiet area with a clipped earpiece to measure their heart rate variability (HRV), HR, and HC. Each participant was asked about their favorite comfort food (sweet vs salty). First, the participant imagined eating her favorite comfort food (IFCF) and then was asked to imagine her non-favorite comfort food (INFCE). Finally, the participant ate her favorite comfort food (EFCF) and then ate her non-favorite comfort food (ENFCF). HC scores were recorded in three categories (low, medium, and high) in these four settings.

Results: A total of 20 participants completed the study. Paired student's *t*-tests were used to assess whether the means of the compared groups were statistically different. The data demonstrated that there was a higher HC when participants ate their favorite comfort food than when they ate the non-favorite comfort food ($t=-2.912, P<.01$) and a higher HC when eating a favorite comfort food than when imagining eating a favorite comfort food ($t=-.2408, P<.01$). The participants' BMI had a positive correlation between the BMI and low HC (when one increases, the other increases as well) when imagining eating a favorite comfort food ($r = .475, P<.05$). There was a negative correlation between BMI and medium HC (when one increases, the other decreases) when imagining eating a favorite comfort food ($r = -.45, P<.05$).

Conclusion: Female subjects with higher BMI (overweight and obese categories) have a higher HC when eating a favorite comfort food in comparison to imagining eating favorite comfort food. Adult females who are overweight or obese need to displace their pleasures of eating with other activities that can give them a higher state of coherence to avoid excessive eating of their favorite comfort food and to prevent weight gain.

Author Affiliations

University of Florida Health Science
Center College of Medicine-Jacksonville
(Drs Matar Joseph and McIntosh).

Citation

Global Adv Health Med.
2014;3(Suppl 1):BPA16.
DOI: 10.7453/gahmj.2014.BPA16

Key Words

Nutrition, biofeedback, obesity,
HeartMath

ABSTRACTS

Coherent Learning: Creating High-level Performance and Cultural Empathy From Student to Expert

Beverly Patchell, PhD, APRN, PMHCNS-BC

Author Affiliation

University of Oklahoma Health Sciences
Center College of Nursing,
Oklahoma City.

Citation

Global Adv Health Med.
2014;3(Suppl 1):BPA17.
DOI: 10.7453/gahmj.2014.BPA17

Key Words

Nursing education, biofeedback,
stress reduction, HeartMath

Background: Schools of nursing are charged with graduating nursing students who reflect the race and ethnicity of the communities they will serve. A college of nursing in Oklahoma received a grant to do just that for the Native American community in Oklahoma. In 1998, 19 Native American students were admitted to the school; only 12 graduated 2 years later. The rate of attrition for Native American nursing students averaged 57% between 1997 and 2001. The overall attrition rate was approximately 9%.

Methods: HeartMath trainers were identified and prepared in 2002 and implemented the program in the nursing college in 2003. The program was voluntary for the first year, then became part of new student orientation the next year. Trainings were offered monthly for students and faculty and were available to every student. Laboratory computers were equipped with the Freeze Frame program, and students could practice during school hours. Several faculty also did one-to-one training and practice with students in their offices at student request. Many faculty members did a short HeartMath session that any student could participate in before each test.

Results: Although only Native American students are reported here, students from all ethnicities and races reported benefits. Following implementation of HeartMath in 2003, the average attrition rate for Native American nursing students between 2003 and 2008 was 37%. During this time, requirements for admission and graduation became more stringent and required increased testing. By 2006, the overall attrition rate for the school was 3% or less. The students reported increased confidence in their test-taking abilities and fewer physical health issues with regular practice of the HeartMath process. Based on test results for all students, it was determined that practicing HeartMath increased test scores by an average of 17 points, thus highly motivating students to practice.

Conclusion: Native American nursing students using the HeartMath stress-reducing processes demonstrated improved test-taking and perceived physical health and higher graduation rates than those who did not use HeartMath. Use of HeartMath while in school decreased the overall attrition rate by approximately 40% for Native American students over the reported timeframe.

Caring Theory and HeartMath: A Match Made in Heaven

Heather Murphy, RN, MSN, ONC

Background: At Chesapeake Regional Medical Center (CRMC), the Chief Nursing Officer (CNO) created the Professional Nursing Council (PNC), which is a governing body to help create more involvement from nursing when it comes to nursing practice. In the Fall of 2008, the PNC decided to adopt a nursing theorist to help guide their practice and with input of the bedside nurses, they chose Jean Watson's Theory of Caring.

Jean Watson's theory was well-received, and nurses were eager to bring care back to the bedside but were struggling with how to incorporate the theory in an already overwhelming work environment. Our CNO went to a conference and met Robert Browning and found out about HeartMath. She thought this would be a good thing to bring to CRMC because the nurses have tremendous demands put on them and are feeling more stressed and overwhelmed than ever.

A HeartMath steering committee was developed and created a plan to get as many nurses signed up for HeartMath as possible within a year. Several nurses were trained to teach the HeartMath workshop to accomplish this goal.

As we presented HeartMath, we introduced it as a modality to the Jean Watson Theory of Caring. The motto was, "You have to take care of yourself before you can take care of others." The first half of the workshop focused on the science and the HeartMath tools. We felt it was important to keep that as the foundation of the workshop. However, we felt it important to introduce Jean Watson's Theory of Human Caring and her 10 Caritas processes into the class and show how they are related.

In October 2010, CRMC hosted the annual Caritas Consortium in Norfolk, Virginia. Two trainers taught HeartMath to a roomful of Caritas coaches as a pre-conference event. The trainers were then able to experience the consortium and realized even more how much HeartMath and the Theory of Caring are intertwined. At this time, it was decided that HeartMath and Jean Watson's Theory should be "married."

On November 17, 2010, the first HeartMath-Caritas Committee meeting commenced.

Method: Quantitative, using Personal and Organizational Quality Assessment (POQA)

Results: The first group to be taught HeartMath was the nursing leadership group in January 2009. POQA results appear in Figure 1. In phase two, we trained more than 850 employees (863 completed the pre-POQA, and 792 completed the post-POQA). The results are displayed in Figure 2.

Conclusion: As a result of incorporating Caritas processes into the HeartMath Workshop, the executive team at HeartMath has created a workshop called "Revitalizing Care," which integrates the Caring Theory into the HeartMath concepts and tools. Care practice plans are built into the workshop to allow more time to have everyone work together to integrate the keys and skills into their work and personal lives, as well as to provide a chance to make connections with the Caring Theory.

Author Affiliation
Chesapeake Regional
Medical Center, Virginia

Citation
Global Adv Health Med.
2014;3(Suppl 1):BPA18.
DOI: 10.7453/gahmj.2014.BPA18

Key Words
Personal and Organizational
Quality Assessment, biofeedback,
stress reduction, HeartMath

ABSTRACTS

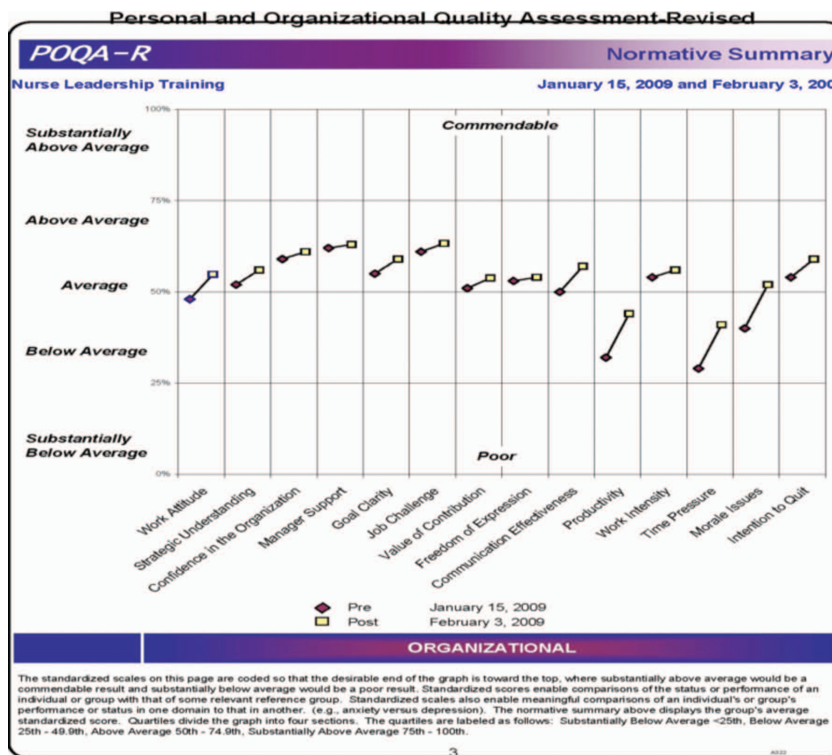
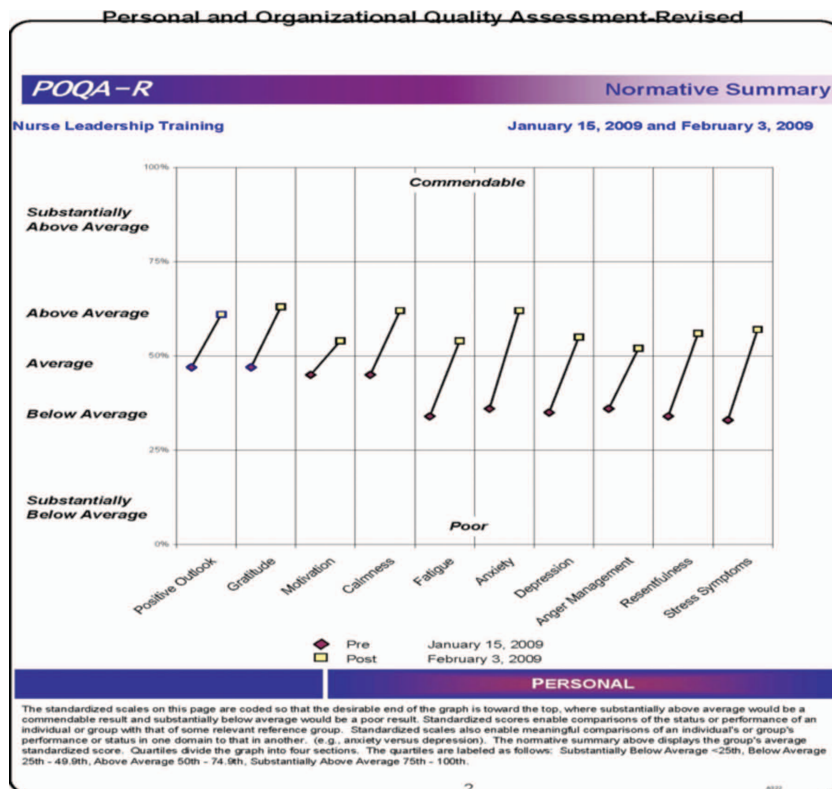


Figure 1 POQA results from nursing leadership.

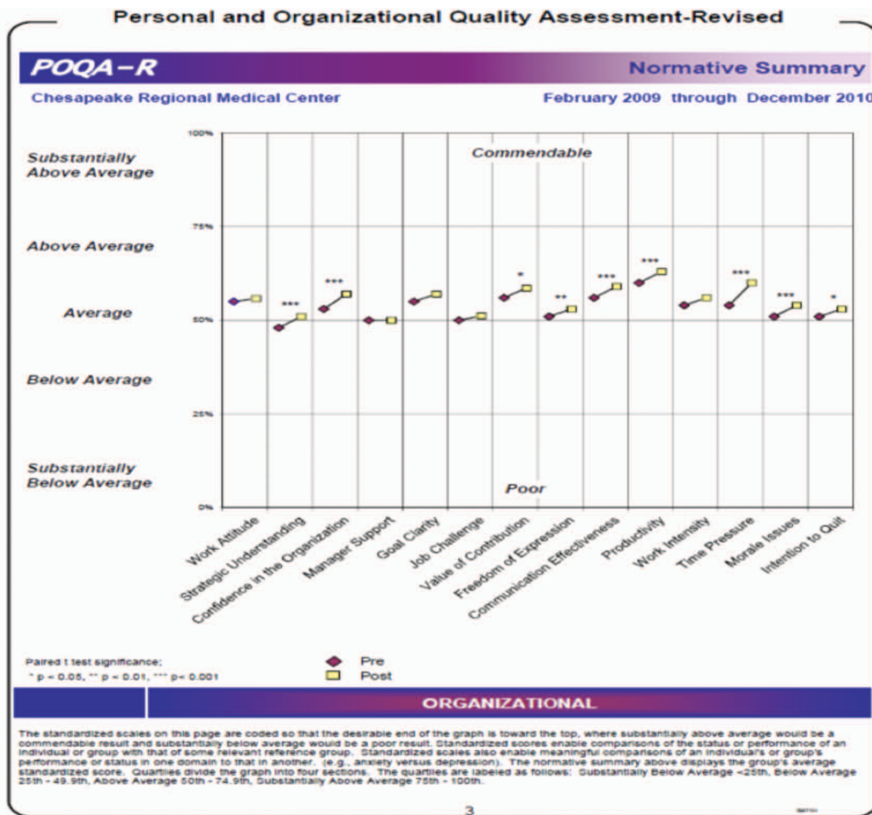
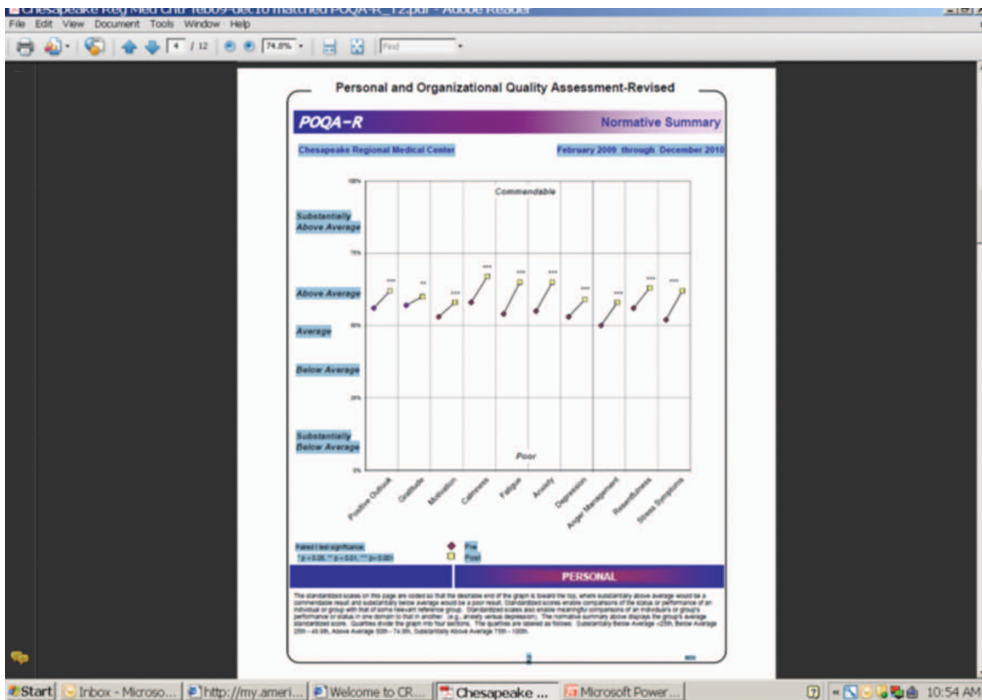


Figure 2 POQA results for the nursing department.