

Evidence-Based Interventions for Medical Student, Trainee and Practicing Physician Wellbeing: A CHARM Annotated Bibliography

For the Collaborative for Healing and Renewal in Medicine (CHARM) *Best Practices Subgroup*

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ACTIVE SELF-IMPROVEMENT

Positive Psychology

Pluskota A. *The application of positive psychology in the practice of education.* *Pluskota SpringerPlus* 2014;3:147. doi: [10.1186/2193-1801-3-147](https://doi.org/10.1186/2193-1801-3-147).

Impetus: Positive psychology practices have been shown in the general population to enhance happiness and decrease depression. Whether these practices can have applications in education was explored.

Description: This paper outlines the history of positive psychology (distinct from the popular trend of Positive Thinking), and its relevance to the field of education, and provides a description of two positive psychology programs. Positive psychology as a science is based on reorientation around three pillars: positive emotions, positive personality traits and positive social situations. The objective of positive psychology in education is to foster lifelong learning by optimizing functioning, improving mental wellbeing and preventing depression by coaching students to create their own “strength signatures and virtues.” Several intervention programs are described, including the Penn Resiliency Program focusing on promoting optimism, “signature strengths” development, and the Three Blessings program to “support positive emotions.”

Contribution: While this paper is not an intervention study, we have included it because it provides an overview of positive psychology and a description of two interventions, undertaken in education. For those new to the concept, the distinction between positive psychology and positive thinking is nicely outlined. The paper provides a frame shift from thinking about correcting negative behavior(s) to coaching for positive behavior and its impact on learning.

Cost: Unknown.

Gazelle G, Liebschutz JM, Riess H. *Physician burnout: coaching a way out.* *JGIM* 2014;30(4):508-13. doi: [10.1007/s11606-014-3144-y](https://doi.org/10.1007/s11606-014-3144-y)

Impetus: Professional coaching, frequently used in other fields outside of medicine, may have applications to address physician burnout.

Description: Professional coaching is used in the business field to promote self-reflection, emphasize individual strengths, decrease self-deprecating thoughts, and increase sense of purpose and engagement. Coaching integrates aspects of positive psychology and mindfulness. Coaching typically occurs in person or via phone. Based on examples from professional coaching programs from other fields, the authors suggest that professional coaching for physicians with burnout should occur weekly or biweekly for an hour for 6 to 12 months. The authors use a case narrative to discuss ways that coaching may be useful for common situations faced by physicians.

Contribution: This study is not an intervention study, but provides an overview of professional coaching and its potential use for physicians to combat burnout.

Cost: Unknown.

Reilly JM and Ring JM. **Healing and hopefulness: a tool for doctor wellbeing.** *Med Educ* 2005;39(11):1158-9. doi: [10.1111/j.1365-2929.2005.02302.x](https://doi.org/10.1111/j.1365-2929.2005.02302.x)

Impetus: Incorporating regular positively-themed wellness sessions into the residency curriculum may improve physician wellbeing.

Description: An academic family medicine residency initiated a program entailing discussions on healing and hopefulness, called “H&H.” This conversation was purposely integrated at the conclusion of the standing morbidity and mortality conference in order to contrast the focus on negative outcomes with a focus on positive experiences. The session was facilitated by an MD and a behaviorist. Residents and faculty met together and were encouraged to share positive moments, which included themes of power as healers, the value of doctor-patient relationships, spirituality, peer support, and career affirmation. A total of 14 faculty and 15 residents completed a satisfaction survey. A majority rated the session highly as an opportunity to express gratitude, affirm good work, create a positive team environment, and nurture team building. All respondents thought that the session should be continued.

Contribution: Although conclusions from this study are limited due to the lack of a control group and lack of use of validated outcome measures, this intervention represents an early proof-of-concept of the value of incorporating positive-focused opportunities for discussion and reflection into the workday.

Cost: Unknown.

Hershberger PJ. **Prescribing happiness: positive psychology and family medicine.** *Fam Med* 2005;37(9):630-4. PMID: [16193425](https://pubmed.ncbi.nlm.nih.gov/16193425/)

Impetus: Positive psychology refers to the study and development of methods to enhance and maintain happiness, which supports a better quality of life. Incorporating positive psychology into physician training may have positive effects on wellbeing.

Description: This perspective reviews several interventions within positive psychology that can be used for enhancement of the personal wellbeing of physicians and for the promotion of emotional and mental wellbeing for patients. The article provides an overview of the potential benefits of positive emotions including improved physical and mental health, longer life span, increased cognitive flexibility, creativity, and the potential for increased self-control. The paper then reviews strategies that have been studied outside of medicine, aimed at increasing gratitude (“Three Good Things”), augmenting team building (“capitalization” or sharing good news), and obtaining “good enough” outcomes (“satisficing”). The author also reviews foundational work of positive psychology on highlighting character strengths and virtues (“signature strengths”) and self-exploration and learned optimism to enrich personal wellbeing and team building among colleagues. Examples of potential applications of positive psychology for physicians are discussed.

Contribution: Although this paper does not describe interventions using these techniques within the medical profession (as none exist thus far), it provides an overview of positive psychology strategies that have been successful outside of medicine and suggestions for ways to incorporate them into medical practice.

Cost: Unknown.

Coaching / Development

Medical Students

Wald HS. Professional identity (trans)formation in medical education: reflection, relationship, resilience. *Acad Med* 2015;90:701-6. doi: [10.1097/ACM.0000000000000731](https://doi.org/10.1097/ACM.0000000000000731).

Impetus: While professional identity formation is a key goal of medical education, no clear “road map” exists to help medical educators guide the development of empathic, humanistic physicians.

Description: This commentary by a leader in reflection speaks to the intentional development of professional identity in medical students. Specifically, it investigates the role of guided reflection, use of personal narratives, relationships and role modeling. This paper describes the process of professional identity formation and explores the process of teaching active reflection, including reflection of situation, others, and self. Dr. Wald gives examples of reflective writing that can support this process. The intertwined concepts of reflection, resilience, and relationships are discussed as keys to “deliberate” development of professional identity.

Contribution: This article presents professional identity formation within a conceptual framework that can be applied to any medical training program as well as practical advice to developing humanistic values among trainees.

Cost: Unknown.

Steckler N, Young L, Ervin A. OHSU resiliency skills elective. *MedEdPORTAL Pub* 2015;11:1002. http://doi.org/10.15766/mep_2374-8265.1002.

Impetus: The goal of this program was to introduce students to a range of resilience skills while improving their emotional intelligence.

Description: At the Oregon Health Science University (OHSU), educators developed a Resiliency Skills Elective, administered as one 2.5 hour session per week for 8 weeks. The authors describe three foundational components that reinforce each other: resiliency practices, social support, and faculty role modeling. The curriculum uses a strength-based approach, focused on building resilience skills and support networks for students. The skills included mindfulness practices, breathing techniques, listening skills, emotional regulation skills, and positive psychology practices. The 2.5 hour sessions consisted of 30 minutes for a meal and socializing plus 2 hours of curricular exercises.

Contribution: This elective uses evidenced-based strategies to promote resilience in medical students. There is no evaluation data provided, so the impact is unknown.

Cost: Cost of the curriculum would include eight meals for the students and faculty advisor, plus printing.

Interns/Residents/Fellows

Palamara K, Kauffman C, Stone V, et al. Promoting success: a professional development coaching program for interns in medicine. *Med Educ* 2015;7(4):630-7. <http://dx.doi.org/10.4300/JGME-D-14-00791.1>

Impetus: Internship is a stressful period in both professional development of identity and knowledge. Remediation-based interventions do not address all learners' professional development. The authors instituted a positive-psychology-based coaching program for one intern class, assessing feasibility and impact on burnout.

Description: This educational innovation describes a professional development coaching program implemented at a single-institution's internal medicine internship program in 2012-13. All 72 interns participated and 26 faculty coaches were recruited and trained in the main tenets of positive psychology. Quarterly meetings between interns and coaches were expected. Faculty coaches had access to written session guides. Survey measures of program experience, professional development and professional interactions were assessed in the first and fourth quarters alongside burnout measures as per Maslach Burnout Inventory. Interns' overall assessment of the program was strongly positive, with fewer reporting high levels of emotional exhaustion in the final quarter compared to the prior year's interns (33% vs. 47%). Trainee pre- and post-survey personal accomplishment scores showed no change.

Contribution: This report constitutes the first description of a strength-based model of coaching for interns. The authors provide the program's curricular materials as an online supplement.

Cost: The residency associate program director acted as the coaching program director (CPD) with a 70-hr contribution and the program was supported by grant funding. Faculty coaches contributed nine hours per coachee (2-3 interns each) and interns participated up to 5.5 hours each.

Practicing Physicians

Dembitzer A, Wang B, Grask A, et al. Burnout in clinician-educators and the importance of lifelong learning: findings from a medical education faculty development program. *J Gen Intern Med* 2013; 28:S38. Abstract. <https://doi.org/10.1007/s11606-013-2436-y>.

Impetus: Clinician-educators (CE) often receive no formal training in education and are at high risk for burnout. The authors sought to determine if a longitudinal faculty development program (FDP) could decrease burnout or improve other job-related outcomes in CEs at one institution.

Description: Eighteen faculty for an 18-month longitudinal clinical skills course for medical students were recruited to participate in a year-long FDP requiring one hour of time per month. FDP format included small group discussions, two three-station Objective Structured Teaching Exercises (OSTE), and videotape review of both OSTEs and small-group teaching sessions. Pre- and post-program surveys of burnout (Maslach Burnout Inventory, separated by clinician vs. educator role response), career fit, job satisfaction, teaching confidence and commitment to lifelong learning (Jefferson Scale) indicated reduction below burnout threshold in one item (for 7/18 of the participants by end of FDP). Of note, baseline emotional exhaustion and depersonalization scores were higher in the clinician compared to educator role; personal accomplishment burnout was reported independent of role. At least 77% of participants reported baseline confidence in teaching, career fit and job satisfaction. CEs who scored below the depersonalization threshold following program completion showed a significant ($p < 0.05$) increase in lifelong learning scores.

Contribution: This abstract demonstrates that CEs in an urban, underserved setting can demonstrate high rates of burnout despite reporting high teaching confidence, good career fit and job satisfaction. A longitudinal FDP may support a modest reduction in burnout.

Cost: Unknown.

Communication Training

Interns/Residents/Fellows

Clayton JM, Butow PN, Waters A, *et al.* Evaluation of a novel individualised communication-skills training intervention to improve doctors' confidence and skills in end-of-life communication. *Palliat Med* 2013;27:236–243. doi: [10.1177/0269216312449683](https://doi.org/10.1177/0269216312449683).

Impetus: Communication is identified by patients and families as critical to end-of-life care and poor quality of discussion about end-of-life issues is a frequent cause of complaints. Residents often feel inadequately prepared for these conversations due to lack of training. Formal communication skills training for practicing physicians has been found to be effective but often involves a multi-day time commitment, and few studies have explored workshops for residents. This study was created to pilot a brief communication training program for trainees and examine its effects on burnout, confidence, communication skills and attitudes toward psychosocial care.

Description: Twenty-two resident volunteers in Australia participated in three one-hour teaching sessions focused on end-of-life care communication. They were also provided with an additional two hours of review material. The first session provided learners with a framework and evidence-based strategies for conversations with patients expected to die within days to weeks. The following two sessions were individual sessions involving practicing communication skills with feedback from an expert facilitator. One week ahead of the first teaching session, participants completed written questionnaires covering burnout (Maslach Burnout Inventory, MBI), attitudes toward psychosocial aspects of care and confidence in communication skills. Additionally, each resident was videotaped interviewing a simulated caregiver of a terminally ill patient and an associate transcript was coded for presence/absence of communication skills and strength of observed skills. All measures were repeated at two weeks following the intervention along with assessment of learner satisfaction. Trainees indicated that the training was useful and significant improvements were found in their communication skills, confidence in communication, attitudes toward psychosocial care and sense of personal accomplishment. While there was significant improvement in the personal accomplishment domain of burnout, there were no significant changes in emotional exhaustion or depersonalization MBI subscales.

Contribution: Communication skills training can feasibly occur in a time-sensitive manner for busy trainees and improves skills, knowledge and attitudes. However, the pilot's failure to impact trainees' burnout levels in domains of emotional exhaustion and depersonalization suggests that brief communication skills training may not directly address these burnout domains, though the pilot may be underpowered to detect a difference.

Cost: Five hours of training time for participating residents.

Bragard I, Etienne A, Merckaert I, et al. Efficacy of a communication and stress management training on medical residents' self-efficacy, stress to communicate and burnout: a randomized controlled study. *J Health Psychol* 2010;15:1075–1081. doi: [10.1177/1359105310361992](https://doi.org/10.1177/1359105310361992).

Impetus: Associations between lack of self-efficacy in communication and burnout have been reported in physicians. Communication skills training can positively impact self-efficacy. Stress management skills training programs have shown limited impact on stress and burnout in health professionals, but have not been studied in conjunction with communication skills training. The authors instituted a unique program for residents and evaluated the impact of combined communication and stress management skills training.

Description: This longitudinal randomized controlled study investigated efficacy of cancer care-based communication skills training and stress management training for 96 French-speaking medical residents. Assessment of residents' self-efficacy beliefs related to communication, stress in communication with cancer patients and burnout (Maslach Burnout Inventory) were done at baseline and in follow-up. Following the assessment period, the 47 control group residents were invited to participate in the 30-hour communication skills training and 10-hour stress management training. Intervention participants reported a statistically significant increase in self-efficacy in communication and decreased stress in communication with cancer patients. The intervention did not decrease burnout.

Contribution: This is the first study to assess combination of communication skills training and stress management training in medical residents and demonstrated trainees improved self-efficacy in these areas, despite showing no effect on burnout.

Cost: Forty hours of training time for participating residents.

Practicing Physicians

Fujimori M, Shirai Y, Asai M, et al. Development and preliminary evaluation of communication skills training program for oncologists based on patient preferences for communicating bad news. *Palliat Support Care* 2014;12:379–386. doi: [10.1017/S147895151300031x](https://doi.org/10.1017/S147895151300031x).

Impetus: Patients have important opinions about how physicians can best deliver bad news. This study explored patient preferences and developed a communication skills training (CST) workshop for oncologists. The impact of this training on oncologists' confidence, helpfulness and burnout was evaluated.

Description: Patient preferences were explored related to (1) the appropriate environment for bad news discussions, (2) various approaches on how to deliver bad news, (3) important additional information to discuss and (4) how to best provide reassurance and emotional support. The 2-day CST workshop consisted of lectures, role playing with simulated patients, and group discussions with other physicians. The program evaluation used pre- and post-CST consultation with a simulated patient. The authors observed the communication preferences, behaviors, and utterances of the providers at the simulated patient encounter before and after the CST in order to evaluate confidence with news delivery. The authors also evaluated burnout (Maslach Burnout Inventory), subjective confidence, and helpfulness with pre-, post- and 3-month post-CST surveys. The authors found significant improvement in emotional support and consideration for how to deliver information after the 2-day CST intervention. They also found improvements in confidence and reduction of burnout, persistent at three months post-CST.

Contribution: Overall, the program was rated well by oncologists and had some benefit to their comfort with delivering bad news. However, this study did not evaluate the patient perspective. In future studies, the authors should explore if the patients felt the doctors improved after the workshop.

Cost: Cost was not mentioned in this study but the participating oncologists dedicated two full days for the intervention. The program also required experienced psychiatrists, psychologists, oncologists and simulated patients.

Quenot JP, Rigaud JP, Prin S, et al. Suffering among carers working in critical care can be reduced by an intensive communication strategy on end-of-life practices. *Intensive Care Med* 2012;38:55–61.

doi: [10.1007/s00134-011-2413-z](https://doi.org/10.1007/s00134-011-2413-z).

Impetus: Burnout can impact a variety of healthcare providers and may be especially pertinent to those who work in intensive care settings (ICUs). This study evaluated the impact of communication training regarding end-of-life practices on burnout in ICU providers.

Description: The communication intervention was developed by ICU providers with the help of two psychologists. It took place over six months and combined lectures and group work, with the aim of improving communication between providers, patients, and patients' families. The study enrolled 62 providers from an ICU setting: only 7% of those who responded were physicians, while nurses made up the majority of participants. Burnout (Maslach Burnout Inventory) and depression (Center for Epidemiologic Studies Depression Scale, CES-D) were measured pre- and post-communication training. Both burnout and depression significantly improved with the intervention.

Contribution: The authors found that the communication intervention was successful in decreasing burnout and depression among a population of intensive care providers. However, the low percentage of physicians that participated limits its generalizability. This study is better considered a study of a burnout intervention in ICU nurses.

Cost: Unknown.

Butow P, Cockburn J, Girgis A, et al. Increasing oncologists' skills in eliciting and responding to emotional cues: evaluation of a communication skills training program. *Psychooncology* 2008;17:209–218.

doi: [10.1002/pon.1217](https://doi.org/10.1002/pon.1217).

Impetus: While psychological morbidity is very prevalent in cancer patients, it is often undiagnosed and not treated. This study evaluated a communication skills training (CST) program that had a goal of improving provider detection and communication about mental health with patients. Furthermore, communication difficulties have been noted to be primary contributors to doctor stress and burnout.

Description: This randomized controlled trial study involved 35 oncologists randomized to receive communication training or not. The training included a 1.5-day communication skills training program that utilized DVD examples, lectures, and role-play scenarios. Burnout was measured using the Maslach Burnout Inventory before and after the program. In addition to the surveys, the authors evaluated physician behavior using pre- and post-CST simulated patient encounters.

Contribution: The authors found that the physicians in the CST displayed better behavior in patient interactions after the program with fewer blocking behaviors and more success in creating a positive environment but neither reached statistical significance. The CST program was well-received and valued by physicians, but did not reduce burnout.

Cost: Unknown.