



Emotional Well-Being and Public Health

Author(s): Sophie C. Feller, Enrico G. Castillo, Jared M. Greenberg, Pilar Abascal, Richard Van Horn, Kenneth B. Wells and University of California, Los Angeles Community Translational Science Team

Source: *Public Health Reports (1974-)*, March/April 2018, Vol. 133, No. 2 (March/April 2018), pp. 136-141

Published by: Sage Publications, Inc.

Stable URL: <https://www.jstor.org/stable/10.2307/26408976>

REFERENCES

Linked references are available on JSTOR for this article:

https://www.jstor.org/stable/10.2307/26408976?seq=1&cid=pdf-reference#references_tab_contents

You may need to log in to JSTOR to access the linked references.

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at <https://about.jstor.org/terms>



Sage Publications, Inc. is collaborating with JSTOR to digitize, preserve and extend access to *Public Health Reports (1974-)*

JSTOR

Emotional Well-Being and Public Health: Proposal for a Model National Initiative

Public Health Reports
2018, Vol. 133(2) 136-141
© 2018, Association of Schools and
Programs of Public Health
All rights reserved.
Reprints and permission:
sagepub.com/journalsPermissions.nav
DOI: 10.1177/0033354918754540
journals.sagepub.com/home/phr



Sophie C. Feller, MD¹, Enrico G. Castillo, MD, MSHPM^{2,3},
Jared M. Greenberg, MD^{2,4}, Pilar Abascal, MD², Richard Van Horn, MDiv⁵,
Kenneth B. Wells, MD, MPH^{1,2,6}, and University of California, Los Angeles
Community Translational Science Team¹

Abstract

In 2011, the National Prevention, Health Promotion, and Public Health Council named mental and emotional well-being as 1 of 7 priority areas for the National Prevention Strategy. In this article, we discuss emotional well-being as a scientific concept and its relevance to public health. We review evidence that supports the association between emotional well-being and health. We propose a national emotional well-being initiative and describe its 6 components: systematic measurement of emotional well-being, identification of the drivers of emotional well-being, formation of partnerships with diverse stakeholders, implementation and dissemination of evidence-based interventions to promote emotional well-being and its drivers, development of public health messaging, and identification of and strategies to address disparities in emotional well-being and its drivers. Finally, we discuss ways in which a national emotional well-being initiative would complement current public health efforts and the potential challenges to such an initiative.

Keywords

emotional well-being, well-being, public health, community health, quality of life, health policy, prevention, mental health

Life expectancy in the United States has dwelled in the bottom half to one-third of the countries in the Organisation for Economic Co-operation and Development for many years,¹ and during the past few decades, gains in life expectancy in the United States generally have not been what would be expected considering the nation's increases in gross domestic product and health care spending.¹ In 2015, after years of steady gains, the United States saw a shocking reversal in overall life expectancy, the first decline since 1993.²

We believe that one way to address the long-term lag in US life expectancy, and to begin to reverse the recent decline, is a national focus on emotional well-being (EWB). EWB, as used in this commentary, is an umbrella term for psychological concepts such as life satisfaction, life purpose, and positive emotions, all of which are shown to be associated with decreased mortality and improved physical and mental functioning.³⁻⁶ Research shows that EWB can be enhanced by interventions. In this commentary, we argue that the launch of a new national focus on EWB and greater use of evidence-based interventions could result in improvements in EWB, as well as physical and mental functioning, and ultimately play a role in decreasing mortality and ameliorating the decline in US life expectancy.^{7,8}

Our proposal is not entirely new. In 2011, the National Prevention, Health Promotion, and Public Health Council, comprising 20 heads of federal agencies, offices, and departments and chaired by the Surgeon General, developed the National Prevention Strategy.⁹ The 2011 National Prevention Strategy describes mental and emotional well-being as 1 of 7 priority areas, and the Surgeon General described it as

¹ Center for Health Services and Society, Jane and Terry Semel Institute for Neuroscience and Human Behavior, University of California, Los Angeles, CA, USA

² Department of Psychiatry and Biobehavioral Sciences, David Geffen School of Medicine, University of California, Los Angeles, CA, USA

³ Los Angeles County Department of Mental Health, Los Angeles, CA, USA

⁴ Desert Pacific MIRECC Health Services Unit, VA Greater Los Angeles Healthcare System, Los Angeles, CA, USA

⁵ Mental Health Services Oversight and Accountability Commission, Sacramento, CA, USA

⁶ RAND Corporation, Los Angeles, CA, USA

Corresponding Author:

Enrico G. Castillo, MD, MSHPM, University of California, Los Angeles, David Geffen School of Medicine, Department of Psychiatry and Biobehavioral Sciences, 760 Westwood Plaza, Semel B7-435, Los Angeles, CA 90095, USA.
Email: egcastillo@mednet.ucla.edu

one of 3 pillars of health.^{10,11} The National Prevention, Health Promotion, and Public Health Council created a resource document for state and local governments and made recommendations to promote mental and emotional well-being.

In this commentary, we discuss EWB as a scientific concept and its relation to public health and review evidence that supports the association between EWB and health. We then propose a national public health initiative, consisting of 6 components, to promote EWB: (1) systematic measurement of EWB and the impact of such an initiative; (2) identification of drivers of EWB; (3) creation of partnerships composed of diverse stakeholders; (4) dissemination, implementation, and evaluation of evidence-based interventions to promote EWB and its drivers; (5) development of public health messaging; and (6) identification and intervention on disparities in EWB and its drivers. Finally, we discuss ways in which this national EWB initiative would complement public health efforts already underway and potential challenges to such an initiative.

Emotional Well-Being as a Scientific and Public Health Concept

EWB is not synonymous with the absence of illness, nor is it synonymous with mental health. EWB, as we use the term, is an umbrella label for several related psychometrically defined concepts, including psychological well-being, positive mental health, health-related quality of life, thriving, and subjective well-being. These concepts encompass several psychological dimensions, including positive emotions and moods (eg, happiness); the relative absence of negative emotions, moods, and states (eg, stress, sadness, loneliness); life satisfaction; sense of meaning and purpose; quality of life; and satisfaction with other life domains (eg, work satisfaction, satisfaction with relationships). All of these psychological dimensions can be measured by using evidence-supported surveys, and all are salient to public health, in part because they are shown to be associated with positive health outcomes.

Emotional Well-Being and Health

An accumulation of research using various methodological approaches provides evidence to support causal directionality between greater EWB and better overall health, better disease-specific outcomes, and reductions in disability.¹²⁻¹⁴ This research includes studies relating states of well-being to physiological changes, experiments that manipulate emotions and examine the resulting biological changes, cross-sectional observational studies, and long-term prospective studies at the population level.¹² Studies show various positive health outcomes related to EWB. One systematic review found that a state of EWB is associated with a 20% reduced risk of all-cause mortality in healthy people and is a protective factor related to mortality from

diseases such as renal failure and human immunodeficiency virus.⁷ A meta-analysis of more than 136 000 people across 10 studies found that a sense of purpose in life, a facet of EWB, is associated with reductions in both all-cause mortality and cardiovascular events by 17% (adjusted risk ratios of 0.83 and 0.83, respectively).¹⁵

Loneliness and EWB have been shown to be bidirectionally related; that is, loneliness, defined as the subjective “perception of social isolation” or the “dissatisfaction with the discrepancy between desired and actual social relationships,” has been shown to predict reduced EWB, and low EWB has been shown to predict greater feelings of loneliness.^{16,17} A meta-analysis of 70 prospective studies demonstrated that social isolation, loneliness, and living alone had significant effects across the life span on the odds of mortality.¹⁶ In addition, loneliness and social isolation have been associated with unhealthy behaviors, such as smoking, physical inactivity, and poor sleep.¹⁸⁻²⁰ In older adults, loneliness has been associated with decreased functional status and increased mortality.²¹

EWB is closely entwined with social relationships. The definition of EWB encompasses satisfaction with relationships, the subjective perception of social support. Also closely entwined are the structural aspects of social relationships (eg, extent of social integration, size of social networks). A meta-analysis of 148 studies showed that social relationships reduced the odds of all-cause mortality by 50%, with an effect size magnitude that is comparable to that of other known protective health behaviors such as quitting smoking.²² Other meta-analyses, which have included studies with collective sample sizes exceeding 4 million, show strong associations between perceived social connectedness and reductions in disease-related mortality.^{16,22,23} These meta-analyses suggest that participation in neighborhood, family, and social life is important to individual and population health.

EWB should be part of the endeavor of public health. What we already know about the health effects of EWB has been translated into powerful, evidence-based public health campaigns in the United Kingdom, Australia, New Zealand, and Canada, among others.²⁴⁻³⁰ We are proposing the same for the United States.

Emotional Well-Being as a National Initiative: 6 Key Components

To increase the EWB of the US population by way of a national EWB initiative, we propose 6 key components.

Systematic measurement of EWB. Federal, state, and local agencies and private organizations are already measuring EWB at the individual and population levels. An example at the individual level is the American Time Use Survey Well-Being Module, conducted by the US Census Bureau, which surveyed individuals in 2010, 2012, and 2013 on their positive and negative emotional states and overall life

evaluation.³¹ An international example of individual-level surveys is the Australian Unity Wellbeing Index, derived from semiannual telephone surveys of 2000 randomly sampled individuals. It surveys individuals' satisfaction in 7 aspects of personal life (eg, satisfaction with personal relationships and health) and 6 aspects of national life (eg, satisfaction with the economy and national security).²⁷ An example at the population level is the Jacksonville Quality of Life Report, which, from 2008 through 2014, collected quantitative secondary data on aspects of community life in Jacksonville, Florida, deemed to contribute to the EWB of the entire city, such as high school graduation rates, unemployment rates, commute times, infant mortality rates, and public and private support of the arts.³² The Canadian Index of Wellbeing is an analogous international example of population-level measurement that uses quantitative secondary data from multiple sectors to grade Canada's progress in domains of life that contribute to EWB (eg, education, living standards, democratic engagement, natural environment).²⁹ Efforts to better measure individual-level EWB and population-level factors that contribute to community well-being would be vital to a national initiative by evaluating interventions, identifying disparities or changes in EWB over time, and informing policy decisions to optimize EWB.

Understand factors that contribute to improvements or declines in EWB. The second component of a national EWB initiative is to elucidate the numerous factors that contribute to improvements or declines in EWB. Such contributors (also referred to as predictors or determinants) operate at various social-ecological levels (ie, individual, interpersonal, organizational, community, and policy). Research has identified some of these determinants of EWB; among the most salient are health, income, housing, education, employment, supportive relationships, financial and personal security, and neighborhood environment.³³⁻³⁶ For example, neighborhood characteristics such as residential stability and economic conditions are shown to be associated with EWB through the mediator of stress reduction.³⁷⁻³⁹ Once more fully elucidated, those contributors that are modifiable can serve as *drivers*, or key leverage points for intervention, with the aim of raising EWB.⁴⁰

Partner with stakeholders across health care and non-health care sectors. The third component of a national initiative is the formation of partnerships consisting of diverse community stakeholders across health care and non-health care sectors. EWB as a public health goal has the potential to unite sectors and stakeholders. Stakeholder engagement processes and the inclusion of diverse partners are shown to be important to the success of past public health endeavors and have been used in the formative stages of local well-being initiatives, such as the Santa Monica Wellbeing Project.⁴¹⁻⁴⁴ In that project, input from diverse stakeholders was used to identify relevant secondary data sources to measure the drivers of EWB and to identify goals and policy priorities. The investigators of that

project write, "Local governments must call upon their partnerships and agencies—those community stakeholders such as local businesses, religious and community leaders, elected officials, city councils, health initiatives, law enforcement authorities, and vested others—to align policy and practice with the data of well-being measurement at the local level."⁴⁴ Similarly, a study in underserved Los Angeles communities demonstrated that a multisector coalition approach, involving partnerships between health care and community-based programs, was more effective than standard technical assistance for improving outcomes among largely African American and Latino low-income clients with depression, including effects at 6 months on mental health-related quality of life and mental wellness.⁴⁵ Thus, community partnerships may hold the potential to identify shared values, inform measurements, and implement interventions to improve EWB.

Disseminate, implement, and evaluate scalable interventions with strong evidence of effectiveness. Interventions that specify EWB as a primary outcome are limited. More well-supported interventions specify EWB as a secondary outcome or focus primarily on a driver of EWB. There is a need to develop and test interventions focused on EWB and to translate research into policies and services. Work is also needed to adapt, implement, and disseminate evidence-based practices in diverse settings. Given that factors operating at all social-ecological levels affect EWB, interventions acting at multiple levels should be implemented. For example, along with individual-level interventions such as mindfulness-based stress reduction, community-level interventions can help people to identify purpose in their lives, an important aspect of EWB, and encourage community engagement through community-wide activities.^{10,46-48} The United Kingdom's Campaign to End Loneliness, a public-private initiative, is one such intervention.²⁵ The campaign works to reframe loneliness as a public health issue and lobbies decision makers to consider the health and care of those who might be lonely. It advocates for evidence-based strategies to combat loneliness and social isolation. Older adults are involved in the process of shaping programs as community partners. The campaign's materials include information about how to identify those most at risk for emotional distress, how to offer support and recommendations for service providers, and how to find relevant organizations that interface with the elderly.

Another example of a successful community-level intervention focused on drivers of EWB is Communities That Care (<https://www.communitiesthatcare.net>). Violence and substance use both contribute to reductions in EWB, and the Communities That Care system was designed to prevent or curtail these problem behaviors among young people.⁴⁹⁻⁵¹ Communities That Care is an evidence-based intervention that prioritizes community partnerships to identify areas of need through a survey of young people and through dialogue with community members. It involves training community

stakeholders to implement programs that focus on preventing risk factors and strengthening protective factors among young people. The intervention resulted in significant reductions in rates of violence, delinquency, and substance use among young people in a randomized study involving 24 small towns in 7 states.⁵²

Engage the public with effective messaging. The fifth component of a national initiative is public engagement, with effective messaging that resonates with how people conceptualize EWB. Countries such as the United Kingdom, Australia, and Canada, which make EWB a part of the national agenda, have found ways to appeal to the public.^{26,27,29} For example, the United Kingdom uses the term *personal well-being* for public messaging about EWB, a term that is inclusive and easily understood.²⁶

Identify and address disparities in EWB. Research shows differences in EWB across the life span and by sex, race, ethnicity, and income and that county-level differences in EWB act as partial mediators in the relationships among race, poverty, education, and mortality.⁵³ More research is needed to understand state-, county-, and neighborhood-level EWB disparities and resource inequalities that hinder EWB.

Emotional Well-Being: Public Health Priorities

A national EWB initiative is consistent with a public health strategy that focuses on prevention and could stimulate shifts in health care spending and public health priorities. The nation's health care and public health infrastructures currently are not oriented or funded to promote population-level EWB. Health care funding largely goes to emergent, acute, and chronic illness management rather than to preventive or wellness care, despite evidence that prevention efforts can yield public health gains and long-term cost savings, especially when accounting for both direct health costs and indirect social costs.^{54,55} In addition, health care financing, even in value-based purchasing arrangements, does not include performance metrics for individual- or community-level EWB. Public health spending and financial structures could be reshaped such that investments are made in policies and services that promote EWB.⁵⁶

Addressing some major contributors to EWB could require a broadening of the traditional public health mission, although efforts to promote EWB intertwine with other public health activities, such as efforts to reduce health disparities by addressing the social determinants of health and the public health approach of health-in-all-policies.⁵⁷⁻⁵⁹ Efforts to address major contributors to EWB address levers for health that are upstream of the clinical encounter (eg, environments, interpersonal and social contexts, public policies). A national EWB strategy could be made part of this revision of the public health mission to include policy and social action on factors underlying EWB, such as social connectedness and a sense of life purpose.^{15,60}

A national EWB strategy has the potential to engage a broad range of stakeholders. These stakeholders include those in underserved communities, faith leaders, educators, the business sector, and policy makers, in addition to the nation's public health and health care workforces. Engaging communities can be accomplished by using evidence-based engagement strategies, such as those of community-based participatory research and implementation and dissemination science. The public health sector can advise local, state, and national policy makers on actionable, evidence-based policies (eg, walkable cities, safe outdoor exercise spaces) that promote EWB and its major drivers.

Conclusion

The public health prioritization of EWB and its drivers would involve some shifts in public health strategies, while simultaneously being grounded in public health's mission of "many sectors and entities . . . [working] effectively together as a public health system and individually to create the conditions that allow people in the United States to be as healthy as they can be."⁶¹ As we have outlined, a national EWB initiative would involve public health prevention efforts and broad engagement with diverse stakeholders to address disparities in EWB, with potential downstream health benefits. To realize a national EWB initiative, work is needed to identify a feasible national measurement strategy, to delineate drivers of EWB, to engage and partner with diverse stakeholders, to implement and disseminate evidence-based interventions that promote EWB and its drivers, to develop a public messaging strategy, and to address disparities in EWB and its drivers. The work of a growing number of partners will be vital to realizing these goals.

Acknowledgments

This article is the product of a team science project conducted by the UCLA Community Translational Science Team (CTST). The CTST principal investigator is Enrico G. Castillo, and senior faculty mentor is Kenneth B. Wells. CTST investigators are Pilar Abascal, Elizabeth Bromley, Yelba Castellon-Lopez, Bowen Chung, Sophie Feller, Jared Greenberg, Ron D. Hays, Roya Ijadi-Maghsoudi, Loretta Jones, Jessica Kaltman, Sheryl Kataoka, Gauri Kolhatkar, Ashley Lewis Hunter, Jeanne Miranda, Cathy Sherbourne, Lello Tesema, Richard Van Horn, and Brandon Yarns. The UCLA CTST acknowledges the support of Dr Nazleen Bharmal, the Director of Science and Policy in the Office of the US Surgeon General.

Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The authors disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: Research that contributed to this article was funded by the Rapid Research Advances for Progress in Disparities Mental Health Award from the California State Behavioral Health Center of

Excellence and the University of California, Los Angeles Clinical Translational Science Institute.

ORCID iD

Enrico G. Castillo, MD, MSHPM  <http://orcid.org/0000-0002-3807-1125>

References

- Berkman LF. Social epidemiology: social determinants of health in the United States: are we losing ground? *Annu Rev Public Health*. 2009;30:27-41.
- Xu J, Murphy SL, Kochanek KD, Arias E. Mortality in the United States, 2015. *NCHS Data Brief*. 2016;267:1-8.
- Ong AD, Mroczek DK, Riffin C. The health significance of positive emotions in adulthood and later life. *Soc Personal Psychol Compass*. 2011;5(8):538-551.
- Kimm H, Sull JW, Gombojav B, Yi SW, Ohrr H. Life satisfaction and mortality in elderly people: the Kangwha Cohort Study. *BMC Public Health*. 2012;12(1):54.
- Boehm JK, Winning A, Segerstrom S, Kubzansky LD. Variability modifies life satisfaction's association with mortality risk in older adults. *Psychol Sci*. 2015;26(7):1063-1070.
- Kim ES, Kawachi I, Chen Y, Kubzansky LD. Association between purpose in life and objective measures of physical function in older adults. *JAMA Psychiatry*. 2017;74(10):1039-1045.
- Chida Y, Steptoe A. Positive psychological well-being and mortality: a quantitative review of prospective observational studies. *Psychosom Med*. 2008;70(7):741-756.
- Ostir GV, Markides KS, Black SA, Goodwin JS. Emotional well-being predicts subsequent functional independence and survival. *J Am Geriatr Soc*. 2000;48(5):473-478.
- Rigby E. How the National Prevention Council can overcome key challenges and improve Americans' health. *Health Aff (Millwood)*. 2011;30(11):2149-2156.
- US Department of Health and Human Services, Office of the Surgeon General. National Prevention Strategy: America's plan for better health and wellness. 2011. <https://www.surgeongeneral.gov/priorities/prevention/strategy/report.pdf>. Accessed December 1, 2017.
- Cox AM. Vivek Murthy thinks we need to learn how to deal with stress. *New York Times Magazine*. December 28, 2016. <https://www.nytimes.com/2016/12/28/magazine/vivek-murthy-thinks-we-need-to-learn-how-to-deal-with-stress.html>. Accessed December 1, 2017.
- Diener E, Chan MY. Happy people live longer: subjective well-being contributes to health and longevity. *Appl Psychol Health Well Being*. 2011;3(1):1-43.
- Kok BE, Coffey KA, Cohn MA, et al. How positive emotions build physical health: perceived positive social connections account for the upward spiral between positive emotions and vagal tone. *Psychol Sci*. 2013;24(7):1123-1132.
- Ong AD. Pathways linking positive emotion and health in later life. *Curr Direct Psychol Sci*. 2010;19(6):358-362.
- Cohen R, Bavishi C, Rozanski A. Purpose in life and its relationship to all-cause mortality and cardiovascular events: a meta-analysis. *Psychosom Med*. 2016;78(2):122-133.
- Holt-Lunstad J, Smith TB, Baker M, Harris T, Stephenson D. Loneliness and social isolation as risk factors for mortality: a meta-analytic review. *Perspect Psychol Sci*. 2015;10(2):227-237.
- VanderWeele TJ, Hawkley LC, Cacioppo JT. On the reciprocal association between loneliness and subjective well-being. *Am J Epidemiol*. 2012;176(9):777-784.
- Cacioppo JT, Hawkley LC, Crawford LE, et al. Loneliness and health: potential mechanisms. *Psychosom Med*. 2002;64(3):407-417.
- Hawkley LC, Thisted RA, Cacioppo JT. Loneliness predicts reduced physical activity: cross-sectional & longitudinal analyses. *Health Psychol*. 2009;28(3):354-363.
- Theeke LA. Sociodemographic and health-related risks for loneliness and outcome differences by loneliness status in a sample of U.S. older adults. *Res Gerontol Nurs*. 2010;3(2):113-125.
- Perissinotto CM, Stijacic Cenzer I, Covinsky KE. Loneliness in older persons: a predictor of functional decline and death. *Arch Intern Med*. 2012;172(14):1078-1083.
- Holt-Lunstad J, Smith TB, Layton JB. Social relationships and mortality risk: a meta-analytic review. *PLoS Med*. 2010;7(7):e1000316.
- Shor E, Roelfs DJ. Social contact frequency and all-cause mortality: a meta-analysis and meta-regression. *Soc Sci Med*. 2015;128:76-86.
- Diener E, Diener M, Diener C. Factors predicting the subjective well-being of nations. *J Pers Soc Psychol*. 1995;69(5):851-864.
- Campaign to End Loneliness. 2017. <http://www.campaigntoendloneliness.org>. Accessed December 1, 2017.
- Government of the United Kingdom. Personal well-being frequently asked questions. <https://www.ons.gov.uk/people/populationandcommunity/wellbeing/methodologies/personalwellbeingfrequentlyaskedquestions>. 2016. Accessed December 1, 2017.
- Australian Unity. Wellbeing index. <https://www.australianunity.com.au/media-centre/wellbeing>. Accessed December 1, 2017.
- Mental Health Advocacy Coalition of New Zealand. *Destination: Recovery: Te Ūnga ki Uta: Te Oranga*. Auckland, New Zealand: Mental Health Foundation of New Zealand; 2008. <https://www.mentalhealth.org.nz/assets/Our-Work/Destination-Recovery-FINAL-low-res.pdf>. Accessed December 1, 2017.
- University of Waterloo. About the Canadian Index of Well-being. <https://uwaterloo.ca/canadian-index-wellbeing/about-canadian-index-wellbeing>. Accessed December 1, 2017.
- Durand M. The OECD Better Life Initiative: How's Life? and the measurement of well-being. *Rev Income Wealth*. 2015;61(1):4-17.
- National Research Council, Panel on Measuring Subjective Well-Being in a Policy-Relevant Framework. *The Subjective Well-Being Module of the American Time Use Survey: Assessment for Its Continuation*. Washington, DC: National Academies Press; 2012.
- Jacksonville Community Council Incorporated. 2013 quality of life progress report for Jacksonville and Northeast Florida:

- twenty-ninth annual edition. 2014. http://issuu.com/jcci/docs/qol_2013/1?e=3421855/6468442. Accessed December 1, 2017.
33. Chanfreau J, Lloyd C, Byron C, et al. *Predicting Wellbeing*. London, UK: NatCen Social Research; 2008. <http://www.natcen.ac.uk/media/205352/predictors-of-wellbeing.pdf>. Accessed December 1, 2017.
 34. Organisation for Economic Co-operation and Development. *OECD Guidelines on Measuring Subjective Well-Being*. Paris, France: OECD Publishing; 2013.
 35. Eurostat. Eurostat feasibility study for well-being indicators: task 4: critical review. 2008. http://ec.europa.eu/eurostat/documents/118025/118135/Feasibility_study_Well-Being_Indicators.pdf/2475816b-9e4f-44e4-9ebf-2cd05762df77. Accessed December 1, 2017.
 36. New Economics Foundation Centre for Well-being. *Measuring well-being: a guide for practitioners*. 2012. http://www.uknswp.org/wp-content/uploads/Measuring_well-being_handbook_FINAL.pdf. Accessed December 1, 2017.
 37. Davis R, Cook D, Cohen L. A community resilience approach to reducing ethnic and racial disparities in health. *Am J Public Health*. 2005;95(12):2168-2173.
 38. Lee C. Environmental justice: building a unified vision of health and the environment. *Environ Health Perspect*. 2002; 110(suppl 2):141-144.
 39. Sampson RJ. The neighborhood context of well-being. *Perspect Biol Med*. 2003;46(suppl 3):S53-S64.
 40. US Department of Health and Human Services, Centers for Medicare & Medicaid Services, Center for Medicare and Medicaid Innovation Learning and Diffusion Group. *Defining and using aims and drivers for improvement: a how-to guide*. 2013. <https://innovation.cms.gov/files/x/hciatwoaimsdvrs.pdf>. Accessed December 1, 2017.
 41. Institute of Medicine. *The Future of the Public's Health in the 21st Century*. Washington, DC: National Academies Press; 2002.
 42. Cheadle A, Hsu C, Schwartz PM, et al. Involving local health departments in community health partnerships: evaluation results from the Partnership for the Public's Health initiative. *J Urban Health*. 2008;85(2):162-177.
 43. Hann NE. Transforming public health through community partnerships. *Prev Chronic Dis*. 2005;2(spec no. A03):1-5.
 44. Warner K, Kern M. *A City of Wellbeing: The What, Why & How of Measuring Community Wellbeing*. Santa Monica, CA: City of Santa Monica Office of Wellbeing; 2013.
 45. Wells KB, Jones L, Chung B, et al. Community-partnered cluster-randomized comparative effectiveness trial of community engagement and planning or resources for services to address depression disparities [published correction appears in *J Gen Intern Med*. 2013;28(11):1534]. *J Gen Intern Med*. 2013;28(10):1268-1278.
 46. Goyal M, Singh S, Sibinga EM, et al. Meditation programs for psychological stress and well-being: a systematic review and meta-analysis. *JAMA Intern Med*. 2014;174(3):357-368.
 47. Fergus S, Zimmerman MA. Adolescent resilience: a framework for understanding healthy development in the face of risk. *Annu Rev Public Health*. 2005;26:399-419.
 48. Ryff CD, Diener E, Huppert JM, et al. Psychological well-being and ill-being: do they have distinct or mirrored biological correlates. *Psychother Psychosom*. 2006;75(2):85-89.
 49. Lee YN, Park JH, Kim B, et al. Violent crimes in a community and quality of life for its inhabitants: results of a multi-level study in South Korea. *Psychiatry Res*. 2017;257:450-455.
 50. Jacoby SF, Tach L, Guerra T, Wiebe DJ, Richmond TS. The health status and well-being of low-resource, housing-unstable, single-parent families living in violent neighbourhoods in Philadelphia, Pennsylvania. *Health Soc Care Community*. 2017; 25(2):578-589.
 51. Tracy EM, Laudet AB, Min MO, et al. Prospective patterns and correlates of quality of life among women in substance abuse treatment. *Drug Alcohol Depend*. 2012;124(3):242-249.
 52. Hawkins JD, Oesterle S, Brown EC, et al. Sustained decreases in risk exposure and youth problem behaviors after installation of the Communities That Care prevention system in a randomized trial. *Arch Pediatr Adolesc Med*. 2012;166(2):141-148.
 53. Arora A, Spatz E, Herrin J, et al. Population well-being measures help explain geographic disparities in life expectancy at the county level. *Health Aff (Millwood)*. 2016;35(11):2075-2082.
 54. Sensenig AL. Refining estimates of public health spending as measured in national health expenditures accounts: the United States experience. *J Public Health Manag Pract*. 2007;13(2): 103-114.
 55. Nurse J, Dorey S, Yao L, et al. The case for investing in public health: a public health summary report for EPHO 8. 2014. http://www.euro.who.int/__data/assets/pdf_file/0009/278073/Case-Investing-Public-Health.pdf. Accessed December 5, 2017.
 56. Teutsch SM, Fielding JE. Rediscovering the core of public health. *Annu Rev Public Health*. 2013;34:287-299.
 57. Marmot M, Friel S, Bell R, Houweling TA, Taylor S; Commission on Social Determinants of Health. Closing the gap in a generation: health equity through action on the social determinants of health. *Lancet*. 2008;372(9650):1661-1669.
 58. Lawless AP, Williams C, Hurley C, Wildgoose D, Sawford A, Kickbusch I. Health in all policies: evaluating the South Australian approach to intersectoral action for health. *Can J Public Health*. 2012;103(7)(suppl 1):S15-S19.
 59. Gase LN, Pennotti R, Smith KD. "Health in all policies": taking stock of emerging practices to incorporate health in decision making in the United States. *J Public Health Manag Pract*. 2013;19(6):529-540.
 60. Cattan M, White M, Bond J, Learmouth A. Preventing social isolation and loneliness among older people: a systematic review of health promotion interventions. *Ageing Soc*. 2005;25(1):41-67.
 61. Institute of Medicine, Committee on Assuring the Health of the Public in the 21st Century. *The Future of the Public's Health in the 21st Century*. Washington, DC: National Academies Press; 2003.