THE PEOPLE BEHIND THE REPORT

Michele Nealon-Woods, PsyD
President

As president of The Chicago School of Professional Psychology, Dr. Nealon-Woods has strategically positioned the university to broaden its focus on psychology education to include the preparation of integrated health care professionals trained to address the mental and physical needs of patients. She spearheaded the development of an ambitious five-year strategic plan, Leading the Way Toward a Healthier World, which serves as a blueprint for that expansion. A native of Ireland, she completed her doctoral studies at The Chicago School, and served as faculty, department chair, and the founding president of the institution’s Los Angeles Campus before assuming the national presidency in 2010. She is an accomplished writer and speaker on a variety of psychology-related topics.

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As the lead author of the report, Dr. Dell’Angela drew deeply on knowledge and experience garnered through her work as a licensed clinical psychologist and on the faculty of Loyola Stritch School of Medicine and The Chicago School of Professional Psychology. Her current areas of focus include professional education, competency assessment, and curriculum development in interprofessional practice, health psychology, and the practice of health service psychology under the Patient Protection and Affordable Care Act. She holds degrees from Rutgers University and Loyola University Chicago.

Naomi Ruth Cohen

Naomi Ruth Cohen was a gifted artist, a loving daughter and sister, a cherished friend, and a skilled geriatrics counselor. She also suffered from bipolar illness that, when diagnosed at age 30, robbed her of her career and much of the joy that had long defined her nature. In May 2000, Naomi took her own life.

In 2002, her parents, Larry and Marilyn Cohen, founded the Naomi Ruth Cohen Charitable Foundation to honor Naomi’s memory and to work to decrease the stigma of mental illness. In 2008, the foundation affiliated with The Chicago School of Professional Psychology and became The Naomi Ruth Cohen Institute for Mental Health Education (NRCI). For more information about the NRCI, please visit: http://naomicoheninstitute.org/. 
Toward a Healthier Nation: No Health Without Mental Health

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WHERE TO GO FOR MORE INFORMATION

The purpose of this report is to increase understanding and also to mobilize the reader toward action and concern. There are many ways to help and many resources available to move forward toward greater personal and community health.

If you, or someone you know, may benefit from support for psychological concerns, parenting stresses, or health concerns, we encourage you to speak with your primary healthcare provider and contact your state health department, a local hospital, and your community social service department to learn what services and referrals are available. The APA Help Center also offers a wealth of information about how to identify resources for a range of concerns in your community (http://www.apa.org/helpcenter/index.aspx).

For more information on ACES, the Robert Woods Johnson collection (http://www.rwjf.org/en/library/collections/aces.html) offers a starting place to learn more about the research and policy implications, and what you can do to help.

Many government websites are a good place to start when seeking reliable information about common health and lifestyle struggles, trends, resources, and interventions.

- Centers for disease control (CDC): http://www.cdc.gov/
- State Public Health Initiatives and Resources: http://www.cdc.gov/mmwr/international/relres.html
- Substance Abuse and Mental Health Services Administration (SAMHSA): http://www.samhsa.gov/
- Healthy People 2020: https://www.healthypeople.gov/
- Eldercare: http://www.eldercare.gov/Eldercare.NET/Public/Index.aspx

Above all, talk to someone about your concerns and take action, however small. When any member of our community is struggling—we are all affected.
As the nation’s leading university devoted exclusively to psychology and related behavioral and health sciences, The Chicago School of Professional Psychology (TCSPP) is committed to preparing highly skilled, broadly trained practitioners who will function as change agents in their profession and in the world. The institution has evolved significantly since its modest start-up in 1979. Today, it serves more than 4,000 students on three ground campuses (Los Angeles, Chicago, and Washington, D.C.) and through a rapidly growing online campus that reaches around the world.

Because The Chicago School has long recognized the essential role that mental health plays in all aspects of our daily lives, we prepare professionals in a wide array of specialty areas that include clinical psychology, counseling psychology, forensic psychology, business psychology, school psychology, applied behavior analysis, and marital and family therapy.

In 2014, TCSPP crafted and adopted an ambitious five-year strategic plan, which focuses on the vital interplay between physical and mental health and positions the university to assume a leading role in the integration of the two fields. A key initiative articulated in that plan is the production of a national report on the status of mental health in the United States today. This is that report, *Toward a Healthier Nation: No Health Without Mental Health*. 
DEDICATION

To the Naomi Ruth Cohen Institute for Mental Health Education

About the Naomi Ruth Cohen Institute for Mental Health Education (NRCI)

The Naomi Ruth Cohen Institute (NRCI) for Mental Health Education at The Chicago School of Professional Psychology provides resources, hope, and community to those who struggle with the stigma of mental illness and those who support them. NRCI develops educational programming for the greater Chicagoland community to reduce the stigma of mental illness and suicide in marginalized populations whose mental health needs go unmet due to the negative impact of stigma, limited access to services, and limited culturally competent mental health providers. Through conferences, workshops, and educational outreach to people affected by mental illness, NRCI reaches and gives voice to people who have suffered too long in isolation. Through partnerships with schools, community-based organizations, associations, and religious congregations, NRCI raises awareness of the impact and consequences that mental health diagnoses have on an individual and community scale. Through mental health education and outreach, we can grow in our understanding of mental health and how we can help those in need.

For more information about NRCI, please visit: http://naomicoheninstitute.org/.

In order to reduce the stigma of mental illness, a transformation must occur in all of us.

We must change the way mental illness is viewed in our communities.
# TABLE OF CONTENTS

## Introduction 3

## Section 1: No Health Without Mental Health: 7
### Finding the Balance; Making the Case

- Mental Health in the World Around You
- Old Ways of Thinking
- Environmental and Social Realities
- Immigrants and Social-Emotional Stressors
- Poverty and Other Social Determinants of Mental Health
- Mental Health and Youth
- Suicide and Mental Illness
- Military Families and the Stigma of Mental Health
- Mental Illness as a Family Matter
- Mental Health in the Workplace
- A Holistic Approach

## Section 2: Identifying the Cause; Finding the Cure 25

- Health Inequities: Using Big Data to Understand Big Problems
- The Devastating Impact of Adverse Childhood Experiences
- Combating the Effects of ACEs
- The Power of Relationships to Hurt and Heal
- Nutrition and Health Outcomes
- Stress as a Threat to Health
Section 3: Working Together;  
Public Health and Mental Health

Public Health: Our Front Line in Battle
Promising Solutions
Prevention Works

- In the Community
- As Individuals
- In the Workplace

The Role of Resilience
Health at All Stages of Life
Creating a Nurturing Environment
Interprofessional Care
Technology as a Tool

Conclusion 52

References 55
PREFACE

We are fortunate to live in a time that has seen breathtaking advances in medicine. In the past century, we have eradicated diseases by the dozen, added an average of 25 years onto our life expectancy, and learned much about the respective roles that genetics, environment, and lifestyle play in our physical well-being. While similar advances have been made in mental health care, it is the interrelation between these two arenas of well-being—the body and the mind—that is only recently beginning to receive serious attention.

At The Chicago School of Professional Psychology, we are acutely aware of the need to integrate our field of study and practice into the wider realm of personal and public health. We know that psychology is integral to every facet of life and that,
more importantly, it is a critical component of health care, vital to the well-being of individuals, families, and communities. As a mission-driven institution committed to improving the human condition, we have positioned ourselves at the vanguard of change. Our goal is to innovate the way psychology is taught and practiced, and to prepare a new generation of health professionals whose integrated approach to mental and physical well-being will result in a happier, healthier society.

A great deal of research has gone into this report. The authors—most of whom are professional psychologists and faculty at our university—reviewed the current research and immersed themselves in the case studies and pilot programs that have proven successful in the delivery of holistic health care. Through the stories of four families—families not unlike yours and mine—they explore the difference an integrated approach to health care can make in the lives of everyday individuals.

While there are myriad angles from which a report of this type could have been approached, the authors chose to look at the environmental and social realities that influence health and to delve into the effect that adverse childhood experiences have on long-term psychological health. They also explore challenges that discrete groups face, including immigrants, military families, and youth. The authors examine several promising approaches that are incorporated into the Affordable Care Act: a focus on prevention, the use of interprofessional health care teams, and the ways in which technology can be used to improve health.

Our intention in producing this report is to shed light into some of the dark corners of health care that have been inadequately explored in the past, and to serve as a catalyst for change that is so badly needed. Those needs will evolve as our population becomes ever more diverse, and as our environmental, economic, and social realities change. To that end, we will update this report regularly, ensuring continual opportunities to take the conversation to the next level. Awareness building is only a piece of our mission; inspiring action is the other. At The Chicago School, we are well on our way to infusing the changes discussed in this report into our curriculum and our outreach, and our hope is that our readers will benefit from what we have learned. We believe strongly in the future of health care in America, and stand by our mantra that there is indeed **No Health Without Mental Health.**

*Michele Nealon-Woods, PsyD*
President
The Chicago School of Professional Psychology
INTRODUCTION

Since the beginning of the 20th century, much has changed in the way we understand and manage our health. Our system of health care in the United States is evolving. We once focused on treating the body as a machine with interventions focused on disconnected parts to systems of care based on an explosion of research detailing how the physical, environmental, and emotional components of our lives intersect to impact health and illness. Our old assumptions about the separateness of body and mind, action and thought, and societal versus individual factors are now seen as having no more validity than the “flat earth” assumptions of the dark ages.

Shocked into awareness by escalating costs and declining national health compared with other countries, our nation has finally recognized that health cannot be divided into physical and mental realms operating independently of one another and the social
environment. Health includes multiple dimensions that, when viewed as a whole, represent our individual well-being and our collective health as a nation. Our physical condition, our emotional state, our social and living environment, our choices, our thoughts—and, most importantly, our actions as individuals, parents, and leaders—profoundly influence the health of each member of our community.

The Patient Protection and Affordable Care Act (ACA), passed in 2010, put in place a structure that requires us to think in this new way about health. Even as the details are being hammered out, we have begun to move decisively toward a system that holds great promise—the promise of more effectively addressing the physical and mental concerns that contribute to poor health, disability, and suffering for all of us. Since the 1960s, our health care system has focused far too little on prevention and care for population health. Unlike most developed nations, large segments of our population—our youth, the elderly, the poor, and the chronically ill—have had inadequate access to quality care that could improve health, diminish disability, and alleviate suffering. We now see clearly that this failure to address the emotional well-being of our youth—a time when proper mental health treatment could make a lifetime of difference—has resulted in enormous costs down the road. Worse, this failure has resulted in a tremendous loss in worker productivity, civic participation, intellectual capital, and family participation. Meanwhile, millions of dollars are spent on incarceration, addiction, and health care problems too long left unaddressed.

As health care providers begin to adapt to this new way of thinking, their changes in approach may seem confusing or even worrisome to those who have long been accustomed to “health care as usual.” It is to allay such confusion that we have chosen to focus this report on concepts and information that may be less familiar to those of us used to the more traditional practices of relying on physical symptoms to determine diagnoses and treatment: social determinants of health, adverse childhood experiences, new findings in eating/nutrition and physical activity, stress, and trauma. These areas of focus were chosen because they offer clear, straightforward evidence of how our mental health and physical health are inextricably linked. It is important for readers to understand that solutions are available for most common health problems that we face as individuals and as a nation. These practical solutions require partnerships among mental health professionals, medical and public health practitioners, and communities to build on treatment received during health care visits.

This report will examine three promising approaches embedded in the ACA, each with the potential to be “a game changer” in how mental and physical health issues are addressed in our communities: strategies to prevent common concerns from escalating into health-threatening challenges; the use of interprofessional teams to treat health issues from combined physical and psychological perspectives; and the use
of technological innovations and applications to provide an additional layer of day-to-day support. While details are still being worked out for how these approaches are to be implemented, this report will offer a glimpse into the potential impact of such new practices on the individual. It will also touch on stigma as a significant barrier to mental health treatment, the community’s responsibility in addressing mental health needs, and the essential role that cultural competence plays in effective and compassionate health care. By bringing together the latest research, highlighting relevant statistics and trends, and presenting a series of real-life scenarios (fictional, but based on actual cases), the authors have laid out the essential building blocks for healthy individuals, healthy communities, and a healthy nation.

Produced by The Chicago School of Professional Psychology, this report seeks to inform, educate, and empower those who wish to live happier and healthier lives, and to spotlight the unique role that psychology can play in creating healthier communities. We know that problems, such as depression, anxiety, addiction, and behavior related to stress, eating, and physical inactivity are intertwined with society’s most pressing health problems. We understand that there are powerful social determinants of health, such as race, education, and income. Psychology professionals have not only done the research, but have witnessed the harsh realities of failing to care for the whole person in our offices, hospitals, schools, and prisons, and on the streets of our communities. The behavioral science field, medicine, and public health have brought the proof to the table—proof that will enable our political leaders and health care executives to see that there can be No Health Without Mental Health.
SECTION 1:

NO HEALTH WITHOUT MENTAL HEALTH:
FINDING THE BALANCE; MAKING THE CASE

Mental health is central to our well-being, carrying with it an enormous impact not only on our emotions, but on our physical health—often far more than we realize. In this report, we will meet four individuals and families whose struggles will illustrate the inextricable connections between mind and body:

- **Kimberly**: a mom worried about the safety of her sons;
- **Omar**: a first-generation college student with responsibilities and guilt;
- **Mary**: the family member on whom everyone depends, trying to balance the demands of children, an aging parent, and work responsibilities;
- **Jason and Felicia**: struggling to be a family following military deployment.

You may recognize a relative, friend, or coworker in one of the stories, or you may even see yourself.

Let’s start with some facts you may not know—realities that were undoubtedly unknown to the subjects of our stories as well.

- Mental disorders, especially depressive disorders, interfere with our ability to manage many chronic diseases, such as cardiovascular disease, asthma, obesity, diabetes, and cancer, increasing cost of care and severity of the illness.
- High levels of stress and mental health problems, such as anxiety and depression, are associated with an increase in behaviors, such as smoking, substance abuse, physical inactivity, and insufficient sleep, that put us at risk for many chronic diseases.
- In the health care and public health arena, more emphasis and resources have been devoted to screening, diagnosis, and treatment of mental illness than to the promotion and maintenance of mental health.
• Adequate housing, safe neighborhoods, equitable jobs and wages, quality education, and equal access to quality health care (including mental health care) may be as important as individual factors in determining our health over a lifetime.

• Poverty is a significant risk factor in most health problems, including mental health. According to sociologists, by age 30, nearly 23 percent of Americans will have experienced at least one year of extreme poverty; by age 40, the percentage reaches nearly 32 percent; and by age 50, it grows to more than 37 percent. Nearly 62 percent of Americans will experience at least one year of poverty, 45 percent will experience at least two years of poverty, and nearly 30 percent will experience four or more years of poverty (Rank & Hirschl, 2015).

We’ve all heard the stories or seen the evidence first-hand: a child with uncontrollable behavior or suicidal thoughts or struggling with eating or “cutting”; a colleague who used to be a top performer, but has now retreated into silence and absence from work; the family member who drinks too much or suffers from constant anxiety, and no longer wants to socialize.

What about you? Have you experienced sleepless nights for the past six months or longer? What issues were you thinking about when you were unable to sleep? How has this affected your personal and work relationships? Have your eating habits changed significantly? Are you frequently distracted, on edge, or irritable? If you answered “yes” to some of these questions, or know someone who would answer “yes,” you’re not alone.

**MENTAL HEALTH IN THE WORLD AROUND YOU**

In the United States, doctors and hospitals have devoted more attention to the screening, diagnosis, and treatment of mental illness than to the promotion and maintenance of mental health. Just as regular checkups, healthy eating, and exercise improve bodily health, we know what individuals and communities can do to promote mental health. We have also largely ignored the social determinants of mental health as a part of general health. There is no question that adequate housing, safe neighborhoods, equitable jobs and wages, quality education, and equal access to quality health care play a major role in determining health—both physical and mental.

A few facts paint a vivid picture of the importance of integrating mental health care as part of overall health care in our nation:
• One in five adults (approximately 43.6 million Americans) experiences a mental disorder in any given year (Center for Behavioral Health Statistics and Quality, 2015).

• Depression is one of the most common complications of chronic illness. Up to one-third of individuals with a serious medical condition experience symptoms of depression. The rate of depression among individuals who have suffered from a heart attack is between 40 and 65 percent (Cleveland Clinic, 2016).

• Anxiety disorders, including panic disorders, Post-Traumatic Stress Disorder (PTSD), and phobias, affect about 18.1 percent of adults or some 40 million individuals (National Institute of Mental Health, 2015).

• LGBTQ populations have among the highest rates of tobacco, alcohol, and other drug use, as well as depression, putting them at higher risk for chronic and severe health problems (National Alliance on Mental Illness [NAMI], n.d.).

• Studies find that 18 percent of employees ages 15-54 report that they experienced symptoms of a mental health disorder in the previous month (Harvard Health, 2010).

Society is gradually coming to understand that overwhelming stress and mental health issues are common in our day-to-day lives. Failure to recognize and intervene leads to unnecessary suffering, and for youth this failure may set the stage for a lifetime of lost potential. This report will focus on the key relationship between physical health and mental health, sometimes referred to as “the mind-body connection,” using familiar examples of how this connection might be present in everyday life.

OLD WAYS OF THINKING

Fifty years ago, a person who demonstrated odd behavior or emotional difficulties would be viewed as someone with poor self-control or the product of “bad mothering,” rather than a person reacting to unhealthy and intolerable circumstances or suffering from a treatable illness. These old ways of thinking often resulted in isolation and estrangement from family, friends, and community, and marginalization by the health care community. Typically, the solutions offered by society—labeling, institutionalization, over-medication, or abandonment—dealt far worse blows to the individual than the illness itself.
Society and the health care community often blamed families for those problems. Rarely did people consider the possibility that odd behavior, mood swings, difficulty with human interactions, or irrational thinking might have had physiological, psychological, and environmental explanations. We now know that recovery or improved quality of life is possible for people coping with emotionally toxic situations, those struggling with overwhelming feelings of stress, and those with serious mental illnesses. We also know that common, less severe mental health struggles, if left unattended, often have long-term negative effects on our general health and our interactions with others in school, in the workplace, and at home.

In addition to meeting four families experiencing common life stressors and considering strategies that could improve their mental and physical health, we will drill down into specific demographics and situations. We will look at the unique challenges facing immigrants, people living in poverty, youth, and military personnel, and the variety of ways in which mental health problems are manifested (through suicide, and in the family, and in the workplace).

There are many ways people define health—especially mental health—in the United States. In this report, we will use definitions provided by the World Health Organization (WHO). These definitions capture what health feels like for us as individuals, rather than viewing health as the absence of disease or illness.

**Health** is “a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity.”

**Mental health** is “a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community.”

**Mental illness** is defined as “collectively all diagnosable mental disorders” or “health conditions that are characterized by alterations in thinking, mood, or behavior (or some combination thereof) associated with distress and/or impaired functioning.”  
(World Health Organization, 2014)
Kimberly: A Mom With Many Worries

Kimberly is a 40-year-old African-American woman who lives in a densely populated area with a high incidence of crime. She has two sons, Darren and Daniel, aged 13 and 16. Kimberly and her husband deal with demanding work hours and long commutes, as there are few high-paying jobs in their immediate area. They’re unable to spend as much time with their sons as they would like. Kimberly’s normal worries about her children have been intensified by recent shootings of young black men, and she finds herself repeatedly calling her sons from work to make sure they are safe. She asks them to skip the after-school sports activities they have long enjoyed so that they can ride the earlier, “safer” school bus home.

After a few months, Kimberly’s anxiety begins to affect her concentration at work, prompting her supervisor to recommend that she go to part time. Kimberly is terrified of losing her job, and tells her supervisor that she will take care of the problem and does not need to change her work hours.

At home, Kimberly has had difficulty falling sleep because of worry, feels like she can’t breathe at times, and experiences chest pains that she tries to hide from her family. Since dropping sports, her son, Darren, has developed stomach aches that keep him home from school, which, in turn, causes Kimberly to miss more work. When Darren’s absences result in slipping grades, the school asks for a note from their family doctor. She also schedules a “check-up” for herself because she is concerned about her breathing.

During the physician visits, Kimberly doesn’t mention her own anxieties to her doctor or to Darren’s. The pediatrician reassures her that Darren’s stomach is fine, and tells her she should be more firm with him about school and make sure he engages in activities, like sports, to burn off some energy. Kimberly’s heart and lungs check out fine, but her blood pressure is up a bit, prompting the doctor to prescribe a new medication because of her family history of stroke.
As we read Kimberly’s story, we begin to see—even if both, Kimberly and her doctor, don’t make the connection—that the symptoms experienced by both, Darren and his mother, are tied to the circumstances that define their lives. Does this mean that Kimberly’s worries are irrational? Of course not, she’s a concerned parent who wants her children to be safe and is doing her best to juggle the demands of parenting and work. Most parents worry and have sleepless nights in similar situations. But how long is too long for this worry and sleeplessness to last? How does it relate to her breathing and blood pressure? How do Darren’s stomach aches fit into this picture? Kimberly’s family and friends may try to help by downplaying her worries, or suggesting that she find a job closer to home. They might encourage her to relax, have a drink, or pray. They may not consider that anxiety symptoms, such as panic attacks—an easily treatable condition with physical symptoms similar to those of a heart attack—may be exacerbating her worries and contributing to Darren’s stomach issues.

Research has shown us that our bodies respond to excessive stress by “sounding the alarm” through our bodies and our thought patterns. When we ignore the signals and fail to change the stress or the way we cope with it, mental health and physical health concerns arise in otherwise healthy people. When we are affected by a history of chronic stress in childhood, we are even more likely to be sent into ill health by a stressful circumstance in adulthood. Because human beings are social beings, when we are not ourselves—irritable, nervous, or sad—others around us are affected, even if we don’t share what we are going through.

In this case, Kimberly’s worry and strain has affected her son’s ability to participate in a health-promoting activity and has probably made him worry as well. Most of us understand that our “guts” often react to our life situations, and this is the case for children as well. The imbalance in her body, her mind, and her family has already started to do damage. Kimberly needs to receive the right kind of health care in order to return to a better state of health.

Like many people, Kimberly might think that she should solve her problems herself. But research has shown that the more we worry, the harder it becomes to think clearly (Sarason, Pierce & Sarason, 2009; Brinker, Campisi, Gibbs & Izzard, 2013). Kimberly’s mind may be “spinning” so fast that she simply cannot figure out what she needs to do to take better care of herself, her job, and her family. When we find ourselves in this state, our body cannot calm down, and it becomes easy to think that we are indeed “going crazy.” We need help to identify and develop new ways to deal with the stress in our lives that push us off balance.

Research tells us that Kimberly may never receive the help she needs to get
through difficult situations because of mental health stigma. She may be affected by a U.S. culture that celebrates those who give the appearance of being “strong” and “independent,” but does not recognize that family, community, or other resources make essential contributions to this strength. Kimberly’s options may be limited by a work culture that passes over for promotion the people (usually women) who request flexibility for family matters. She may also come from a family legacy that encourages her to “keep our secrets inside the family.” Regardless of the reason, Kimberly’s health depends on whether she is offered and receives appropriate care for her anxiety as part of care for her blood pressure.

### ABOUT STIGMA

“Stigma has been described as ‘a cluster of negative attitudes and beliefs that motivate the general public to fear, reject, avoid, and discriminate against people with mental illness.’”

(The President’s New Freedom Commission on Mental Health, 2003, p. 4)

“We now have clear evidence that stigma has a toxic effect by preventing people seeking help for mental health problems. The profound reluctance to be a ‘mental health patient’ means people will put off seeing a doctor months, years, or even at all, which in turn delays their recovery.”

(King’s College London, 2014)

“Stigma thwarts, undermines, or exacerbates several processes—availability of resources, social relationships, psychological and behavioral responses, and stress that ultimately lead to adverse health outcomes.”

(Hatzenbuehler, Phelan, & Link, 2013)
Omar: The Preoccupied College Student

Omar, a college student who dreams of becoming a physician, has been experiencing headaches, jitteriness, problems concentrating, and sadness during his freshman year. His friends notice that he has been staying up late playing video games instead of sleeping and is frequently irritable. He often misses his early classes and his grades are slipping. He is ashamed that his adjustment has been difficult, and feels pressure as the first person in his family to go to college. Although drinking is not acceptable in his family for religious reasons, Omar has started to drink “a beer or two” every night after his full-time warehouse job to “take the edge off” of his bad feelings.

Omar has Deferred Action for Childhood Arrivals (DACA, 2012) status, a temporary status allowing him to remain in the U.S. Although he has never had any legal troubles, he stays away from friends who party and drives carefully to avoid any legal attention. Omar also worries about the future and the possible loss of family members who are undocumented. His uncle, who got him the warehouse job, was deported after an immigration raid at the warehouse. Omar doesn’t want to betray his family’s status or be subject to anti-immigration comments by talking about this outside of the family. Yet he deeply feels the loss of personal support that his uncle provided for him every day.

At night, Omar experiences extreme anxiety, which often manifests itself in heart palpitations. When his heart races, his brain starts to replay the difficult migration journey he took with his mother and younger sister when he was five years old. His girlfriend sees how nervous he has become, and has offered to make an appointment for him at the school’s counseling center, which he refuses. He finally agrees to go to the health center, with the idea that he might get some medicine that will help him sleep and calm his nerves.

His visit at the health center is short. During his physical, the doctor asks about his drinking patterns and work when he describes his sleep problems. Omar is given no medication and is advised to cut back on his work hours. He is afraid to tell the doctor about his uncle, his loss of support, his financial obligations, or his flashbacks, and leaves the doctor’s office feeling hopeless and ashamed, convinced that he was never meant to attend college.
IMMIGRANTS AND SOCIAL-EMOTIONAL STRESSORS

According to the U.S. Department of Homeland Security (2014), there are more than 13.1 million lawful immigrants in the U.S. today. Immigrants experience many life changes and stressors including stereotyping, discrimination, and hate crimes based on how they look, dress, and/or speak. In schools, immigrant children may be bullied for difficulties with the language or assumed to have academic difficulties or talents based on race.

Although the majority of immigrant adults have jobs that pay below minimum wage, they often experience adversity and discrimination, and are accused of taking jobs away from American citizens. Many work two or more jobs to make ends meet, but still live in poverty. Immigrants who were once medical or other professionals in their native countries may find themselves in jobs far below their potential contribution.

Many immigrants have additional stressors, such as the responsibility for supporting family members who remain in their country of origin—countries that may be ravaged by war and famine. Despite their higher risk for physical and mental health conditions, immigrants have access to fewer health care resources and even fewer that can be provided in their native language.

What Omar doesn’t know is that mental health problems among college students are not unusual, and that the academic success of every student is dependent on community support. When students feel socially isolated and do not have access to culturally sensitive support services due to budgets cuts, stigma, or time constraints posed by full-time work schedules, minor adjustment problems—such as sleep, sadness, anxiety, and relationship issues—can become more serious, ultimately affecting academic success and degree completion.

POVERTY AND OTHER SOCIAL DETERMINANTS OF MENTAL HEALTH

Lack of economic security contributes to poor health and to mental health problems, especially for children. Consider these facts:

- In its 1995 report, “Bridging the Gaps,” the World Health Organization described extreme poverty as, “the world’s most ruthless killer and the greatest cause of suffering on earth.”
• Low-income children demonstrate disproportionately high cognitive deficits, low cognitive skills and educational achievement (Anakwenze & Zuberi, 2013). Many of these issues are linked to preventable causes.

• U.S. child homelessness is at an all-time high; one in every 30—or 2.5 million children—were homeless in 2014 (The National Center on Family Homelessness, 2014).

• Homelessness has long shown to be a contributing or causal factor in negative behaviors, poor lifestyle choices, substance abuse, crime, and higher morbidity. The poverty, lack of affordable housing, racial disparities, and domestic violence that often result in homelessness are also primary social/environmental determinants of mental health (Grant et al., 2013).

With poverty and homelessness affecting an alarming percentage of the U.S. population, it is impossible to overlook the role that social determinants play in both physical and mental health. It represents an area that demands special consideration as we face the challenge of creating a healthier environment that supports all segments of our society.

MENTAL HEALTH AND YOUTH

Another population that demands specialized study and action is our young people—the generation that will lead us through the coming decades. The status of mental health issues that face our children and youth in the U.S. is alarming:

• Fifty percent of lifetime mental illness cases begin by age 14; by 24 years of age, 75 percent of those whose lives have become impacted by mental illness will have had their first serious incident (Kessler et al., 2005).

• Attention Deficit Hyperactivity Disorder (ADHD) is the most-often diagnosed health problem among children ages three to 17, followed by depression (Centers for Disease Control and Prevention, 2013, May 17).

• In any given year, the majority of clinically depressed youth do not receive treatment for depression from a mental health professional (Avenevoli et al., 2015).

Like adults, children and adolescents who engage in one harmful activity are likely to engage in additional harmful behaviors. It is important to recognize and address
behaviors—dramatic mood swings, extreme relationship anxieties, changes in eating habits (both over-eating and under-eating), use of alcohol or drugs, engagement in risky behaviors and self-harm, such as cutting—and to intervene with nonjudgmental support at an early stage. Parents, teachers, and physicians may have difficulty at times distinguishing between problems that a child will “grow out of” or that represent more worrisome patterns that require rapid intervention. Unless behavioral health specialists are partners in the care of the child, there may be too much of the wrong intervention (medication for a solvable peer problem) or too little attention paid to the signs of substance abuse, serious depression, or trauma, such as reactions to sexual assault that are often part of significant behavior changes in youth.

SUICIDE AND MENTAL ILLNESS

Suicide is the third leading killer of young people between the ages of five and 14, and the second leading killer of young people aged 15 to 24 (CDC, 2013c). More teenagers and young adults die from suicide than from cancer, heart disease, AIDS, birth defects, stroke, pneumonia, influenza, and chronic lung disease combined. All too frequently we avoid discussing this painful subject, but the statistics are staggering and cannot be ignored:

- Hispanic females in grades 9-12 reported attempting suicide at a significantly higher rate than Caucasian, non-Hispanic, and black non-Hispanic female students (CDC, 2012).

- Suicide is the second leading cause of death among American Indians/Alaska Natives who are between the ages of 15 and 34; this is 2.5 times higher than the national average for that age group (CDC, 2012).

MILITARY FAMILIES AND THE STIGMA OF MENTAL ILLNESS

Those who serve our country, along with their families, are bound together by behaviors and cultural beliefs often referred to as “warrior culture.” Although honorable and noble in its intent, the core values of this culture—honor, commitment, resiliency, toughness—can create harmful obstacles when veterans and their families are dealing with otherwise treatable mental and physical health concerns.

The warrior culture puts a high value on strength and sacrifice; many “normal”
Felicia and Jason: a Military Family

Felicia, a 25-year-old civilian woman of Puerto Rican heritage, has come to the military base health center expressing concern over her husband’s behavior and demeanor since his return from his second deployment to Afghanistan. Jason is a Marine Corps Corporal, 23 years old, and of Italian heritage. The couple has been married for three years and has a four-year-old daughter, Mara. Jason’s re-integration was described as “pretty rough”; Felicia reported to her physician that her husband returned home “a completely different person.”

Felicia describes Jason as emotionally detached, withdrawn, showing signs and symptoms of Post-Traumatic Stress Disorder (e.g. insomnia, irritability, arguing, increased drinking, frequent headaches, and chronic fatigue). All of these behaviors concern Felicia, but it is his bouts of excessive drinking that are the most frightening. She shared that “one night Jason came home late after another drinking binge, and came unglued because our daughter’s toys were in the living room.”

Jason’s highly uncharacteristic binge drinking and aggressive behaviors are showing up in frequent arguments at home and in the workplace. At work, he was put on notice that if his behavior continued, it could lead to discharge. Jason has refused all requests to go to the psychiatrist at the military clinic, stating that he is “not crazy,” and that he wants everyone to back off for a while.

Felicia’s migraines have become more frequent, but she is afraid to take her medication because it makes her sleepy. Jason has never harmed Mara, but she is worried about leaving him alone to care for their daughter because he has been preoccupied, and his behavior has been so erratic. Mara’s tantrums have increased, and she has become clingy and begun to wet the bed, waking up the household when her sheets need to be changed. Felicia is exhausted; she has gained 10 pounds from the sweets she finds herself eating to stay awake and calm her nerves.
human vulnerabilities and needs are wrongly seen as weakness or lack of character, or having “lost the edge.” Instead of disclosing health-harming problems, many military veterans and families “stonewall” those around them, keeping problems and their understandable responses to horrifying experiences hidden behind a controlled and unemotional exterior. While stonewalling may have its place in combat, it can damage relationships. The strain of maintaining this wall may lead to unhealthy coping and hopelessness, especially after separation from the military community.

It has been shown that those who enter military service are more likely than other groups to have experienced difficulty in early life (Blosnich, Dichter, Cerulli, Batten & Bossarte, 2014). This alone places them at a statistically higher risk for mental health concerns. Combat and separation from home and family creates significant strain on soldiers and their families.

According to Veterans Administration data, depression and Post-Traumatic Stress Disorder (PTSD) are the two most common mental health problems faced by returning combat troops (Seal et al., 2009); these issues may emerge in the workplace, and may affect family members and friends. Children—especially those of Mara’s age—are engaged in the important task of learning about emotions and interpersonal relationships from observing the people closest to them. We know that these early lessons are important to our later emotional life and relationships. Even if Jason refuses assistance, Felicia is right to seek assistance to address her health and stress concerns and to learn how best to support Mara’s healthy development as Jason struggles with his issues.

**MENTAL ILLNESS AS A FAMILY MATTER**

The responsibilities and strain of caring for family members with declining health can be an uncomfortable topic. But it is an issue we will be dealing with more frequently as the world’s population ages. According to the National Institutes of Health and the World Health Organization’s report, “Global Health and Aging” (2011), the increasing incidence of chronic disease and cognitive decline that will inevitably accompany our aging population will be a “powerful and transforming demographic force” (p. 1) that will place mounting strain on the infrastructure of most nations for many years to come. It notes the reality that family caregivers are often caught between the need to work, the demands of growing children, and the time and energy needed to care for aging family members with physical or mental health issues. While the Family and Medical Leave Act (FMLA) is legally available for many employees, it is not a realistic option for those already in poverty, part-time employees, single-wage-earner families, or for those who cannot afford to go without income even for short periods of time.
Mary in the Middle

Mary is a 55-year-old single parent of three children—two in college and a daughter who is active in high school sports. Mary, who works full-time, arranges her schedule so that she can provide transportation and attend as many of her daughter’s sporting and academic events as she can. Her ex-husband lives nearby, but his employment often takes him out of town.

Mary is the eldest of four siblings in a large Irish family. Mary’s mother, Susan, is 75 and lives across town, a 30-minute commute when traffic is light. Providing care for Susan, whose health has been in steady decline since a recent fall, has become Mary’s responsibility as the oldest female in her family.

Mary and her siblings have noticed that Susan is having frequent mood swings; she becomes sad and withdrawn, and then lashes out unpredictably. Mary realizes that her mother is not eating well and is becoming increasingly forgetful. When she suggests that their mother could benefit from a home health aide, and should see a doctor about her mood and memory problems, her siblings do not agree with the extra costs that would be involved. Susan also refuses to allow a live-in caregiver or visiting nurse to be hired, and becomes enraged when the possibility of an assisted living facility is mentioned. She will not answer the door for the Meals on Wheels program Mary has scheduled. Mary often finds that her mother has not changed her clothes for days.

Mary prides herself on being a devoted parent, employee, daughter, and now a primary caregiver as well. Juggling these responsibilities, she races from place to place making sure everyone’s needs are met. When she begins getting calls from Susan at all hours of the day and night, disrupting her work and sleep, Mary begins to smoke again after 20 years in an attempt to manage her stress. She begins noticing flare ups of her arthritis in her hands and feet. She is also becoming irritable and annoyed with her siblings, who call often for updates but don’t offer to help. Mary has quit her community choir to make more time, and realizes after a few weeks that she is feeling isolated.
This describes the situation for Mary, whose family, work, and relationships are all affected by her need for more resources and support. The consequences of her disrupted sleep, social isolation, smoking, and stress will likely take a significant toll on her work performance and parenting. Her recent return to smoking also increases her risk for lung and cardiac disease.

Importantly, Susan also suffers when Mary is forced to provide all of her care in a rush. Without proper assessment by an expert in the mental and physical health of older adults, treatable problems, such as depression, hearing loss, substance abuse, and dental issues—along with their effects on nutrition—may go unaddressed. Unlike many countries, the U.S. lacks coordinated community resources that offer the opportunities for the elderly and their families to stay connected and engaged socially, especially when health is in decline.

“There is mounting evidence from cross-national data that—with appropriate policies and programs—people can remain healthy and independent well into old age and can continue to contribute to their communities and families.

The potential for an active, healthy old age is tempered by one of the most daunting and potentially costly consequences of ever-longer life expectancies: the increase in people with dementia.”

(World Health Organization & National Institutes of Health, 2011, p. 3)

MENTAL HEALTH IN THE WORKPLACE

The examples of Kimberly, Jason, and Mary underscore the reality that mental health issues are not just personal or family concerns. Individuals affected by these life imbalances carry their increasing physical and mental distress into the workplace, where they are almost certain to have an adverse effect on the wellness and productivity of those around them. A few facts about mental illness’ impact on the workplace can put the issue into perspective.

- During a three-month period, persons with depression are absent from work an average of 4.8 days and experience 11.5 days of reduced productivity (CDC, 2013a).
• It is estimated employee depression costs employers $17 billion to $44 billion yearly and causes an estimated 200 million lost workdays each year (CDC, 2013a).

• Depression is the leading cause of disability in the U.S. for ages 15 to 44 (American Psychological Association [APA], n.d.a.).

• Approximately 9 percent of U.S. workers report being hungover at work, and 15 percent report being impaired by alcohol at work at least once during the past year (CDC, 2013b).

• Workplace bullying is a significant factor for later mental health problems, including symptoms of anxiety, depression, and Post-Traumatic Stress Disorder (Verkuil, Atasayi & Molendijk, 2015).

A HOLISTIC APPROACH

In everyday life, each of us has to manage multiple stressors; some are within our control, others are not. Although Kimberly wants to protect her children, there are realities she cannot control. The violence in her world contributes to her hypertension, sleeplessness, and fatigue affecting those around her as well. Even though she sees her doctor, and even if she takes her medication, her health is likely to decline if she does not receive the right kind of care that addresses the impact of anxiety and stress on her sleep, relationships, and work.

Omar cannot hide his cultural identity, but it is often at the center of his sense of displacement and isolation. He, too, needs culturally sensitive support to manage the normal worries of college and those tied to his early life that interfere with his studies. Omar’s future is at stake, and he must have the support of his entire community—not just his family—to reach his potential. The United States has a severe shortage of practitioners who are trained and committed to the culturally responsive health care that is needed to care for the health of our diverse society. When Omar achieves his dream of becoming a physician, all of us benefit.

Jason’s barriers to accepting help may arise from lessons in his early life, his culture, his combat history, and his self-image as a soldier. Without help from those who understand military culture, he may well be on a fast track to a failed marriage, poor health, substance abuse, and potentially suicide. Felicia’s health—compromised by unhealthy coping—is closely tied to whether Jason receives the help he needs. Mara’s exposure to the stressful household—if continued and especially if it worsens—may put her at risk for a host of difficulties in school achievement, mental health, and physical health.
Mary’s position is not sustainable without some kind of help; she simply cannot continue to burn the candle at both ends. With limited options for her mother’s care available in her community, Mary’s physical and mental health are likely to decline as she tries to do more than one person can. She may become unable to work if her arthritis progresses or her fatigue contributes to a serious motor vehicle accident. Susan’s health will also suffer; she may fall again or suffer complications of poor nutrition or incorrect medication dosages if resources to address her social isolation, depression, and declining cognitive skills are not soon found.
SECTION 2:
IDENTIFYING THE CAUSE; FINDING THE CURE

Section 1 made it clear why any workable solution to costly health problems must be built upon a clear understanding that emotional, physical, and social health are inseparable. In the past, our system of health care alternated between the view that mental distress/mental illness is a personal or character flaw and the view that mental health disorders are brain diseases that must be “cured” with pharmaceutical
interventions. We now realize that neither approach is correct.

Section 2 will address the scientific and medical findings that have led to a far more realistic and effective approach to mental health, and will demonstrate what these discoveries mean for the individuals we met in Section 1. We will look specifically at a number of factors—social determinants, adverse childhood experiences, nutrition, and stress—that can contribute to mental health problems, sometimes immediately, and, at other times, years down the road.

HEALTH INEQUITIES: USING BIG DATA TO UNDERSTAND BIG PROBLEMS

“Big data’s power does not erase the need for vision or human insight.”
[McAfee & Brynjolfsson, 2012, p. 65]

Increasingly powerful data management tools—such as electronic health record technology and data analytics—allow us to see clearly the relationships between the biological and environmental factors that contribute to our well-being.

The World Health Organization defines social determinants as “the conditions in which people are born, grow, work, live, and age, and the wider set of forces and systems shaping the conditions of daily life” (WHO, n.d.a.). These forces include economic policies and socio-economic systems, social norms and inequities, governmental and political systems.

As income gaps widen, and as the U.S. ages and becomes more diverse, social determinants play an increasingly significant role in the health of our population. Disparities in access to basic health resources, high rates of poverty, and inequities in education and housing are powerful determinants of health, especially among our youth. The data is unambiguous and has shown us that:

- Americans with less income and lower educational levels report higher rates of disease, disability, and poor health compared with Americans of higher socio-economic status (Braveman, Egerter, An & Williams, 2009).
- People living below the poverty line have less access to care than people in high income households, across all measures of access (Agency for Health Care Research and Quality, 2015).
• Counties with the highest rates of poverty and food insecurity have the highest rates of diabetes (CDC, 2012).

• Lower household income is directly related to an increased risk for chronic health conditions in children (American Public Health Association, n.d.).

• A child who lives in poverty is more likely to be diagnosed with a learning or developmental disability (Marston, 2013).

• The risk for obesity is significantly greater among women with lower income and education, increasing their risk for diabetes and heart disease.

• Experiences of racial discrimination have been shown to increase the risk of stress, depression, hypertension, cardiovascular disease (Shavers, Klein & Fagan, 2012), breast cancer (Taylor et al., 2007), and overall mortality (Todorova, Falcon, Lincoln & Price, 2010).

• Persons with serious mental illness die 25 years earlier than the general population, often from conditions caused by modifiable risk factors, such as smoking, obesity, substance abuse, depression, and inadequate access to medical care (National Association of State Mental Health Program Directors, 2006).

• 60 percent of premature deaths in persons with serious mental illness are due to physical conditions, such as heart, respiratory, and liver disease, as well as stroke and cancer.

• Even though laws require health insurers to provide mental health care along with other health services (“parity”), significant regional disparities exist in the availability of quality mental health services (Mental Health America, 2015).

• Elderly Hispanic individuals experience a disproportionately higher incidence of chronic disease, such as diabetes, hypertension, liver disease, arthritis, respiratory diseases, stroke, cancer, and heart disease than other demographic groups. Factors contributing to these disparities include language and cultural barriers, lack of access to preventive services, and lack of insurance.

• The United States incarcerares more individuals than any other country. A Bureau of Justice Statistics (BJS) report estimates that 705,600 mentally ill adults are incarcerated in state prisons, 78,800 in federal prisons, and 479,900 in local jails (BJS, 2006).
• Research documents that “people with mental illnesses are over-represented in probation and parole populations at estimated rates ranging from two to four times the general population” (Prins & Draper, 2009, p. 11). Not surprisingly, the living conditions in the prison system are reliably shown to worsen mental health (Torrey et al., 2014), increasing the likelihood of recidivism and disproportionately subjecting those with mental disabilities to sexual victimization (Wolff, Blitz & Shi, 2007), and unnecessary, extreme, or punitive use of force (Human Rights Watch, 2015).

THE DEVASTATING IMPACT OF ADVERSE CHILDHOOD EXPERIENCES

In 1995, Dr. Vincent Felitti, a California physician, was frustrated by the dropout rate in his obesity clinic. This clinic was treating educated people with many life advantages who appeared motivated to lose 100 pounds to improve their health. He used all of the best science in exercise, nutrition, and medication, but continued to lose patients even after they had achieved success in their weight-loss programs.

What he and other researchers discovered, after studying 17,421 people in the California health care system, changed our understanding of the factors contributing to common and costly illnesses (Felitti et al., 1998). The results of this study (replicated in 22 states and thousands of additional scientific studies) indicated that adverse childhood experiences changed the body and brain in such a way that they had lasting powerful effects on the person’s health as an adult.

Adverse childhood experiences (ACEs) refer to a set of specific traumatic or stressful life events that occur before age 18. While many of us have experienced one or two such events (e.g. mental illness in the household, substance abuse in a parent, parental divorce, or separation), the experience of four or more ACEs is linked to every major chronic illness and behavioral health problem. These are the same health care and societal problems that cost American taxpayers billions of dollars every year. ACEs cross the line between stress and trauma, disrupt brain development, and impair functioning in critical areas. These changes—set in motion while our bodies and brains are maturing—alter the way our nervous system responds to stress, disrupts our sleep patterns, affects our trust of others, impairs our concentration, and increases the likelihood that unhealthy habits and addictions will develop. Children with high ACE scores who do not receive proper treatment by adolescence are at the highest risk for serious diseases, violence, poor educational and career outcomes, teen pregnancy, and incarceration.
What we know:

- Nearly one-third of U.S. youth ages 12-17 have experienced two or more types of childhood adversity that are likely to affect their physical and mental health as adults.

- ACEs may vary by state, reflecting differences in rates of community violence and economic and social factors (Sacks, Murphey, and Moore, 2014).

- The likelihood of experiencing an ACE varies with location; local maternal-child health policies, such as the protective service system and the availability of visiting nurse programs can all have an impact (Bruskas et al., 2013; Payne, 2015).
• Parents with high ACE scores have difficulty with emotional regulation that impacts parenting. This is especially true of parents who are also struggling with poverty or discrimination.

• In 2010, the average lifetime financial cost for each victim of nonfatal child maltreatment was estimated at $210,012 which included:
  • $32,648 in childhood health care costs;
  • $10,530 in adult medical costs;
  • $144,360 in productivity losses;
  • $7,728 in child welfare costs;
  • $6,747 in criminal justice costs;
  • $7,999 in special education costs (Fang, Brown, Florence & Mercy, 2012).

• In 2008, the total lifetime economic burden resulting from new cases of fatal and nonfatal child maltreatment in the United States was approximately $124 billion and may be as high as $585 billion (Fang et al., 2012).

COMBATING THE EFFECTS OF ACES

In the same way that children differ in the type and number of ACEs they experience, they differ in the type and value of the support they receive, which can counteract or reduce the events’ negative effects on the body and brain. Stable, warm, and affirming social relationships in the family and/or the community can potentially balance the impact of ACEs, helping children increase resilience. Not surprisingly, children who experience high ACE scores and receive too little nurturing do far worse.

Evidence shows that family-based child abuse prevention programs—which frequently target parents who themselves suffered abuse—hold promise to reduce rates of depression, PTSD, and partner violence when these children become adults (APA, 2009). Elimination or reduction of ACEs also reduces or eliminates the resulting long-term physical and mental health problems that children with high ACE scores are shown to suffer throughout their lives.

When Felicia finally seeks help for her husband’s military trauma, she is not only
helping her husband and herself, she is also taking important steps that can reduce her daughter’s exposure to ACEs. This is particularly important if Jason’s own adverse childhood experiences are negatively impacting his parenting skills and family interactions. People who serve in the military (Blosnich et al., 2014) are more likely to have experienced more traumatic childhood events, such as being abused or living with an alcohol-dependent parent, than people who have not served in the military (JAMA Psychiatry, 2014).

**THE POWER OF RELATIONSHIPS TO HURT AND HEAL**

The direct linkages between adverse childhood experiences and physical health, happiness, and security have been borne out by many studies. Several approaches and interventions have been found to improve outcomes significantly.

Dr. Stephen Porges, a professor of psychiatry at the University of North Carolina, studied how blood pressure, heart rate, and breathing change in harmful ways when we are afraid, and how they improve when we feel the support of the people around us. He discovered that the physical reactions that help us cope with and survive extreme danger—such as war, abuse, or disaster—change the chemistry and function of our brains and bodies, and that these changes persist even after the extreme stress is over. His Polyvagal Theory (Porges, 2011) explains how persistent stress and trauma reroute brain and body information pathways in a way that is protective during dangerous situations, but disabling in everyday life. When our bodies are in this state of extreme or constant fear, we may:

- Become over-sensitive so that we can identify and escape danger;
- Become nervous as we await coming danger;
- Become numb or avoidant of others.

The after-effects of extreme or chronic stress include continued over- or under-reaction to normal situations or to the behavior of people around us. Relationships suffer, as do problem-solving abilities, coping skills, and concentration. Although understandable, these physiological changes are harmful because they lead us away from the very things that can help us recover from problems that result in poor physical and mental health, disability, addictions, and even suicide, the second leading cause of death in people ages 25-34 (CDC, 2013c).
When Jason or Omar use alcohol, it may minimize the flashbacks and numb the overwhelming feelings of stress and danger, but the alcohol also disrupts their sleep, impairs their judgment, and interferes with their relationships. When the news media reminds Kimberly about the dangers facing black men, her physiological stress increases, directly affecting blood pressure, anxiety, energy, and concentration. If this goes on for too long, our bodies’ alarm systems become overtaxed and numb, leading us to make errors in our assessment of real threats to our well-being.

Even if Mary, Kimberly, Omar, and Jason cannot immediately change their circumstances, their distress and self-imposed isolation rob them of a critical opportunity to reset their “alarm systems.” This reset would have allowed enormous improvements in their relationships, their short- and long-term well-being, and ultimately their overall physical and mental health.

Healing from chronic and extreme stresses requires soothing and nurturing connections, such as those that occur in:

- Sustained, nurturing individual relationships;
- A consistently supportive home, work, and/or school environment;
- Regular community engagement, including volunteer work;
- The context of therapeutic relationships, such as counseling.

While highly stressed individuals initially “protect” themselves by keeping family and friends at a distance, they cut themselves off from the very relationships that are critical to the healing process. Regular exercise has also been found to reset nervous systems to a healthier balance, while unsafe or unstable living situations, unemployment, relationship difficulties, and substance abuse are among the factors that impede recovery.

**NUTRITION AND HEALTH OUTCOMES**

Did you know that our “gut”—the inside of our mouth, stomach, and intestines—is actually an extension of our skin? Just like our skin, our gut functions as a barrier and gateway from the outside world into our bodies. When our gut is not healthy, it cannot protect us or make good use of nutrition.

We know that people who experience mental health issues, such as depression and addiction—as well as those experiencing chronic stress or poverty—share common problems related to appetite or eating. Stress changes how nutrients and waste are
processed and move through our digestive system, often causing various types of discomfort and contributing to increased pain, especially for those with chronic conditions, such as Irritable Bowel Syndrome (IBS).

However, how we eat—especially if it is too much, not enough, or the wrong types of food—also has a tremendous impact on our mental and physical health. We are familiar with how our eating patterns affect our likelihood of diabetes and heart disease, as well as the dangers of eating disorders and obesity. There is much information available on which foods and substances produce chemicals that regulate mood, sleep, and immune function. We also know now that having the right psychological support can improve health and save lives for individuals struggling with eating issues, including those related to medical treatments, such as chemotherapy (King et al., 2015).

Recent articles in The New York Times, Wall Street Journal, and the science journal, Nature, have focused on new discoveries that validate our “old” wisdom about healthy eating and the unique contribution of breastfeeding to our health. A growing body of new research into our “gut microbial community” (the invisible cells in our gut that regulate how our body works) has produced clear evidence that imbalance in our guts can dramatically affect the balance in our body and brains. Such imbalance increases the likelihood of obesity, diabetes, allergies, major depression, asthma, cognitive problems in old age, and fatty liver disease.

The connection among gut health, mental health, physical health, and our internal system starts early and is far-reaching. Mounting evidence suggests that the gut microbiota affects brain development, function, and behavior through neural, immune, and endocrine pathways. This connection is known as the brain-gut-microbiota axis (Kelly et al., 2015). Recent emerging research is beginning to link depression with inflammatory processes and gut bacteria.

Our health care practices, business practices, and individual food consumption all play critical roles in gut health. For example, in infants born by Caesarean section (one out of three children in the U.S.), those exposed to antibiotics before or shortly after birth, and those who do not benefit from the healthy microbes in breast milk have less diverse gut microbes and are at much higher risk for asthma than infants who do not have these risk factors (Arrieta et al., 2015). This is important when we consider that asthma is now one of the most common and serious childhood diseases, affecting 9.3 million children (CDC, 2015b), about one in every 10, and the leading cause of missed school days—about 14 million days annually (CDC, 2015a).

A lower intake of fresh vegetables and fruits, healthy oils, unprocessed grains and beans (fiber), and a higher intake of foods containing sugar, chemicals, and residues of antibiotics increase the likelihood of developing—or failing to recover from—health problems, due in part to the impact on our healthy gut bacteria. People—and
even entire communities—with limited access to whole grains and fresh fruits and vegetables experience imbalance in their gut-brain connection, which leads to poor health and increased risk of obesity. Children who eat large amounts of processed food as part of their diet are especially at risk for this.

At a time when the focus on food fads distracts from the attention that should be paid to widespread hunger, it is easy to underestimate the connection between food and health. But for those living in “food deserts,” the situation is dire. The U.S. Department of Agriculture (2011) defines “food deserts” as “urban neighborhoods and rural towns without ready access to fresh, healthy, and affordable food.” As a result, individuals or families who are most likely to go hungry on a regular basis are also more likely to be obese—a finding that makes sense when we understand that what we eat is as important as how much we eat.

While those who are living under the stress of poverty and ill health are more likely to experience disruptions in their “gut microbial community,” the health hazards of a typical American diet—dominated by fast food and processed ingredients with added antibiotics—are well publicized. According to David Tilman’s 2014 report published in *Nature*, the globalization of Western eating habits is bad for human health and for the environment. His analysis makes clear that countries with low levels of chronic diseases show a predictable decrease in population health, including startling increases in diabetes and heart disease after a Western-style diet takes hold in a country. This reality has been well documented most recently for the world’s most populous nation. According to an article published in *The Journal of the American Medical Association* (Xu et al., 2013), “The prevalence of diabetes was less than 1 percent in the Chinese population in 1980. Our study estimated that approximately 11.6 percent of Chinese adults 18 years or older may have had diabetes in 2010” (p. 949). This “epidemic” has been attributed in large measure to the adoption of the Western diet and increased urbanization in a country with a long history of famine and different eating habits.

**STRESS AS A THREAT TO HEALTH**

We experience stress when we are required to act or adapt in a new or difficult way. Typically defined as an “uncomfortable ‘emotional experience accompanied by predictable biochemical, physiological, and behavioral changes’” (Baum, as cited in APA, n.d.b.), stress is processed by our minds but lives in our bodies. The most commonly reported sources of high stress include money (64 percent), work (60 percent), family responsibilities (47 percent), and personal health concerns (46 percent) (APA, 2015).

In the U.S., the highest levels of stress are reported by women, young people, and
parents. Chronic or uncontrollable stress triggers a flood of physical body reactions, some of which we can detect, and some we cannot. These reactions alter our ability to concentrate and make good decisions; be a good friend, worker, parent, or partner; maintain healthy weight and blood pressure; or feel a sense of contentment and emotional stability.

Although many people turn to habits that offer temporary distraction and calm symptoms, those same habits—which can include excessive screen time and nonstop use of digital technology—can ultimately exacerbate stress and lead to ill health. Ives (2012) explored the social-cognitive effects of technology on teenagers’ brains and their socialization processes, and found that excessive digital consumption diminishes our capacity for empathy by limiting how much people engage with one another. The addictive qualities associated with excessive time online are also becoming a concern, along with a decrease in attention span and a potential source of ADD and ADHD in
our culture. High mobile phone use—a trend seen particularly among adolescents and young adults—often results in sleep disturbances, stress, and depression in both men and women (Thomée et al., 2011).

Research has made it clear that a far better weapon against stress is the ability to understand the thoughts, physical sensations, and environments that lead to stress, and to develop habits and behaviors that address these triggers. Exercise may, in fact, be the most powerful intervention we have to deal with many of our most challenging health problems—especially those that are caused or worsened by stress.

Regular exercise has been proven to:

- Change our brain functions in ways that decrease our anxiety, improve our mood, and improve our body and brain’s ability to successfully deal with stressful events;
- Combat and delay cognitive decline that comes from aging; exercise reduces inflammation, improves mood and sleep, and reduces stress and anxiety, all factors linked to cognitive decline;
- Stimulate the growth of new blood vessels in the brain, as well as the creation of new brain cells;
- Reduce insulin resistance, a primary symptom of diabetes (Godman, 2014).

Studies have suggested that the parts of the brain that control thinking and memory (the prefrontal cortex and medial temporal cortex) have greater volume in people who exercise regularly than in people who don’t. Exercise can improve and sustain brain functionality, and may protect against disabling—and costly—neurodegenerative disorders.

Common barriers to healthy exercise include environmental factors like those that may be experienced by Kimberly and her family (unsafe neighborhoods, limited after-school sports), as well as individual factors, such as mood, sedentary habits, and lack of time. Mary’s experience of stress led her back to the habit of smoking. If she had used the time and money spent on smoking to take an exercise class once a week, lift weights at home, or take regular 10-minute walks, research suggests that she would be less “stressed out,” even if nothing else about her situation changed. When Susan sits at home alone all day, rather than participating in activities at a senior center, her lack of activity is in fact contributing to poor health and cognitive decline.
Section 1 introduced us to everyday people and their families who encounter stress from a variety of sources. Section 2 highlighted the biological and social factors that transform stress into poor mental and physical health. These elements become critical determinants of our health—and the health of our families, friends, and communities—
when we do not have emotional and mental health support as an integral part of our lives. Section 3 will focus on the importance of the public health system and showcase promising approaches to the integration of mental health into all health care. There are common factors in each of these approaches:

- They make it easier for all people to get access to the right kind of care at the right time.
- They address all of the components of health: mental health, physical health, and healthy communities.
- They pay attention to the powerful influence that community and the environment have over health, whether it be stigma, healing social relationships, or an environment promoting health and healthy behaviors.
- They improve the ability of individuals, communities, and health care professionals to collaborate on the goals of individual and community health.

Each of these interventions represents an important contribution toward the goal of dismantling the long-standing wall of silence between the health care and mental health systems.

**PUBLIC HEALTH: OUR FRONT LINE IN BATTLE**

When people think of health care, they think of visiting a doctor and being sent on their way with a diagnosis, a prescription, and/or a referral to another health care provider for further evaluation. Or they may think of being admitted to a hospital for an emergency or procedure. What most people don’t realize is that only 15-20 percent of our overall health and longevity can be attributed to this kind of clinical care. Public health activities play a much bigger role in our health.

According to the World Health Organization, “Public health refers to all organized measures (whether public or private) to prevent disease, promote health, and prolong life among the population as a whole. Its activities aim to provide conditions in which people can be healthy and focus on entire populations, not on individual patients or diseases” (WHO, 1998).

The U.S. public health system—a network of federal agencies and state and local health departments, along with partners from the private and nonprofit sectors—focuses
on technology-based medical care and public health concerns including immunization rates, preventable diseases, such as diabetes and heart disease, and preparation for emergencies. Public health departments respond to local needs and differ in priorities and resources. In the U.S., little focus—and very little funding—in health research and intervention has been placed on the factors (such as social policies, education, discrimination, and poverty) that contribute to physical and mental health problems (Solar & Irwin, 2010). By some estimates, 95-97 percent of the dollars spent on health go to direct medical care services, while just 3-5 percent is allocated to population-wide approaches to health improvement. Tragically, but not surprisingly, only 5.6 percent of funding is allocated to mental health care, with almost half of these dollars going to pay for pharmaceuticals.

As a nation, we have made little progress in addressing the causes of health problems that affect large numbers of our population. Our avoidance and delay in getting to the root cause of these issues has resulted in embarrassingly poor health indicators and health care costs that far exceed those of other, less wealthy countries. The global community is far ahead of the United States in recognizing and embracing the concept that public health-based approaches improve health, save lives, and contribute to a more just and equitable society. The World Health Organization and the United Nations have both committed to coordinated global efforts to address the environmental and social factors linked to poor health, poverty, and injustice. Although the United States has committed its support to these global goals, much remains to be done if we are to turn the goals into achievements (U.S. White House, 2015). The Affordable Care Act is a step in the right direction by requiring that all health care providers pay attention to the factors that impact the health of their patients.

“Overcoming poverty is not a task of charity; it is an act of justice. Like slavery and apartheid, poverty is not natural. It is man-made and it can be overcome and eradicated by the actions of human beings.”
Nelson Mandela

In the U.S., we cherish the values of individual responsibility and equal opportunity. These values are threatened when opportunities are impeded by health disparities—physical and mental health problems that remain untreated because government policies and legislative funding decisions have ignored the barriers that stand between large segments of population and adequate health care. A system that has long maintained
separate tiers for the delivery of mental and physical health and that has allowed patients with pre-existing conditions to remain uninsured has exacerbated health care inequities and compromised the nation’s health. The resulting cost to America is staggering in terms of personal suffering, dollars spent, social unrest, and lost productivity.

The World Health Organization has identified clear pathways and actions for improving public health. These focus on understanding health as a social phenomenon and justly requiring more complex forms of cross-sector policy action. If the United States is to reverse the catastrophic spread of poor health in our nation, we must find ways to implement the WHO recommendations. Some progress has already taken place, including Chicago’s “Health and Medicine Policy Research Group” (http://www.hmprg.org), which represents an excellent example of a public health organization that has spearheaded innovative programs, including the creation of a behavioral health-primary care integration learning collaborative that will guide the organization’s advocacy agenda and will drive practice-level changes to improve the lives of people with mental illness.

“Policymakers need to begin thinking in terms of a health agenda rather than a health care agenda.”

(McGinnis, Williams-Russo, and Knickman, 2002, p. 89)

PROMISING SOLUTIONS

Serious mental illness results in enormous personal, social, and economic costs—including an estimated $193 billion a year in lost earnings alone. Some 70 percent of youth in the juvenile justice system suffer from mental health disorders; 27 percent of cases are so severe that functional ability is seriously impaired.

According to an April 2012 report from the Institute of Medicine (IOM), the indirect costs associated with preventable chronic diseases (costs related to worker productivity as well as the resulting fiscal drag on the nation’s economic output) may exceed $1 trillion per year (DeVol & Bedroussian, as cited in IOM, 2012).

PREVENTION WORKS

All evidence points to prevention as the most important strategy for solving society’s pressing and costly mental and physical health care problems. The good news is
that “what is predictable is also preventable.” Frequent—and often contradictory—news stories focus on what we should be eating, drinking, or doing to prevent health problems. These contradictions may make it difficult for Mary or Kimberly to believe that small changes in their habits can make a difference in their health. The reality is that actions we take in our personal lives are only part of what is needed to thwart many of today’s most prevalent health problems. Prevention incorporates a wide range of individual and collective actions or interventions that target health threats. Some are up to the individual to implement, while others are the responsibility of communities or the state and federal governments.

Health experts describe three distinct levels of prevention (primary, secondary, and tertiary) to address complex health problems (Institute for Work & Health, 2015). This comprehensive prevention model involves more than seeking medical attention when illness strikes; it harnesses the knowledge, power, and effort of everyone in the community, including legislative bodies, to improve health.

- **Primary prevention** includes actions that prevent disease or injury before they occur by eliminating exposure to hazardous substances or circumstances (e.g. second-hand smoke, firearm violence, lead in water, or toxic chemicals in food), encouraging behaviors that minimize disease or injury (e.g. increasing seatbelt use, reducing smoking), and increasing resistance to disease or injury (e.g. fluoride in drinking water, immunizations, prenatal care, health education). This is the first and perhaps most important line of defense.

- **Secondary prevention** focuses on reducing the negative impact of a disease or injury through early detection. Early detection allows patients to take timely advantage of treatments that halt or slow the impact of the problem or that prevent re-injury/recurrence. The recent recommendation of the U.S. Preventive Services Task Force (USPSTF, 2016) that all persons over the age of 18 be screened for depression—particularly pregnant and postpartum women—is an example of a secondary prevention strategy that is evidence based and likely to improve clinical outcomes.

- **Tertiary prevention** seeks to reduce the impact of an ongoing illness or injury by supporting the management of chronic and complex health problems and injuries, thereby improving quality of life and increasing life expectancy. An example of tertiary prevention for an individual struggling with both heart disease and depression might include psychotherapy and enrollment in a community exercise program.
The most effective—and cost effective—measures, and the ones most likely to benefit the greatest number of people, are those that address prevention in a comprehensive and integrated manner. Such an approach requires high-quality cause-and-effect data that ties social determinants with both positive and negative outcomes. The overwhelming evidence that we now have about the connections among social forces, adverse childhood experiences, and obesity offer a clear example of this.

Using the example of ACEs, we can see how crucially important preventive actions can be. We know that childhood trauma is the nation’s number one public health problem. The CDC’s *Adverse Childhood Experiences Study*, often called, “the largest, most important public health study you’ve never heard of” (Stevens, 2012, n.p.), points to clear data linking certain types of childhood adversity to high risk for future violence, hazardous substance use, and adult onset of chronic disease and mental illness (CDC, 2014).

The links between interpersonal and community violence and poor health outcome are also clear. As parents and/or teachers, we understand the importance of teaching children personal responsibility, but we must be mindful of the fact that some punishments can do more harm than good. Research on ACEs has shown that parenting practices that include violence and profound social isolation can leave bodies and brains badly damaged, and interfere with physical health, mental health, and the ability to survive or thrive in the world. While parents may be reasonably concerned when children act in ways that are unacceptable, we know—through both research and common sense—that a belittling or violent response to a struggling child never helps the child learn. Ongoing harsh, shaming, shunning, and violent discipline more often decreases the likelihood that a child will grow to be a healthy and productive member of society. This also holds true for our system of justice. In 2015, David H. Cloud and colleagues brought the weight of evidence and reason to the issue of solitary confinement, finding that “more people with serious mental illness are confined in the jails and prisons throughout each state than in the largest remaining state psychiatric hospital. Members of this population are significantly more likely than other prisoners to end up in solitary confinement” (Cloud, Drucker, Browne & Parsons, 2015, p. 22). Studies also document that, in general, isolation in prison not only contributes to mental illness but is associated with more danger to the community after release, including increased recidivism and more violent recidivism (ACLU, 2014; Reiter, 2012).

**Prevention at the Community Level**

Armed with this type of knowledge, we can all be prepared to practice prevention on three levels.
**Primary**: We all know a child who acts too mature for his or her age, looks overly nervous, or spends too much time on the street. As community members, we can take interest, listen carefully, and provide a safe and affirming space for youth who have too much to bear in their households or have too few healthy relationships. Even when we don’t understand the specifics of the family’s struggles, or why a teen is going astray, we can provide primary prevention by offering every child the building blocks of resilience with kind words, encouragement, and patience. When we work in our community to reduce food and housing insecurity, racial intolerance, and violence, we are reducing the stresses on parents and children, and helping to impede this destructive cycle.

**Secondary**: A patient’s ACE score is as much of a “vital sign” as blood pressure or heart rate, and is often “inherited” by children in much the same way that physical factors are. When health care systems screen for ACEs, they are providing secondary prevention. The Cleveland Clinic is an example of how health care teams can screen prospective parents for adverse experiences during childhood and provide them with the appropriate support, education, and guidance on how ACEs will affect their health and their parenting. Pediatric and primary care practices that reliably screen children for ACEs can mobilize resources in the family and community, minimizing or even eliminating children’s exposure to adverse experiences, and building resilience.

**Tertiary**: Every day, our law enforcement, education, and public service agencies deal with the tragic effects of ACEs on learning and behavior. But innovative policies and practices—such as the Children’s Resilience Initiative in Walla Walla, Washington, and the Los Angeles County Sheriff VIDA program—can promote better outcomes for at-risk youth. Such interventions often deter youth from continuing down the path to poor health, jail, and economic failure. Nowhere is tertiary prevention and intervention more important than in the juvenile justice system. Public service agencies (courts, police, and school districts) recognize that in order to improve outcomes for both individuals and the community, procedures must be implemented that reduce the long-term effects of ACEs and serious mental illness on youth, families, law enforcement, and public safety. Indeed, countries that have adopted strong crime prevention policies report lower incarceration per capita and dramatically lower health care and prison costs.

**At the Individual Level**

Individuals can practice prevention as well. Mindfulness—which can be practiced in any location or situation—is an age-old prevention skill that promotes both physical and mental health. It includes breathing that calms the body, quiet awareness of our
thoughts, bodily sensations, and the world around us, and nonjudgmental acceptance of our current state.

Other mindfulness practices, such as praying the rosary or reciting yoga mantras, may have a significant impact on breathing and have been found to lead to healthy physical and psychological changes (Bernardi et al., 2001; Buchholz, 2015; Gallegos et al., 2015; Snippe, 2015). All people, even children, can learn and practice this technique, regardless of their circumstances and stress levels. The simple act of regularly substituting a short “mind-body vacation” for a health-damaging habit—such as smoking, overeating, or drinking—can significantly decrease our risk for preventable physical/mental health problems, improve our relationships and outlook, our work life, and our ability to meet life’s challenges.

In the Workplace

The workplace plays a unique role in prevention, due largely to the amount of time spent in that environment. Work stress, including financial stress from non-living wages, directly impacts the entire family and can exacerbate the health risks that are the result of adverse experiences earlier in life. Workplaces that are attentive to wage equity and to the health and safety of employees show improved outcomes by achieving lower health care and disability costs, increased quality of life for employees, improved morale and employee relationships, increased productivity, and decreased “presenteeism” (at work but not working). Estimates of return on investment for health-focused programs are as high as six dollars returned for every dollar spent. According to the APA Center for Organizational Excellence, preventive efforts to address health and safety issues in the workplace include:

- Training and safeguards that address workplace safety and security issues;
- Efforts to help employees develop healthy lifestyles, such as stress management, weight loss, and smoking cessation programs;
- Adequate health insurance, including mental health coverage;
- Health screenings;
- Access to health/fitness/recreation facilities;
- Resources that help employees address life problems, for example grief counseling, alcohol abuse programs, Employee Assistance Programs (EAPs), and referrals for mental health services.
It is important to note that prevention does not mean screening everyone for everything at every moment, nor does it mean intruding on every person’s life and lifestyle choices. As we continue to learn more about which factors increase a person’s risk for which health conditions, health care systems (including public health agencies) can customize or personalize prevention efforts. For example, an annual physical may not actually improve health for people who are feeling well; exams that include unnecessary tests can even do harm and contribute to stress through errors or false alarms. Individually designed, regular health care visits, screenings, tests, and check-ins based on age and circumstances are, however, essential for developing the relationships that can help a health care team intervene in the right way and the right time.

This personalized approach to prevention reduces costs, eliminates the risks associated with unnecessary tests, saves time, and eliminates unnecessary stress. Planned check-ins must look broadly at all aspects of our physical and mental health, provide early detection of stress, relationship problems, and physical symptoms associated with mental health issues, such as hazardous substance use, smoking, relationship troubles, and problems with eating and sleeping.

In a prevention-focused health care system, Kimberly, Omar, Jason, and Mary’s health care teams would gather information about personal stressors, difficulties, and family and employment issues as a normal part of any visit. The teams’ understanding of how these various factors relate to poor overall health—and increased health care costs—would allow them to determine the best schedule for follow up visits, and reduce time spent on duplication of services.

THE ROLE OF RESILIENCE

Individualized, prevention-based care recognizes the critical role that resilience plays in the ability to face challenges successfully. In the past, we thought that resilience—like “grit”—was something an individual had or didn’t have. Now we know that it is far more than that. Resilience is “the interplay of risk and protective processes occurring over time and involving individual, family, and larger sociocultural influences” (Goldstein, S. & Brooks, R., 2012).

Families who shelter their children from all challenges, and communities that cannot support the basic needs of vulnerable youth, both, contribute to a child’s inability to meet problems head-on. To increase resilience—the ability to bounce back despite previous adverse experiences—we must ensure that youth have access to the building blocks of resilience—safety, connection, hope, and challenge, and that we minimize the factors that harm—violence, social isolation, and despair.
Resilience is especially critical in preventing long-term effects from adverse childhood experiences. It requires supportive, nurturing relationships from within our communities, which can take many forms. The documentary, “Paper Tigers,” chronicles one community’s approach to disruptive youth by asking “not what is wrong with our youth, but rather what has happened to them…shifting from punishment and blame to a deeper commitment to understanding and healing the underlying causes” (Paper Tigers, 2015).

HEALTH AT ALL STAGES OF LIFE

We know that prevention can take many forms, and must be practiced by individuals, communities, health care providers, and lawmakers. The environments in which we find ourselves, which are often controlled by others, also exert powerful influences on what we do and how we cope.

What do we know about maintaining our mental health? From a young age, we’re taught to brush our teeth and bandage a cut to prevent infection. But what do we teach children about maintaining their emotional well-being? How do we make sure that all children are armed with the right information and skills—proven ways to cope with the large or small difficulties that life presents? Do we teach them how to spot the key indicators that their mental health has been threatened (rumination, feelings of loneliness, persistent fear, shame), and do we give them simple strategies and skills that can be used to stop these thought habits? Do we teach children the right words to describe injuries to their confidence in their skills, their feelings of safety, or loneliness? More importantly, do we attend to a broken spirit in the same way we attend to a broken arm? Whether we like it or not, an excellent curriculum is wasted on a child who cannot learn because of hunger, worry, or trauma. Evidence-based programs that decrease bullying, increase connection and empathy, and set high expectations with patience and support increase the resilience of children to meet challenges ahead.

Research has made it clear that positive interactions can begin to repair the damage to trauma-damaged brains and bodies. Porges (2011) showed us how intentional nurturing can be key to preventing or interrupting the destructive cycle initiated by early adverse experiences. Public health initiatives that include home visits, mindfulness-based cognitive behavioral therapy, such as ACT (Biglan, 2015), and the availability of psychological support in the health care setting have all demonstrated success in interrupting the pathway from trauma and stress to poor health, illness, and disability.

As explained in the book, Nudge (Thaler & Sunstein, 2008), we are more likely to buy the food that is most visible on the store shelf, regardless of how healthy it is, to quit smoking as cigarette taxes increase, and to exercise more when a city has bike
lanes and walking paths. All of these intentionally influenced environmental factors make a clear, undisputed impact on our health choices and the prevention of health problems.

Research and common sense tell us that seniors stay healthier when they are engaged in community activities that keep their bodies, minds, and spirits active (Wilcox, et al., 2009). Social isolation and loneliness are common for those in poor health, as well as for their caregivers. Across the country, innovative prevention programs promote awareness of common life struggles faced by seniors and their caregivers, including those that reduce depression and isolation among seniors whose families are not able to be with them often.

**CREATING A NURTURING ENVIRONMENT**

No matter the context or the problem at hand, following these universal principles of a nurturing environment creates the best chances at success. Nurturing environments do four things:

- Minimize toxic social and biological conditions.
- Teach, promote, and richly reinforce prosocial behavior.
- Limit influences and opportunities for problem behavior.
- Promote psychological flexibility, which is a mindful approach to pursuing one’s values, even in the face of emotional, cognitive, and real-world challenges.

(Biglan, 2015)

Communities that provide resources, such as transportation, meals, and senior activities play an essential role in prevention and intervention. They effectively address common problems, such as poor nutrition, cognitive decline, and depression due to isolation. These programs often put our health care system resources and public resources to the best possible use, while offering the whole family greater peace of mind.

**INTERPROFESSIONAL CARE**

Recent advances in scientific practice and research have given us valuable answers
about why our health care system has failed to keep us healthy. These findings demand that our mental and physical health providers, hospitals, health care insurance, and government must now approach health care in a different way. Interprofessional—or integrated—care, which places the patient at the center of his or her health care plan, is one such way. Through this approach, health professionals (doctors, nurses, psychologists, behavioral health experts, dieticians, pharmacists, social workers, community health workers, physical therapists, and other specialists) work as a team to deliver the best care that focuses not only on physical health, but on mental well-being as well. This care model is informed by solid evidence provided by both research and practice, and takes into consideration the patient’s culture and the resources available in the community. A patient under the care of an integrated health team receives treatment that is tailored to his or her circumstances, behavior, and stress factors. This is very different from the way mental health care was treated as an “add-on” or “carve-out” in the past. Unlike traditional fee-for-service care that schedules the patient for myriad appointments with unconnected providers who don’t share information, the interprofessional treatment plan is comprehensive in nature and coordinated from the outset.

This new model of care differs from old versions of “managed care” that managed cost by limiting care without being held accountable for how this impacted health. The system currently being put into place under ACA carries with it a strong incentive for health care teams to keep patients well by connecting them to the right resources, including mental health care support as part of regular care.

Under the interprofessional team model, Kimberly, Omar, Jason, and Mary would have received specific attention to their emotional states, cultural backgrounds, environmental, and family concerns as an integral part of their care. They might have been asked to complete a quick screening survey or speak with a behavioral health specialist trained to recognize common problems that affect health in their circumstance. The power of this model is clear when we consider that, by many estimates, more than 70 percent of primary care visits include a behavioral health component (American Academy of Nursing, 2014; Collins et al., as cited by Institute for Clinical and Economic Review, 2015; Robinson & Reiter, as cited by U.S. Medical Assistance Program, 2014). In each of the cases we introduced, an integrated approach would have resulted in better and more effective care for their specific issues and would have increased the probability of immediate reduction or elimination of their suffering.

An integrated model does represent a change from the health care system we have become used to. Patients may initially be uncomfortable when asked for more detailed and in-depth personal histories—including information about habits and relationships—but this collection of information is critical to informing the varied
members of a health team, each of whom brings specific expertise. In return, patients will benefit from more individualized support for physical health and mental health issues, stress management, healthy eating, and healthy activity, as well as interventions to address unhealthy habits, mental illnesses, and addictions. Evidence tells us that in countries that practice evidence-based integrated care, the population enjoys better health, a higher quality of life, and significantly reduced health care costs. There are many resources for people to learn more about this model and how they can work better with their health care team in this new approach.

**ONLINE RESOURCES FOR FURTHER INFORMATION ON INTEGRATED CARE**


**TECHNOLOGY AS A TOOL**

Technology has changed our lives in many ways. Smart phones and computer tablets keep us connected, but their use reaches far beyond convenience and accessibility. There are many ways in which technology is contributing to improved health care.

**Electronic Health Records (EHRs):** Technology allows health care providers to store, retrieve, and share health records. Electronic systems can be easily used to track patient symptoms and to communicate key information to health care providers who may not be in the same building or even the same town. Evidence tells us that when all the members of a health care team have access to all necessary information, medical errors are reduced by 30 percent (Starmer et al., 2013). After-visit summaries recorded in EHRs help patients remember key health information, enabling them to follow advice offered by their provider, communicate with family members, and understand their condition better. When Mary is able to share the summary of Susan’s health care visit with her siblings without needing to rely on her memory, better communication
and more effective decision-making can occur.

**Telehealth**: Health care providers have recognized that technology can be used by licensed professionals to meet the needs of people who are unable or uncomfortable with visiting a clinic due to distance, safety, health, or stigma. This technology is already in use on the battlefield and in rural areas, allowing patients to “see” their doctor using their smart phone or a computer that connects to the Internet. A communication device also can be linked to a health monitor that allows a doctor to receive immediate updates on such indicators as a patient’s blood pressure or blood sugar. Other indicators of well-being—such as mood and stress—can be monitored as well. For example, a new study (Torous, 2015) shows that phone data alone can predict whether a user is experiencing depressive symptoms. Telehealth and Telemedicine technologies now exist that allow a doctor to remotely adjust a patient’s pacemaker, insulin pump, pain management, or other implantable medical devices. These real-time measures allow health professionals to partner more actively with their patients to identify problems before they get out of hand, and to modify care plans as needed to meet patients’ health goals. Jason may well be unwilling to visit a doctor to discuss his struggles, but research suggests that he is more likely to check in with a counselor using his phone or an application that teaches him new ways to understand and manage his symptoms (Mohr et al., 2012).

**Smart Phone Health Games**: Every day, new mobile device applications or “apps” are developed. These now include fitness programs that motivate people to move more, drink more water, or add healthy foods to their diets (DeBenedette, 2013; Kaines, 2015). Several leading health organizations offer apps that support patients in managing smoking and eating habits and taking control of chronic health issues, such as diabetes, hypertension, and stress. Research is beginning to show that people can take charge of their own wellness and recovery more easily and more effectively when technology enables them to interactively access reliable information. Recent research has examined the effectiveness of mental health apps for depression, anxiety, substance use, sleep disturbances, suicidal behavior, self-harm, psychotic disorders, eating disorders, stress, and gambling (Donker et al., 2013). While many have produced promising results, the public needs to be educated on how to identify those applications that are evidence based.

Technology can also be powerful when used in rehabilitation therapies, and to help increase cognitive function in an aging population. “Rehabilitation gaming” is a strategy mediated by electronic gaming technology that can improve functioning after an illness or injury. According to Nap and Diaz-Orueta (2014), game-based rehabilitation is valuable because it increases the patients’ motivation to engage in rehabilitation activities, lends itself to personalization, and produces objective measurements of
progress. In our previous example, Susan might have benefited from this game-based rehabilitation tool to help control her mood swings and maintain her cognitive skills for longer.

**Social Media:** Popular social media sites, such as Facebook, Twitter, and Instagram are proving effective in connecting patients with information, health care professionals, and each other, a trend called peer-to-peer health care (Pagoto et al., 2016). Trials of online delivery of behavioral interventions through social networking sites have shown promise, although much work remains to be done on intervention development and methodology.

Preoccupation with social media to the exclusion of other relationships can create difficulties for some—but these networks can also be used to support and monitor those who struggle with social connection and mood. Munmun De Choudhury et al. (2013) found that the analysis of posting frequency and content to social networks yields important clues about whether a person is experiencing problems with mood. The ability to identify markers of depression online may offer professionals and parents other avenues to monitor and support the health of those they care about.

Perhaps even more significant, though, is the increasing use of social media to combat the stigma that so often accompanies mental illness. In 2013, the New York City Chapter of the National Alliance for Mental Illness piloted an “I Will Listen” campaign, through which people pledged—on Facebook, Instagram, Twitter, or Vimeo—that they would listen and be supportive of friends facing mental health challenges. In its first year, the campaign resulted in 12,000 online pledges of support, which in turn prompted the sharing of many stories of mental illness online.
CONCLUSION

There is no question that we have made progress since the days when ills of the body were treated completely separately from disorders of the mind—if, indeed, disorders of the mind were treated at all. But, while much has been accomplished in understanding the interconnectedness of our physical and mental health, so much more remains to be done. In this report, we have probed the complex challenges facing our society, and have learned how truly individual and universal our situations are. The need for culturally competent professionals became evident as we read about Kimberly and Omar, while Jason’s story illuminated the incredible stress that too often accompanies men and women returning from war zones, as well as the impact on children who live in communities where too many of their basic needs can’t be
met. Mary’s was a story that is all too familiar to today’s burgeoning population of Baby Boomers: the dilemma of balancing the needs of aging parents with the demands of work and growing children. In all cases, however, it became apparent that there are solutions at hand; the challenge is ensuring that health care providers incorporate those solutions into their treatment plans, and that patients have access to the services that will help turn their lives around.

The field of psychology will continue to bring light and solution to these health challenges through research and our expertise of the human condition. This knowledge will result in a greater integration of health care systems and the increased use of interprofessional teams in treating patients holistically. Together with other promising solutions discussed in this report—a focus on prevention, the increasingly important role of community services, and leveraging the benefits of technology in health care delivery—we are confident that the United States can begin to close the gaps in health care access and improve the lives of all who live here.
REFERENCES


REFERENCES


REFERENCES


THE PEOPLE BEHIND THE REPORT

Michele Nealon-Woods, PsyD
President

As president of The Chicago School of Professional Psychology, Dr. Nealon-Woods has strategically positioned the university to broaden its focus on psychology education to include the preparation of integrated health care professionals trained to address the mental and physical needs of patients. She spearheaded the development of an ambitious five-year strategic plan, Leading the Way Toward a Healthier World, which serves as a blueprint for that expansion. A native of Ireland, she completed her doctoral studies at The Chicago School, and served as faculty, department chair, and the founding president of the institution’s Los Angeles Campus before assuming the national presidency in 2010. She is an accomplished writer and speaker on a variety of psychology-related topics.

Kim Dell’Angela, PhD, MLS
Department Chair and Associate Professor of Clinical Psychology, Chicago Campus

As the lead author of the report, Dr. Dell’Angela drew deeply on knowledge and experience garnered through her work as a licensed clinical psychologist and on the faculty of Loyola Stritch School of Medicine and The Chicago School of Professional Psychology. Her current areas of focus include professional education, competency assessment, and curriculum development in interprofessional practice, health psychology, and the practice of health service psychology under the Patient Protection and Affordable Care Act. She holds degrees from Rutgers University and Loyola University Chicago.

Naomi Ruth Cohen

Naomi Ruth Cohen was a gifted artist, a loving daughter and sister, a cherished friend, and a skilled geriatrics counselor. She also suffered from bipolar illness that, when diagnosed at age 30, robbed her of her career and much of the joy that had long defined her nature. In May 2000, Naomi took her own life.

In 2002, her parents, Larry and Marilyn Cohen, founded the Naomi Ruth Cohen Charitable Foundation to honor Naomi’s memory and to work to decrease the stigma of mental illness. In 2008, the foundation affiliated with The Chicago School of Professional Psychology and became The Naomi Ruth Cohen Institute for Mental Health Education (NRCI). For more information about the NRCI, please visit: http://naomicoheninstitute.org/.