The Future of Appalachia: Health

Randy Wykoff and Olivia Egen

Appalachia is a diverse region of incredible natural beauty and a deep, rich cultural heritage. It is, however, a region that lags behind most of the nation when it comes to the health status of its citizens. According to the Appalachian Regional Commission in 2010 the number of deaths per 100,000 residents in Appalachia was over 1,000 while, nationally, the rate was barely over 800. This means that the number of deaths in Appalachia is approximately 25% higher than it is nationally.

The question is often, and appropriately asked: What should be done to improve the health of the people of the region?

As authors, let us make clear from the outset that the opinions expressed in this article are our own, and do not reflect review or endorsement by East Tennessee State University. That said, we believe there are four specific, interrelated steps that must be taken to fundamentally change the health status of the region:

1. Change Health-Related Behaviors

It has been estimated that 40% of early deaths in America are related to our behaviors and/or life-styles. The leading preventable cause of death in the nation continues to be tobacco use, followed by factors related to diet and exercise (which combine to cause obesity, diabetes and related conditions). Nationally, the prevalence of adults who are obese is 26%. However, obesity rates are extremely high in Appalachia, with over 30% of adults falling within this category in 2010. Of increasing concern in Central Appalachia is the rapidly evolving epidemic of opiate addiction, especially as manifest as prescription drug abuse.

Any effort to improve health in Appalachia will have to address these and other behaviors. To this end, there need to be three distinct health promotion/disease prevention programs: a) programs that give school-age children enough information about their bodies and their health to allow them to make intelligent decisions
about health-threatening behaviors; b) programs that identify adults who are already engaged in health-threatening behaviors, and help them to quit; and c) programs targeted to new parents and parents-to-be so that they create environments in which future generations can develop with appropriate role models, food choices, exercise options, and related activities. Additionally, there are opportunities for interventions at the societal level (policy interventions). For example, raising the price of cigarettes has been shown to be an effective mechanism to reduce adolescent tobacco use. Drug courts can provide options for those with substance addictions beyond incarceration. Schools, churches, businesses, and others can create environments and policies that encourage healthier eating and appropriate physical activity.

The “good news,” if there is any, about the fact that behaviors account for 40% of our early deaths in America, is that behaviors can change. Ensuring a more robust future for the people of Appalachia will require that these health behaviors change.

2. Impact the Social Conditions that are Associated with Poor Health

People are often surprised to learn that our health often reflects the social conditions in which we live. There is, for example, a strong correlation between income level and health outcomes. It has been reported that an American in the poorest income category is three times more likely to die before the age of sixty-five as an American in the wealthiest income category. The national poverty rate for the period from 2010-2014 was 15.6%, while the rates in Central Appalachia ranged from 17.5% in the Appalachian counties of North Carolina, to 25.4% in the Appalachian counties of Kentucky. Because poverty is much worse in Appalachia than in the rest of the country it is clear that it will be exceptionally difficult to improve the health status of the people of Appalachia unless we can also improve the economic conditions in which they live. This will require a close collaboration with the private sector, economic-development boards, chambers of commerce, and other groups that may not have, historically, worked closely on health issues.

Another social condition that is strongly related to health is educational achievement. It shocks people to learn that, on average, high school dropouts live five to seven years less than college graduates in the United States. This is not, of course, a direct relationship, as both educational achievement and life expectancy are impacted by common aspects of a child’s living conditions. However, education has the dual benefit of providing the child with a range of skills necessary for success in life and, also, preparing them for more productive and meaningful employment opportunities. According to the Appalachian Regional Commission in the period from 2008-2012 the percent of the population aged twenty-five and over with a bachelor’s degree or higher was 28.5% nationally, while in the Appalachian region the rate was only 21.3%. This means that the share of the population with higher education is 33% higher nationally than in the Appalachian region, reinforcing the message that it will be difficult to improve health in Appalachia without addressing the educational disparities that exist.

It is becoming increasingly clear that early interventions are the key to success in education. Infant and early childhood development, specifically, cognitive and socio-emotional development are vital for school readiness. Children need to enter elementary school with the basic building blocks necessary for such activities as reading and social-interaction. To this end, there need to be programs that focus on new parents and parents-to-be, to assure that they have the skills and understanding necessary to prepare their children for a life-time of success. Something as simple as reading to a child can impact future academic success. “Education” from the lowest levels to the highest are an ideal target for support from the business and philanthropic communities, since the product of those investments (educated citizens) become the backbone of the job market in the future.

3. Assure Access to Affordable Health Care

People sometimes assume that the only way to improve the health of people living in a certain area is to have more health care—more hospitals, more doctors, more nurses, and more clinics. In some cases, especially in rural and isolated areas, this is true. However, it is often the case that it isn’t the physical presence of health care that is missing; it is the inability of people to access that health care—due to lack of insurance (or other means to pay for the care), lack of transportation and opportunity to access the care, or cultures and traditions that haven’t, historically, included access to health care.

Many of the hospital systems that serve rural areas in the United States have developed a type of “spoke-and-hub” system where smaller, outlying facilities will provide care for appropriate medical conditions, while referring the most complex or challenging conditions to the more centralized locations. While this system can, and has, worked well it is inevitable that in the most rural and isolated parts of Appalachia, there will be people who cannot
easily access the entry points for the “spoke-and-hub” system.
To this end, there are some obvious steps that will help more people access the system—for example effective transportation, “mobile” delivery of health care, tele-health technology, the use of alternative health care professionals, and more wide-spread insurance coverage. Transportation and “mobile” delivery of health care are self-explanatory. Poverty, illness and age often combine to make it difficult for people to physically travel to a health care delivery site. This could be overcome by creating a more efficient transportation system, or, by bringing health care to the home-bound person in terms of mobile clinics or “house calls.” The idea behind alternative health care professionals is that health care delivery, not just hospital care, can be provided using a “spoke-and-hub” system. In this way, the health of the region could be supported by people with less formal training than a doctor or a nurse who can conduct outreach to those with chronic medical conditions, the elderly, and other home-bound people. Alternative health care professionals can provide basic care and support to assure that their patients are filling prescriptions appropriately, taking their medications as directed, keeping appointments, and, above all, that they are accessing the range of services that they need to maintain their health and life-style. The issue of “health insurance coverage” has, at the time of this writing, become a major political issue. Setting aside, for the moment “how” such coverage should be achieved, it is clear that there is a broad social benefit to be obtained from people having the ability to access and pay for health care. How the nation ultimately addresses this need is less important than the fact that it is addressed.

4. Disrupt the Intergenerational Cycles of Poor Health in Appalachia
Over the years, it has become increasingly clear that children tend to inherit the health and social status of their parents. For example, males born to fathers living in the bottom fifth of the income scale, have a 42% likelihood of being in the bottom fifth when they become adults—and only has an 8% chance of being in the top fifth. Additionally, parental smoking is a major determining factor of adolescent smoking patterns and longevity. Those adolescents whose parents smoke are at increased odds to be early regular smokers and early experimenters. Parents’ educational level has a tremendous predictive impact on the educational level of their children. There is a twelve-fold difference in the chance of a high school sophomore obtaining a college degree in ten years between the student whose parents didn’t complete high school and the student whose parents have a professional degree. The Adverse Childhood Experiences study has revealed the relationship between the traumas in one’s youth and the toll these take in later life. For a slew of health problems and risk behaviors including smoking and chronic obstructive pulmonary disease (COPD) there is a dose-response relationship—the more trauma one endured as a child the more likely one is to exhibit risk behaviors and some diseases.

Time and again, we see the impact of inter-generational cycles of poor health. It is growing abundantly clear that if we want to improve the health of people living in Appalachia, we must attack this problem directly. We must work together to systematically provide children with the best possible start to their lives.

It is clear to us that we must start with programs for new parents and parents-to-be that give them the knowledge, skills, information, and opportunity to “launch” their children onto the healthiest possible life trajectory. The new parent can read to their child; they can assure that no one smokes around their child; they can give the child a truly healthy diet; they can make sure that the child receives routine medical care; they can be sure that the child is appropriately restrained in a car-seat; and the list goes on and on.

Once the child enters school, the system can support the child by focusing on assuring the attainment of age-appropriate reading, math, and social skills; providing a healthy diet and regular required physical activity programs (beyond just “competitive” sports) and, of equal importance, significantly increase the amount of

health-related knowledge that is imparted to students at every level. Businesses can contribute signifi-
cantly by encouraging healthy eating and regular physical activity. Equally, businesses should be strongly encouraged to support the programs mentioned above. It is becoming almost a cliché in Appalachia that businesses are finding it difficult to hire healthy, educated, drug-free workers. Clearly, it is in everyone’s best interest to invest in early childhood programs and educational programs from pre-K through professional schools—the graduates we produce are, literally, the future of our region.

There is a role for everyone, in improving health in Appalachia. Faith communities can use their unique positions to both support health-related programs, but also, to create a final safety-net that identifies people at greatest risk. Parks and recreation programs can reach out to a new generation of participants and recognize that there must be programs that include all children and not just those with “competitive potential.” Restaurants can contribute by assuring that there are healthier options on their menus.

Ultimately, of course, the future of health in Appalachia will be defined by the family and the child’s home environment. What we eat, how we exercise, our commitment to education, our understanding of health, and many other factors, are driven by the environment we grow up in. This will not, of course, change overnight. However, if we work together to assure that every child in Appalachia has the best possible start in life we will see a dramatic change over the course of that child’s life.

The children who grow up in this “new” Appalachia, will not only be healthier, but they will also become the agents of change over the ensuing generations.

If we invest in our children, the future of health in Appalachia will be incredibly bright and rewarding.

References

Randy Wykoff is the founding Dean of the College of Public Health at East Tennessee State University. He speaks and writes regularly about the health challenges facing the people of Appalachia.

Olivia Egen is a second-year Doctoral Student in the College of Public Health at East Tennessee State University. For the past five years, she has called Appalachia home, and is interested in the salient issues facing the region.