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## **BUSINESS DAY**

## Income Gap, Meet the Longevity Gap

By ANNIE LOWREY MARCH 15, 2014

Fairfax County, Va., and McDowell County, W.Va., are separated by 350 miles, about a half-day's drive. Traveling west from Fairfax County, the gated communities and bland architecture of military contractors give way to exurbs, then to farmland and eventually to McDowell's coal mines and the forested slopes of the Appalachians. Perhaps the greatest distance between the two counties is this: Fairfax is a place of the haves, and McDowell of the have-nots. Just outside of Washington, fat government contracts and a growing technology sector buoy the median household income in Fairfax County up to \$107,000, one of the highest in the nation. McDowell, with the decline of coal, has little in the way of industry. Unemployment is high. Drug abuse is rampant. Median household income is about one-fifth that of Fairfax.

One of the starkest consequences of that divide is seen in the life expectancies of the people there. Residents of Fairfax County are among the longest-lived in the country: Men have an average life expectancy of 82 years and women, 85, about the same as in Sweden. In McDowell, the averages are 64 and 73, about the same as in Iraq.

There have long been stark economic differences between Fairfax County and McDowell. But as their fortunes have diverged even further over the past generation, their life expectancies have diverged, too. In McDowell, women's

life expectancy has actually fallen by two years since 1985; it grew five years in Fairfax.

"Poverty is a thief," said Michael Reisch, a professor of social justice at the University of Maryland, testifying before a Senate panel on the issue. "Poverty not only diminishes a person's life chances, it steals years from one's life."

That reality is playing out across the country. For the upper half of the income spectrum, men who reach the age of 65 are living about six years longer than they did in the late 1970s. Men in the lower half are living just 1.3 years longer.

This life-expectancy gap has started to surface in discussions among researchers, public health officials and Washington policy makers. The general trend is for Americans to live longer, and as lawmakers contemplate changes to government programs — like nudging up the Social Security retirement age or changing its cost-of-living adjustment — they are confronted with the potential unfairness to those who die considerably earlier.

The link between income and longevity has been clearly established. Poor people are likelier to smoke. They have less access to the health care system. They tend to weigh more. And their bodies suffer the debilitating effects of more intense and more constant stress. Everywhere, and across time, the poor tend to live shorter lives than the rich, whether researchers compare the Bangladeshis with the Dutch or minimum-wage workers with millionaires.

But is widening income inequality behind the divergence in longevity over the last three decades? Would an economy with a narrower gap between the haves and the have-nots lead to stronger life-expectancy gains, from the richest to the poorest? Might the expansion of insurance through the Affordable Care Act help close the gap? And might the policies that Congress is contemplating to ameliorate poverty — like raising the minimum wage — have a further effect on life spans, too?

Those are questions that researchers armed with reams of data on mortality, poverty, health, social spending and income are struggling to answer.

"The gaps continue to widen between the communities with the highest life expectancy and the lowest," said Christopher Murray, the director of the Institute for Health Metrics and Evaluation in Seattle, which produces the county-level life-expectancy figures. "There is nothing in sight that suggests that the 25-year trend is going to stop."

"Would that be different if the income inequality were reduced?" he added. "If you took a 30-year view, then yes. There does seem to be that long-run relationship between community income and these life-expectancy outcomes."

Living in Fairfax is different than living in McDowell.

In Fairfax, there are ample doctors, hospitals, recreation centers, shops, restaurants, grocery stores, nursing homes and day care centers, with public and private entities providing cradle-to-grave services to prosperous communities.

The federal government, especially security and military contracting, drives the economy. While cutbacks — through sequestration and reduced military spending — have slowed the rate of growth in recent years, the government nonetheless provides a steady base on which the region has flourished over the last decades. Currently, the local unemployment rate is just 3.6 percent; the national rate is 6.7 percent.

"We aren't like Beverly Hills or some other place with lots of multimillionaires," said Stephen S. Fuller, the director for the Center for Regional Analysis at George Mason University, in Fairfax County. "But we have more workers per household than just about any metro area in the country. We have more people working, and more people working in every age cohort."

The jobs tend to be good jobs, providing health insurance and pensions, even if there is a growing low-wage work force of health aides, janitors, fast-food workers and the like. "It's a knowledge-based work force," Mr. Fuller said. "And we have an economy built on services, technology-intensive services."

Social services — judged against those of poorer counties — are stellar, too. The local government, which runs some of the best public schools in the country, also offers its older citizens services as varied as rides to senior centers and "care and enrichment consultations" for those looking to adopt a pet rabbit.

A retired home-health nurse, Tena Bluhm, heads the local Commission on Aging. "We were seeing a big change in demographics," she said, "with the boomers aging and a trend where folks, as they aged, wanted to stay in this area."

On a cool weekday morning, John McGinnis, 57, emerged stiffly from a shallow pool at a public indoor facility, where there were also gleaming squash courts, a golf course and three bored-looking lifeguards. A water-exercise instructor had led him and nine others through a series of gentle movements with pool noodles.

"I've had six back surgeries," he said, shuffling toward an oversized hot tub after the class. "This is a lifesaver."

On a sunny weekend afternoon, 350 miles away, Chea Lockwood, a registered nurse with the Commission on Aging in McDowell County, visited Melissa Courtner, 38, who lives in one of McDowell's few high-rises, a bare-bones facility for disabled and elderly residents.

Coal miners still dig into and blast off the tops of steep Appalachian hills. But the industry that once provided thousands of jobs is slowly disappearing, and the region's entrenched poverty has persisted. The unemployment rate is 8.8 percent, down from more than 13 percent in the worst of the recession. The current number would be even higher if more residents hadn't simply given up looking for work.

Government assistance accounts for half of the income of county residents. Social workers described shortages of teachers, nurses, doctors, surgeons, mental health professionals and addiction-treatment workers. There is next to no public transportation. Winding two-lane roads, sometimes impassable in snow and ice, connect the small population

centers of trailers, small homes and the occasional minimart. "It'll take you an hour to drive 15 miles," Ms. Lockwood said.

Ms. Lockwood has lived in McDowell County long enough to be widowed twice, and on this morning she first checked on two older patients in the housing project, cheerfully going through a checklist of questions. "Is your health aide on time?" "Do you need help washing that pretty hair of yours?"

She checked in on Ms. Courtner, whom she had seen for her first evaluation earlier in the week. "I'm going to steal your man," Ms. Courtner said with a whoop as Ms. Lockwood entered the room.

"You can't have him!" Ms. Lockwood said, reaching down to hug Ms. Courtner in her wheelchair before sitting down on a coffee table to talk.

Ms. Courtner's medical problems started early. She dropped out of high school and started smoking and drinking at 16. She had a stroke at 21, leaving her with partial paralysis. She has multiple sclerosis and bipolar disorder. A fistula, only partially repaired, makes a colostomy bag necessary.

She is unable to work, she said, so she manages with disability payments and food stamps. Before moving into her housing unit, she lived in a shed without plumbing or electricity on the property of her parents, who are also disabled.

Many people have similar stories. Ms. Lockwood notes that other residents have multiple woes: "Diabetes. Obesity. Congestive heart failure. Drug use. Kidney problems. Lung conditions from the mines." Problems often start young and often result in shorter lives, she said. Earlier that day, she handed me a list of recent funerals with about half highlighted in yellow; they signified that the deceased was under 50.

Since the 1980s, "socioeconomic status has become an even more important indicator of life expectancy." That was the finding of a **2008** report by the Congressional Budget Office. But dollars in a bank account have never added a day to anyone's life, researchers stress. Instead, those dollars are at work in a thousand daily-life decisions — about jobs, medical care, housing, food and exercise — with a cumulative effect on longevity.

"Why might income have an effect on morbidity or mortality?" said David Kindig, an emeritus professor at the University of Wisconsin School of Medicine and an expert in longevity issues. "We have these causal pathways, through better jobs, better health insurance, better choice of behaviors, he added. On top of that, "there's the stress effects of poverty and low educational status."

As such, the health statistics for Fairfax and McDowell are as striking as their income data. In Fairfax, the adult obesity rate is about 24 percent and one in eight residents smokes. In McDowell, the adult obesity rate is more than 30 percent and one in three adults smokes. And the disability rate is about five times higher in McDowell.

In both counties, food availability matters. There are only two full-size grocery stores in McDowell; minimarts and fast-food restaurants are major sources of nutrition. "We don't have gyms or fitness centers," said Pamela McPeak, who grew up in McDowell getting creek water to flush her family's toilet. "It's cheaper to buy Cheetos rather than apples." She now runs a nonprofit program that provides tutoring and helps high school students get into college.

Education is also correlated with longevity, as it is with income and employment. Educated individuals are much more likely to work, and much more likely to have higher incomes. In McDowell, about one in 18 adults has a college degree; in Fairfax, the share is 60 percent.

Finally, and perhaps most powerfully, researchers say that a life in poverty is a life of stress that accumulates in a person's very cells. Being poor is hard in a way that can mean worse sleep, more **cortisol** in the blood, a greater risk of

hypertension and, ultimately, a shorter life.

As southern West Virginia has foundered, northern Virginia has flourished. But do the two counties' diverging life expectancies relate to their diverging economic fortunes? And might that be true across the country?

It is hard to prove causality with the available information. County-level data is the most detailed available, but it is not perfect. People move, and that is a confounding factor. McDowell's population has dropped by more than half since the late 1970s, whereas Fairfax's has roughly doubled. Perhaps more educated and healthier people have been relocating from places like McDowell to places like Fairfax. In that case, life expectancy would not have changed; how Americans arrange themselves geographically would have.

"These things are not nearly as clear as they seem, or as clear as epidemiologists seem to think," said Angus Deaton, an economist at Princeton.

Further, there is nothing to suggest that, for a given individual, getting a raise in pay or moving between counties would mean outliving her peers.

"The statistical term is the ecological fallacy," Mr. Kindig said. "We can't apply aggregate data to an individual, and that's underappreciated when you're looking at these numbers." But, "having said that, I still think that the averages and the variation across counties tells us a lot," he added. "We don't want to let the perfect be the enemy of the good here."

Despite the statistical murk, many epidemiologists, economists and other researchers say that rising income inequality may be playing into the rising disparity in health and longevity. "We can't say that there is no effect, just because we don't have clear methods to test the effect," said Hui Zheng, a sociologist at Ohio State University.

In particular, changes in smoking and obesity rates may help explain the connection between bigger bank accounts and longer lives. "Richer people and richer communities smoke less, and that gap is growing," said Dr. Murray at the Institute for Health Metrics and Evaluation.

Mr. Zheng has also posited that inequality, by socially disenfranchising certain groups and making them distrustful of public systems, may have a long-range effect on health.

To some extent, the broad expansion of health insurance to low-income communities, as called for under Obamacare, may help to mitigate this stark divide, experts say. And it is encouraging that both Republicans and Democrats have recently elevated the issues of poverty, economic mobility and inequality, But the contrast between McDowell and Fairfax shows just how deeply entrenched these trends are, with consequences reaching all the way from people's pocketbooks to their graves.

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