Does Being "First" Matter?

Thoughts on Ranking, Health and Public Policy

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The emotional resonance of "being first" lies in personal identification with whatever "first" you celebrate. As sports fans, we talk of "our" team with pride when it finishes first. When I became CEO of Christiana Care, Delaware's largest health system, I was proud that my health system was first in terms of size in my state. As an employee, I personally resonated with the history of my new organization's past success. Delawareans are proud of their status as "the First State." Other "firsts" abound in Delaware that foster local pride and identity – e.g. the DuPont Company's inventions, its commitment to safety, and internationally respected business-friendly court system. This pride by association is not a uniquely Delawarean trait, but true across communities as they celebrate their identity and uniqueness. To echo a Delaware state marketing slogan, it feels "good to be first."

Delaware may be "the First State," but in terms of health it is far from first. The most recent rankings published by the United Health Foundation list Delaware as 31st among all states. The United Health Foundation has produced America's Health Rankings® for 25 years. The index uses national data sources and derives "rankings" based on comparisons of the state-to-state variances on a list of measured determinants. Somewhat sobering is the fact that in 2003, my first year as CEO at Christiana, Delaware ranked 36. At my retirement in 2014, Delaware's rank remained remarkably stable at 35. Thoroughly average. Not the type of result likely to puff up one's chest with pride.

Aside from pride, what difference do health rankings like those published in America's Health Rankings® make? Clearly, they do generate energy. As one of a great many examples, the Boston Globe newspaper recently reported the pride-filled headline "Massachusetts Is the Second-Healthiest State in America, Report Says." On a more somber tone, a Louisiana radio station noted "Louisiana ranked #50 in national health rankings." The accompanying print article noted that Louisiana had distinguished itself by being ranked in last place 16 previous times. As an explanation, the article cited Louisiana's persistent problem with childhood poverty. Since the news media frequently highlights health rankings, it is reasonable to presume the media at least perceives there is some resonance with the public's interests and concerns. How much these headlines engage the public is another question.

What is clear is that public health rankings do not seem on their own to motivate the public to action – at least in the area of personal choice of physicians or health care facilities. Eric Schneider and T. Lieberman in 2001 wrote, "The U.S. experience of the past decade suggests that sophisticated quality measures and reporting systems that disclose information on quality have improved the process and outcomes of care in limited ways in some settings, but these efforts have not led to the "consumer choice" market envisaged." After discussing a number of potential reasons for the lack of evidence of an effect on quality disclosure on the public, the authors concluded, "Even under the best conditions when information is highly salient, it is not clear that consumers use it. In Pennsylvania, a state with a public disclosure programme that lists hospital specific and surgeon specific risk adjusted mortality rates, cardiac surgery patients who

had recently undergone coronary artery bypass graft surgery did not obtain or use the information."

So, it appears that even if the public in general might be interested in health rankings as a headline, and perhaps take some pride if "their" doctor, "their" hospital or "their" state is highly ranked, their interest leads to no behavior change.

However, health rankings do matter to some, and these are often people in positions of authority. I speak from personal experience that while the cardiac surgery rankings in Pennsylvania noted by Schneider et al made no apparent difference to the public, they did make a great deal of difference to the Board of Directors of the Pennsylvania health system that employed me. Less than a top rank for our cardiac program resulted in a long and somewhat defensive conversation with my Board. Hospital Boards of Directors in general very much like their organizations to be "first." 5

Health rankings are complex and are built on a number of assumptions. The choice of measures, their validity and reliability, time lags in measurement, the relative weights given to a measure in developing a summary index, and delays in the effects of interventions combine to create complexity. This complexity is rich in opportunity for critics.⁶ Rankings are often challenged on the basis of their assumptions, applicability to a specific population and even political orientation.

America's Health Rankings® uses a model that assumes health behaviors, community and environment, clinical care and public policy interact to effect specific health outcomes. The system gives higher weights to health behaviors, and community and environment than to the other domains. The final rankings are statistical comparisons of all the "health input domains," plus select measured "health outcomes." Another prominent health ranking project is the "County Health Ranking and Roadmaps" project developed by the University of Wisconsin Institute for Population Health and the Robert Wood Johnson Foundation. This effort looks at health at the county level for most counties in the United States. It employs a somewhat different approach in its comparisons than America's Health Rankings. The Commonwealth Fund also published a state-by-state comparison of health system performance in 2018. Additionally, the Centers for Disease Control and Prevention has published a list of "public health gateway resources," which permit comparisons among states. One has many approaches and rankings with which to make comparisons.

It has been 25 years since McGinnis and Foege pointed out that over 50 percent of mortality could be attributed to causes directly related to behavior and environmental risks – most modifiable. Behavioral and environmental causes (or enablers) of disease have come to be called "social determinants of health." Programs to identify and modify the "social determinants of health" are now key components of most population health efforts. With the recognition of the importance of the social determinants of health, health systems have begun to look past their walls and outside the bounds of the traditional medical model of care. Large health systems like Kaiser Permanente acknowledge their role as economic and social "anchors" of their communities. They have begun to use their economic and social position in their communities in a broader attempt to improve their communities' health. Similarly, the Robert Wood Johnson Foundation has focused its efforts on facilitating a "culture of health" within communities. It now is universally agreed that the health of a community depends on much more than good health care.

Despite this focus on the broader issues that influence health, the health benefits of these efforts so far have remained elusive and difficult to demonstrate. An interactive animation map spanning from 1990 to the present on the Americas Health Rankings website reveals that the relative rankings of the vast majority of individual states have varied very little over the past 25 years. Rather, most have remained within their initial quintile during this period. ¹⁴ Complex causality may be making it difficult for states to "move up" or "down." Braverman and Gottlieb in a 2014 paper, "Social Determinants of Health: It's time to consider the causes of the causes," review the difficulty in rigorously determining causality in health. ¹⁵ Succinctly stated, the effect of social determinants on health and interventions that can change them are so complicated by multiple sources of potential interaction that causal links are very difficult to discern.

Does a less state-focused, more global picture of the United States give us a better indicator of social progress on health? For example, are we healthier today in the United States as a society than we were 30 years ago? The data reveals we are living longer (or were until recent declines in life expectancy). And, are we less sick? Disappointingly, it is hard to tell and it seems to depend on where you live. 17

Where does this all lead us – policy makers, clinicians and individual members of the public? Oliver¹⁸ points out that rankings can matter. He notes rankings have several audiences – the community of experts, policy makers and the public. Rankings serve different functions for each of these groups. For the community of experts, the details underlying rankings can reveal important research questions to be explored. Comparisons can lead to testable hypotheses of causal relationships and enable analyses that can identify the likelihood a particular public health approach may be effective in a given community. For policy makers, comparisons can help determine evidence-based priorities for action. If a community ranks high in certain healthy behaviors, it might be a better use of resources to work on areas that appear more problematic. Using the energy in civic pride, rankings can engage politicians, public officials and administrators who direct public resources, to act.

Rankings can be useful to the public in more complex and less direct ways. For each of us, what appears to matter most are our own personal experiences and the experiences of those of people who we know, or with whom we identify. Motivation to change is highly personal. Numbers can matter, but only if they are our own numbers. Stories in general have a much greater impact.

Rankings can be used to inspire stories – like the Louisiana radio station linking the state's poor rankings to poverty in children. Most people will empathize with an image of a poor child. This empathy can inspire action.

Rankings are summaries. As such they lack detail, and it is the focus on detail that enables effective action. Two Delaware examples illustrate the power of focus. Delaware has been plagued for decades with a high rate of low birthweight births (most due to prematurity). Despite major advances in pre- and perinatal care, far too many babies are born before they are ready – often with severe consequences. Delaware has had many efforts to reduce prematurity during this time. Unfortunately, the rate of low birthweight births has actually increased during the period between 2003 and 2018, from 8.6% to 8.9%. ¹⁹ I conclude that these programmatic efforts, as well intentioned as they are, have not worked. The causes of Delaware's high rates of prematurity require more research rather than continuing the efforts of the past.

Cancer is a different story. Cancer in Delaware has long been a major concern of Delaware citizens. And, like reducing prematurity, reducing cancer has been a major state priority.

Delaware established new advanced cancer treatment programs and extensive cancer prevention efforts. The latter were often targeted to Delawareans who suffered disproportionately from cancer as a group. The data from national comparison reveals that cancer death rates in Delaware have declined significantly from 2003 to 2018, 217.1 to 200 cancer deaths per 100,000 people. And while Delaware's rate is still a bit higher than the national average, the rate of decline in Delaware cancer deaths is almost twice that of the country as a whole. In cancer death rankings, Delaware has improved from the lowest quintile to next lowest in less than 10 years. Additionally, the disparity in cancer deaths among Delaware's diverse populations has largely been eliminated with major declines in the death rate among African Americans in particular. The current cancer death reduction strategy appears to be working.

Despite their limitations and imperfections, health rankings can be helpful, but only to the extent that they inspire action. Rankings can capture attention and generate energy. If that attention is focused on learning about the specific issues that form the rankings, important discoveries that lead to action can result. The first step to change is to have a desire to do something different – often something very different than one has been doing. By their very nature, health rankings challenge the status quo. Having the courage to "look in the mirror" of health rankings is a good place to start.

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