The Market Mechanism and Health Insurance in Rural Places:
Lessons Learned from an Economics and Policy Perspective

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Executive Summary

- This paper focuses on unique challenges in health insurance markets facing rural people, providers, and places. We identify how and when these challenges stem from what economists call “market failures,” defined narrowly or broadly. We review how previous government interventions and programs have sought to redress insurance market failures, and we assess the success (or lack thereof) of these interventions. We conclude with observations about the current landscape of rural insurance markets and make suggestions for policy interventions and further research.

- In large towns and cities, the up-front investment necessary to acquire or improve the non-labor inputs to health care delivery, including facilities, equipment, and electronic medical records, can be spread over many units—or patients—using them. This phenomenon is known as “economies of scale.” In a low-volume setting, many investments and new technologies will not make financial sense given the high average cost per use. In other words, the baseline, or “fixed,” costs of entering the market to provide health care or health insurance are relatively high, and this may stand in the way of market entry even when the per-person, or “variable,” costs are relatively low.

- Low population density in rural insurance markets makes it difficult for firms to implement risk adjustment techniques. Unlike a government entity, which can function well over time by breaking even in its predictions, a private company’s goal is consistent profitability. Businesses hesitate to enter—and are quick to exit—a geographic market in which losses are likely to be, or are being, incurred. Rather than staying in the market and fine-tuning the products offered and the risk-assessment methodology used, some firms will simply exit. When the county is the geographic level of choice, each county is treated as a marginal decision to be made.

- The provision of health care generates significant benefits to society (e.g., caring for the poor and disabled, improving population health). However, such benefits are not represented in private market transaction decisions. We discuss several of these issues as they manifest in rural places, all of which indicate a need for additional structure or regulation around any market-based policy solutions. The issues include:
  - structural differences between urban and rural delivery systems due to differing goals;
  - difficulty in crafting equitable payment policies to address regional variation in poverty, disability, and population health;
  - greater sensitivity in rural places to precise policy details, due to the greater role of public funding of health care; and
  - demographics in many rural places that differ from those in urban places, including a greater degree of poverty, an older population, fewer large employers to provide health insurance, and in general lower attainment of many factors considered to be the “social determinants of health.”

- Policy considerations for addressing the issues presented in this paper include:
  - maintaining insurance reforms while strengthening risk adjustment and reinsurance;
  - redesigning rating areas and network adequacy policies;
  - incentivizing plans to offer coverage over large, perhaps nationwide, service areas while discouraging the county as the unit of coverage;
  - encouraging demand for insurance by individuals and small employers;
  - encouraging the development of rural provider networks;
  - shifting focus from paying for medical interventions to paying for prevention; and
  - restructuring payment to reflect the different cost profile, i.e., higher fixed costs and lower variable costs, that is often true for rural places.
Introduction

The United States chose early in the twentieth century to emphasize a private insurance model to deliver health insurance coverage options to its citizens, rather than a public insurance model that most developed countries had chosen by the 1920s. Although the private insurance mechanism has some advantages, it also poses many challenges that health economists have elucidated over the last 50 years, beginning with Kenneth Arrow’s seminal article in 1963. These challenges have repeatedly led to calls for government intervention in insurance markets, including the first major intervention occurring in 1965 with the creation of Medicare and Medicaid, and the most recent major legislation in the form of the Patient Protection and Affordable Care Act (PPACA) in 2010.

This paper focuses on unique challenges in health insurance markets facing rural people, providers, and places. We identify how and when these challenges stem from what economists call “market failures,” defined narrowly or broadly. We review how previous government interventions and programs have sought to redress insurance market failures, and we assess the success (or lack thereof) of these interventions. We conclude with observations about the current landscape of rural insurance markets and identify issues policy makers should be aware of as well as other aspects that would benefit from further research.

Background and Economic Theory

Initially, as health care costs began to rise around the turn of the twentieth century, health insurance by and large did not exist in the U.S. The earliest form of health insurance was provided as direct service through Baylor Hospital. Health insurance as we understand it today developed slowly and was resisted heavily by providers, unions, and others. The end of the Great Depression, World War II, and collective bargaining are thought to have led to the widespread growth of health insurance in the U.S., developed mostly through employers contracting with insurance companies to cover their employees (incentivized by the fact that this form of compensation was not subject to income tax). But for many years, private insurance was largely untouched by any Federal policy, and many groups who were left out of coverage (e.g., the aged, disabled, unemployed, poor) had no recourse, despite this overall growth. A handful of smaller-scale social insurance programs after World War II led to a push for national health insurance expansions for the aged (Medicare) and poor (Medicaid).

Two aspects of this history are important for understanding the impact on rural people and places. First, since rural people are more likely to work for smaller employers and for lower wages, and
in employment sectors that are less likely to offer insurance (e.g., farming, mining), rural people were less likely to be offered employer-sponsored insurance. Probably because the early forms of health insurance were hospital-based or employer- or union-based, rural populations have always had less access to the full range of insurance products. A review of survey data from the early 1960s shows that even then, urban residents were more frequently covered than rural non-farm residents, who were in turn more frequently covered than farmers.³ In 2011-2012, rural adults were 20 percent less likely to be confident that they could find affordable, non-group health insurance coverage and were 21 percent more likely to report problems paying their medical bills and to delay or forego needed care because of cost.⁴ Furthermore, among all individuals younger than 65 years with private insurance during 2007-2010, 26 percent of those living in a rural, non-adjacent county had a high deductible health plan (HDHP), compared to 21 percent of those living in a rural-adjacent county and 20 percent in an urban county. HDHPs, which cost less in terms of monthly premiums, can have deductibles that are several times higher than traditional plans, and are sometimes considered inferior in that they can lead to large out-of-pocket costs.⁵ But, some policymakers and consumers favor HDHPs as means of suppressing premium costs for individuals and households willing to accept more financial risk. Importantly, these rural/urban differences disappeared when researchers controlled for other sociodemographic characteristics,⁶ suggesting that affordability, not preference, led rural residents to purchase the less-comprehensive coverage of HDHPs.

Second, the unique reliance of the U.S. on a private market system for determining health insurance allocations across people and places means that rural people are more likely to be affected by market failures that characterize health insurance markets and by the lack of explicit policies directed toward insurance markets at the Federal and (to a lesser extent) State levels. Several important aspects of markets and “market failures” must be understood in order to think about how rural people are affected in particular. The use of a market mechanism to help allocate health care resources has been touted for its potential efficiency gains; in many sectors, competition has been shown to keep prices in check while improving quality, and the goal of many health policies that affect markets is to leverage this potential. However, some critical assumptions underlie the classical economic model. In general, economists assume that well-functioning markets have the following characteristics: (1) many buyers and sellers, (2) free entry and exit, (3) perfect information, (4) a “homogenous” good, and (5) no externalities.
free entry and exit, (3) perfect information, (4) a “homogenous” good being sold, and (5) no externalities. Violation of these assumptions is understood to lead to various forms of “market failure.”

Many buyers and sellers. In recent years there has been widespread concern about the relatively few insurance firms offering health insurance in certain parts of the country. Economists worry that as the number of firms in an area drops, competition drops, and the “market power” of the firm rises, leading to higher prices (in this case, premiums) relative to other areas, or rising premiums over time. In general, economists believe that while monopoly power (one firm) in an area creates a significant amount of power to raise prices (if unregulated), the degree of power starts to drop as another firm enters the area and continues to decline as two or more firms enter.

Furthermore, because in some rural healthcare markets there is a single provider, these markets are sometimes characterized in terms of economic monopoly, or near-monopoly, on the provider side. About 10 percent of all Primary Care Service Areas (PCSAs) have one or fewer primary care providers, about 13 percent have one or fewer primary care medical doctors, and about 32 percent have one or fewer specialists. The competitive market model assumes that there are sufficient buyers and sellers in all aspects of a market. Therefore, the classical model has no place for provider shortages and is not well equipped to handle such an issue. The model would predict that any such shortage would be temporary, as prices would be bid upward and new providers would be attracted to the market. But in fact, this is unlikely to occur as an automatic market correction due to the commitment over time that moving to a rural area represents. A provider would need to be confident that he or she could earn a competitive income for years to come. Since the market will not readily adjust, the reality in many rural places is that there is monopoly power on the provider side—if the insurer is required to form a network in that place. The provider, or clinic or hospital, is potentially able to negotiate higher reimbursements from insurance companies, which they may do in an attempt to cover fixed and operating costs in situations when there are limited opportunities to recover both because of low volume and a payer mix dominated by public payers (Medicaid and Medicare). Depending on network adequacy standards in the state, the insurance company may have little choice in contracting with these providers if it wants to offer plans elsewhere in the same geographic area. Although network adequacy standards protect consumers—ensuring that they are not purchasing plans that make it difficult, in practice, to access care—the perverse consequence may be that insurance companies avoid such markets. Or, if they do participate, the policies they sell may be more expensive due to the higher rates dictated by sole providers. Importantly, including local providers in networks established by commercial insurers generates revenues for those providers that helps them meet fixed costs and continue providing service to others including Medicaid.
patients and the uninsured. Thus, the loss of those dollars when a plan does not contract with a small rural provider may contribute to a financial viability challenge for that provider.

The problem of low volume of patients presents a fundamental challenge in rural settings. An average primary care physician has a panel of about 2,300 patients, which means that this is roughly the number of patients needed to pay his or her “full” salary. At the PCSA level, 141 of the 6,542 total PCSAs contain fewer than 2,300 people. An additional 618 contain fewer than 4,600 people, meaning that on average, such PCSAs may not “support” two fully employed doctors. (Actual average numbers of primary care physicians across PCSAs with fewer than 2,300 people and fewer than 4,600 people are 1.5 and 2.6, respectively.) Citing these numbers oversimplifies the issue of provider shortages, but it illustrates the low-volume problem. In a town of a few thousand people, additional doctors are unlikely to arrive to compete with existing doctors in the community. There simply isn’t room in the market.

The problem discussed above in terms of providers carries over into many other inputs to care delivery, such as facilities, equipment, and electronic medical records. In large towns and cities, the up-front investment required to acquire or improve these inputs can be spread over many units—or patients—using them. This phenomenon is known as “economies of scale.” In a low-volume setting, many investments and new technologies will not make financial sense given the high average cost per use. In other words, the baseline, or “fixed,” costs of entering the market to provide health care or health insurance are relatively high, and this may stand in the way of market entry even when the per-person, or “variable,” costs are relatively low.

Firm entry and exit. In the classical economic market, entry and exit are viewed as natural parts of the market model. This dynamic aspect is viewed as a key element in driving the market to efficiency. Given the nature of health insurance, with its networks of providers whose fees must be negotiated and its administrative overhead, it is less obvious that frequent entry and exit, with the resulting churning of enrollees into and out of insurance plans, is actually desirable or efficient. The lack of continuity of care, as new patient/provider relationships need to be continually established, is at least administratively burdensome and at worst will result in inferior health outcomes. In rural places, where participating providers are more likely to stay the same, the latter is less of an issue, especially for primary care, but consumers still need to learn new benefit structures and how to navigate them to attain the best care at the lowest cost, and the issuers themselves expend resources in creating networks from scratch when they enter a new market compared to renewing and renegotiating existing contracts.

Perfect Information. It is well understood in the literature that unique aspects of the market for insurance violate the perfect information assumption. First, all insurers focus heavily on assessing the
“risk” of those they insure, as measured by the expected benefits they will need to pay out. Consumers who purchase health insurance are buying membership in an “insurance pool,” a group of people who agree to share the risk of incurring high health costs, even though on average they will pay more in premiums than they receive in benefits. Economists assume that typical consumers want to purchase insurance because they are “risk-averse.” Using actuarial data, insurers assess their risk as rising as the underlying health status of the population drops, all else equal, and as the size of the population drops. This latter effect is crucial to understanding the rural problem, and is worth additional discussion.

Insurance works by spreading risk across pools, and the larger the pool, the easier it is to spread risk. In 2014, the most expensive 1 percent of the overall U.S. population incurred average health care expenses of $107,208. But this top 1 percent of expenses ranged from about $50,000 to millions of dollars. (In 2015, one Wellmark enrollee filed claims of $18 million.) In a metropolitan area with hundreds of thousands of claimants, it is very likely that the average liability faced by an insurer for its top 1 percent of claims will be somewhere near the high-but-predictable $107,208. However, in rural areas, due to the lower number of individuals in the risk pool, insurers face an increased chance of variation in average costs. Since firms are bound by the medical loss ratio to pay out in claims a minimum of 80 percent of what they collect in premiums (and subsidies) in the individual and small group markets, a driving factor in for-profit insurance firms’ decisions is to keep claims as close to 80 percent as possible. Any deviation from this value is suboptimal.

Consider a simple example. Suppose a firm is seeking to spread risk in a rural area across 10,000 people while another firm seeks to spread risk in an urban area across 1 million people. Both groups have an underlying health risk that is about equal to start; assume $5,000 per person. But then assume that one person in each place is hit with a health episode costing $5 million. In the place with 1 million people, this episode adds $5 per person to the annual premium (a negligible 0.1 percent increase), while in the place with 10,000 people, it adds $5 million/10,000 = $500 to the annual premium, a 10% increase. Thus, in the urban place, risk is spread over a much larger pool than is available in the rural place.

Economists, beginning with George Akerlof in 1970, have pointed out that imperfect information that is systematic is especially problematic in many markets, not just health insurance. In the health insurance example, the term “adverse selection” refers to those with higher risks being systematically more likely to purchase health insurance (and to purchase a higher amount of insurance) thus raising the risks for the insurance company. Insurance companies have developed various policies over the years to deal with the problem, such as bans on pre-existing conditions, requiring employers to
cover all employees, and refusing to cover employers in some high-risk industries (e.g., mining, farming). In the private market for health insurance, these practices gained wide acceptance over decades, with comprehensive physical exams required to obtain individual market coverage in the years immediately prior to 2010. Over those decades, what it meant to incur “high” costs changed considerably. In 1970, someone in the 90th percentile of medical spending had costs of $1,614, or 51 percent of the average income; by 2014, the costs of someone in the 90th percentile were about $31,203, or 103 percent of average income. The result of this change, much of which was driven by technological advances, was to dramatically increase the incentive for private insurance firms to exclude high-cost consumers from their insurance pools. As explained above, inadequate risk pools in small rural markets make these higher costs a greater liability to insurance firms in those places. Excluding high-risk industries will have a bigger effect on rural people to the extent that in smaller insurance pools it is more difficult for insurers to absorb this industry-level version of adverse selection.

Over time, in an environment with adverse selection, if an insurance company prices a policy to be “actuarially fair,” meaning that the sum of claims and the sum of premiums balance, the healthiest individuals are likely to forgo the policy. Not having the healthiest individuals in the risk pool in turn drives up the average cost to the company of insuring those who remain in the pool, and the company responds by increasing premiums. A spiral ensues, with the market breaking down entirely if the degree of adverse selection is severe. It is true that with the increase in computational power and more sophisticated methods for modeling risk, insurance companies have improved their ability to predict costs. However, the reliability of these predictions is only as good as the data used, and it is a mathematical truth that a smaller number of people in a pool leads to less precise estimates. This lack of perfect information matters in an environment in which the decision makers—insurance company executives—are pressured to generate profit (or positive return on investment) each year. Unlike a government entity, the goal of which over time is to break even in its predictions, a private company’s goal is consistent profitability. This leads to businesses hesitating to enter—and being quick to exit—a geographic market in which losses are likely to be, or are being, incurred. Rather than staying in the market and fine-tuning the products offered and the risk-assessment methodology used, some insurers will simply exit.

Another concept, related to the systematic violation of the perfect information assumption, is “moral hazard.” Economists, beginning with Kenneth Arrow and Mark Pauly in the 1960s, have defined moral hazard as the situation that occurs when insured persons are incentivized to behave in ways that increase the costs of the insured risk, all else equal, because they are insured and therefore do not bear
the full costs of the risk. Fully insured individuals may be prone to this phenomenon, engaging in more risky health behaviors than they would if they had to pay their own medical costs. Insurers have developed many policies to address moral hazard over the years, including but not limited to carefully setting co-payments, coinsurance, and deductibles to discourage unnecessary use of medical care. Employers and insurers have also developed programs designed to decrease utilization through incentives to establish and maintain a healthy lifestyle. However, there is a significant body of evidence that participants in the various markets for health insurance are underinformed about their choices, do not understand the complex jargon that describes many aspects of claims and reimbursements, and often make choices that are suboptimal compared to their own stated preferences. Efforts to improve “health insurance literacy” have met with some success, but an efficient market requires much more transparency and consumer knowledge, i.e. perfect information, than currently exists.\(^\text{16}\)

Moral hazard can occur on the provider side when physicians who have a higher degree of knowledge about what services patients need than do the patients or the insurers have an incentive to recommend services and procedures that may not be medically necessary and to overlook solutions that are low cost, over-the-counter, etc. These may be conscious decisions or unconscious biases. Again, the combined effect of this issue is likely to weaken the ability of insurers to accurately price their products. Over the last few decades, changes in the health delivery system have been developed to address moral hazard focusing on the provider side, including policies that create capitated payments or shared savings arrangements.

Ultimately, after over 50 years of experience with various policies that incorporate market forces into health insurance in many different ways, we have a lot of information about what specific pieces are most successful as well as what aspects pose special challenges in rural places. The remainder of this paper gives an overview of this history, set against the relevant economic theory, in order to identify recurring themes. We discuss these themes in the context of informing current policy.

**Use of Market-Based Principles to Provide Access to Insurance**

In this section, we describe the development of some key public policy interventions in health insurance markets, with a specific focus on how well these interventions have worked (or have not worked) in rural areas. Beginning with provision of coverage to Federal employees under the Federal Employees Health Benefit Program (FEHBP) in 1960, and continuing with Medicare and Medicaid in 1965 as well as numerous revisions to these programs over the course of decades, public programs have represented an increasing share of the health insurance sector. Most recently, with the passage of the
PPACA in 2010, public funding of health insurance plan purchases by individuals, as well as increased regulatory oversight, have significantly increased the government’s role in this market. In all of these programs, there are elements that attempt to preserve or reinforce competition in some form, with the goal of achieving the social efficiency promised by the perfectly competitive market.

**FEHBP.** The FEHBP, introduced in 1960, currently offers coverage to about 8 million people, including Federal employees, retirees, and their dependents, and it gives enrollees a choice of competing private health plans with different premium and benefit structures. The premiums charged to enrollees are subsidized by between 72 percent and 75 percent of prevailing weighted averages in the program. Insurance companies must submit bids to the Office of Personnel Management, which accepts them on “a basis which, in the judgment of the Office, is consistent with the lowest schedule of basic rates generally charged for new group health benefit plans issued to large employers.” Some plans are offered nationwide, and as such charge the same premium to everyone across geography. Others, called state-specific plans, can enter a limited geographic region and can enter bids at the county level. As our 2012 study of enrollment and plan competition showed, most FEHBP enrollment was concentrated in a few major insurance companies, with competition at extremely low levels in many rural areas. In 1,922 of the 3,141 counties in the U.S., there were two or fewer state-specific options. Overall, in rural areas, only 6 percent of enrollment was captured by state-specific plans, compared to 23 percent in urban areas.

The difference between the national plans and the state-specific plans is important for rural places: the ability to bid on a county-by-county basis necessitates a cost/benefit view of each county. The insurance firm is forced, from a business perspective, to treat the questions of whether to offer coverage in a particular county, and at what price, as marginal decisions. Once costs have been estimated at this level of granularity, many firms choose not to offer state-level coverage in many rural counties. Those that do, often must charge a higher premium and typically attract little enrollment.

**Medicaid.** Created in 1965, Medicaid (as well as Medicare) did not originally contain elements of market models, but rather relied upon administrative price setting. California’s Medicaid program, Medi-Cal, was the first to contract with managed care organizations (MCOs) in 1973. In general, while Medicaid managed care enrollment has risen overall, growth has been lower in rural areas. As of July 2016, states with an above average percentage of their population living in rural areas had 71 percent of their Medicaid beneficiaries enrolled in managed care, while states with a below average rural population had 80 percent enrollment in managed care. Depending upon the arrangement between the state and the MCO, managed care penetration can signify the presence of competition at token or
robust levels; the assumption for the purpose of this discussion is that at least some bidding mechanism and negotiation were involved in determining prices and coverage areas.

Rural areas lag behind urban areas in Medicaid managed care enrollment for several reasons. First, there are fewer physicians in rural areas to provide care to managed care beneficiaries, especially in the area of behavioral health. In 2014, there were 67 primary care physicians and 48 specialty physicians per 100,000 individuals in rural areas while there were 94 primary care physicians and 110 specialty physicians per 100,000 in urban areas.\textsuperscript{25} This rural/urban provider imbalance together with low Medicaid reimbursement rates makes it more difficult for managed care companies to build sufficient provider networks and offer multiple plans in rural areas.\textsuperscript{26} Creating sufficient provider networks is especially difficult for high-risk groups and in the area of behavioral health.\textsuperscript{27} Further, in rural areas there are higher percentages of elderly and disabled individuals as well as higher mortality rates and higher rates of negative health-related behaviors such as smoking and lack of physical activity, which may make providing coverage for rural individuals more challenging (although there may also be more potential profit for firms that can successfully manage health).\textsuperscript{28,29,30} Additionally, during implementation of new managed care programs, lack of data and infrastructure necessary for quality and access monitoring have been problematic, especially in rural places.\textsuperscript{31,32,33}

To minimize such difficulties in provision of Medicaid managed care in rural areas, states and their contracted MCOs have implemented several novel strategies. First, telehealth is increasingly being used in remote rural areas to provide patient care at a distance.\textsuperscript{31} Second, community and Rural Health Clinics are proliferating in rural areas, now serving one in four rural Americans.\textsuperscript{31,34} Third, nurse practitioners are being utilized more often to provide patient care, compensating for the lack of physicians in rural areas.\textsuperscript{31} Finally, novel payment models such as pay-for-performance and bundled payment initiatives are increasingly being implemented statewide and in rural areas.\textsuperscript{35} As of fiscal year 2017, 28 states had implemented pay-for-performance initiatives within their MCOs.\textsuperscript{36}

\textbf{Medicare}. The first payments to private health maintenance organizations (HMOs) by Medicare were authorized in 1984, and the first cohesive privatized Medicare program, Medicare+Choice, began in 1997. Both before and after that date, HMOs could offer benefits on a county-specific basis, with the government providing capitation payments that vary at the county level. Because this variation typically included significantly higher payments in urban and suburban counties, HMOs began, and continue, to be more prevalent in these markets than in rural markets. The Balanced Budget Act (BBA) of 1997 established a payment floor of $367 per month that applied almost exclusively to rural counties in order to incentivize plan entry into these markets. Three years later, the Benefits Improvement and Protection
Act (BIPA) of 2000 increased the level of the rural floor to $475 but also created a payment floor of $525 for urban areas.\(^\text{37}\)

Between 2000 and 2003, there was a 29.4 percent decrease in rural enrollment in Medicare+Choice, most of which occurred in 2001.\(^\text{38}\) This might seem surprising considering the BBA-mandated floor payment rate and the BIPA-mandated increase in the floor payment rate. Each of these was intended to stabilize, and even increase, rural enrollment, as the Medicare+Choice penetration rate in rural counties in 2000 was only 1.9 percent, compared to 18.1 percent in urban counties. Urban enrollment declined gradually over the same three years, with a net loss of 26.0 percent. The abrupt decline in rural enrollment “might reflect retraction of a prior overexpansion by plans in extending their service areas to rural areas when it was not a viable business proposition.”\(^\text{39}\) Interviews with issuer organizations suggested that the floor alone could not incentivize them to enter a rural county in which formation of provider networks is challenging, either due to “physician bargaining power, hospital bargaining power,” in their words, or simply a lack of providers in an area.\(^\text{40}\) In other words, the insurers claimed that payment policy did not accurately mirror the fixed and variable components of cost in some places.

Changes in the bidding mechanism, in which rebates are offered to plans that bid below the benchmark rate, have accentuated the discrepancy between rural and urban counties. Medicare Advantage (as Medicare+Choice was renamed in 2004) plans that bid below the benchmark keep part of the difference, adding to their profitability and allowing them to offer “zero premium” plans to consumers. (The plan is then available for zero additional premium beyond the standard cost of Medicare Parts A and B, and some plans may also pay part or all of Part B.) Zero-premium plans are available predominately in urban areas.\(^\text{41}\) Because a zero-premium plan is very attractive to the MA consumer, plans can feasibly earn profits in the market by an increased market share, even though each payment per member per month is smaller. Furthermore, these larger numbers of enrollees help predict risk and model anticipated costs more accurately.

More recent changes to rebates, due to the PPACA, have added a quality incentive. MA plans with the highest quality ratings can keep a larger share of the difference between their bid and the benchmark. This has the potential to exacerbate the issue described above if the options for enhancing quality scores are easier to achieve in urban areas.

In addition, the PPACA made another fundamental change to MA payment: it created a system in which counties are ranked by their level of traditional fee-for-service (FFS) Medicare costs, divided into quartiles, and benchmarks are created that depend on the quartile of the county. MA plans
operating in counties in the highest-cost quartile receive only 95 percent of FFS costs, while counties in the lowest-cost quartile receive 115 percent of FFS costs. This again has a differential rural/urban impact: 46 percent of urban beneficiaries are in counties that are in the highest quartile, with FFS costs that can be more than double the lowest counties’ values. Even a benchmark that is “only” 95 percent of such an amount is a considerably higher value than the average. Even though 41 percent of rural beneficiaries are in a lowest-cost quartile county, now receiving 115 percent of FFS costs, the average benchmark for a rural enrollee is still substantially lower than for an urban one.\textsuperscript{42} One might argue that this makes some sense, since FFS costs are in fact lower. But this differential highlights the most critical aspect of the policy: the assumption that FFS costs reflect need and therefore are a “fair” anchor for payment. In fact, geographic data on the prevalence of health conditions suggests the opposite: rural Americans tend to be less healthy than urban Americans.\textsuperscript{43} Several studies have shown that utilization is lower,\textsuperscript{44} and it seems likely this is the main driver in differential FFS averages. (While certain parts of the country are more expensive than others, we believe that “geographic variation” is more relevant regionally than in an urban/rural discussion since rural patients typically seek their more expensive care in nearby urban areas and therefore incur those charges.) But lower utilization multiplied by lower allowable charges determined by traditional Medicare may not capture the full cost of truly managing someone’s care in such a way that life and quality of life are extended. Furthermore, many providers state that they do not make any money on traditional Medicare patients, and evidence suggests that at least in primary care this is true.\textsuperscript{45} In 2011, MedPAC found that 64 percent of hospitals lose money on Medicare patients.\textsuperscript{46} Therefore, FFS costs may not be an adequate basis for the bidding benchmark if there is a broad goal of equitable outcomes across urban and rural beneficiaries and an interest in compensating providers sufficiently to make sure they can cover their own costs of delivering quality care.

Fundamentally, the market-based approach has not served all rural Medicare beneficiaries well. In places that have sufficient providers to form networks, firms will participate and offer MA plans. But it is worth noting that not all counties have even one firm participating in the program.\textsuperscript{47} Furthermore, having a payment that is anchored to utilization of services occurring outside the MA program is conceptually flawed. Market-oriented reforms could potentially include a better payment design for incentivizing health, for example tying payment to the expenditures required to maintain or improve health in a county with a given set of socioeconomic characteristics. Quality measures could be modified to include such improvements, at the plan/county level, and a modest 1-2 percent bonus payment could reward achieving high quality.
The Medicare prescription drug benefit program, Part D, added in 2006, has proven to be relatively successful at reducing access disparities between rural and urban populations. Concerns had been raised initially regarding the potential of the proposed program to meet rural needs, but large, multi-state rating areas and generous subsidies have proven a good combination for encouraging issuer participation and beneficiary enrollment. Medicare Part D may be an instructive example for utilizing a market structure to allocate health insurance, although the lack of need for network formation limits the applicability beyond prescription drugs.

**Health Insurance Marketplaces.** The PPACA of 2010 reformed the individual market for health insurance significantly, standardizing coverage options and creating a platform—an online marketplace “exchange”—where consumers could shop for plans and compare features. More significantly, the legislation provided income-based subsidies to assist many consumers in purchasing coverage on the exchange, although “off-exchange” policies continued to exist without subsidization. Insurance companies were encouraged to participate in the new marketplace by the promise of a new guaranteed market—thanks to the mandate requiring everyone to purchase insurance—and by a system of risk adjustment payments to be made for the first three years of marketplace operation. The latter seemed necessary given the little available data on the likely health and utilization of the newly insured population. Another important aspect of the PPACA, from a rural viewpoint, was the specification of geographic rating areas. The rating area is the unit of geography within which firms must charge the same premium to a person of the same age, and it is also the unit of geography in which a decision to offer coverage may be made. These areas, designed by each state, are as small as individual counties and as large as the entire state. Many states chose a design in which each metropolitan area was grouped with adjacent or nearby rural counties into one rating area. Seven states opted for the “MSAs+1” default, in which each metropolitan statistical area in the state became its own rating area, while all of the rural counties in the state were grouped together.

Early experience with Health Insurance Marketplaces (HIMs) was largely positive, with people in many rural areas being able to buy coverage from at least two or three different companies in 2014, the initial year of implementation. Firm participation increased in 2015, and premium increases were modest in most areas. There was some evidence that in remote rural areas, options were more limited, while premium growth was higher, but in general, the market seemed to be functioning. In October 2015, however, the Centers for Medicare & Medicaid Services (CMS) announced that only 12.5 percent of promised “risk corridor” payments would be made. Risk corridors, along with a reinsurance program, were to operate for the first three years to give firms time to acclimate to the conditions in the
new market. The risk corridors were intended to limit gains and losses to an allowable range; reinsurance was an insurance program for insurers so those who had high-cost enrollees would be able to receive additional payments from insurers with low-cost enrollees. However, risk corridors were later determined to function as reinsurance, it was argued, and only the amount collected from firms with gains above the limit could be distributed to the firms with losses below the limit. This departure from a risk corridor system in which losses were truly capped left many small—and a few large—insurance companies struggling. The majority of the non-profit “co-ops,” many of which offered insurance coverage in rural areas, went bankrupt. The importance of this point is hard to overstate: the risk corridor payments, which were expressly designed to induce firm participation in the new marketplace by decreasing the potential losses from inadequate predictability of costs, are exactly the type of policy addition that is vital to the successful launch of a market-based program in a rural area.

Data on 2016, and especially 2017, plans show that the number of firms participating in HIMs has declined, and that much of the decline is occurring in rural areas. In 702 of the 1,976 rural counties in the U.S., only one firm offered plans in 2017. Average adjusted premiums increased by double digits in many rating areas, but the increases in the lowest-density rating areas (below 50 people per square mile) averaged 26.6 percent, compared to average increases of 14.2 percent in rating areas with 1,000 people or more per square mile. The overall trend is that the rate of premium increase grows as population density declines. This same trend has applied to non-HIM (“off exchange”) plans as well.

**Rural Policies and Challenges**

**Policies Addressing Market Failure.** As the preceding historical narrative suggests, policy interventions in health insurance markets have attempted to remedy market failures, and to some extent problems facing rural areas. Since the 1980s, policies have emphasized economic theory and market mechanisms in order to motivate profit-maximizing private firms to offer coverage, including the following: the bidding mechanism that rewards lower-cost MA plans over their competitors, interventions to shift from FFS to Medicaid managed care, and the capitation payment model that rewards firms for averting high costs by allowing them to profit from their success. The adverse selection problem is addressed through risk adjustment payments in MA, in some Medicaid managed care contracts, and in the HIMs. Adverse selection is also addressed through the individual mandate, and through automatic, opt-out enrollment in the FEHBP and in traditional Medicare, although it has still been observed in FEHBP across plan types.
Although these design elements have been developed to address market failures overall, none of these explicitly focuses on market failures found in health insurance or health care delivery in a rural setting. As noted above, one of the biggest problems in rural markets is low population density, making it difficult for insurance firms to implement risk adjustment techniques. In principle, if risk could be perfectly assessed on the basis of known, measurable factors, risk adjustment could control for the fact that rural populations tend to be less healthy for a number of reasons. However, most studies suggest that ability to predict risk is quite imperfect, with less than half of utilization predicted by known factors that can be modeled.\(^59\) Moreover, while these inaccuracies can easily be canceled out on average in a large population, it is more difficult to compensate firms serving small populations when outliers occur. Thus, risk adjustment is a policy response that has not been customized for rural areas.

The unit of geography chosen for rating areas can also be problematic when implementing policies in rural areas. The design of rating areas under the PPACA, as described earlier, was left to the states. Three states selected county-level rating areas and seven of the smaller states selected state-level rating areas, while most states fell somewhere in between. The default “MSAs+1” design was implemented in Alabama, New Mexico, North Dakota, Oklahoma, Texas, Virginia, and Wyoming. In some states, rating areas and service areas must align; in others, firms can select by county. As discussed in the FEHBP context, this level of choice on the part of the profit-maximizing firm leads to treatment of each county (or group of counties) as a marginal decision to be made: whether to add this rural county to the principal service area, or exclude it, depending on whether doing so is likely to increase overall profit. Considering that such a county (or group of counties) may yield only a few hundred enrollees, it may not be worth the cost of establishing contracts with service providers and hospital systems, given the likelihood of a poorly performing risk model and the possibility of high-cost outliers. In 2016, rural enrollment averaged 847 people in Federally Facilitated Marketplaces, with a range from 10 to 8,493, while the average enrollment in urban counties was 8,803 people, with a range from 42 to 392,901.\(^60\)

While the policy of rating areas was intended to acknowledge the variation in costs and utilization that characterizes our nationwide health care landscape, giving insurers the flexibility to set premiums accordingly, the impact on rural populations was not sufficiently considered. The urban/rural aspect of the “MSAs+1” default suggests that policymakers gave some thought to the differential, perhaps imagining that the lower overall price levels in many rural places would lead to lower premiums in those places. In a few cases, this may be true. However, since rural people typically seek more complex (expensive) care in the closest urban area, many of their per-service costs will be the same as those of their urban neighbors.\(^61,62\)
At the state level, policymakers have turned to private firms, believing that market-based policy in the form of Medicaid managed care, can help control budget costs. The number of states with rural counties that operate statewide Medicaid managed care programs continues to grow, with many states relying on a mixed or primary care case management (PCCM) program. Many states also incentivize coverage in rural areas, i.e., increasing payment rates in those areas and encouraging regional contracting. Thus, at the state level, it is acknowledged in policy that rural areas may require a different model. The PCCM model, as well as the enhanced PCCM model that has been tested in several states, provides varying degrees of care coordination and case management, but there is no risk to the provider or to any other third party. The state pays its usual FFS Medicaid rates to providers, plus an additional fee to the primary care provider to compensate for case management services. There is no expectation that the power of competition can save money, simply because managed care organizations do not want to compete in these areas.

There is also a connection between the historical presence of a firm in the Medicaid managed care market and the likelihood that that firm can succeed in the HIMs. Demographically, the most-subsidized HIM consumers (who represent the bulk of enrollment) are fairly similar to able-bodied Medicaid enrollees, and it is easier for firms to enter and succeed in markets they can accurately gauge.

**Additional Rural Challenges.** As we have noted, several challenges to rural health insurance markets’ success stem from low population density issues. We discussed many of the core issues using the language of market failures and identifying areas in which the assumptions of the perfectly competitive model do not apply. Beyond these issues, additional factors are likely to influence success in rural areas. Broadly viewed, these factors relate to “social efficiency,” meaning the set of outcomes that are in the best interest of society and social goals. In an ordinary, perfectly competitive market, economists assume that social efficiency is obtainable through the market mechanism. In health care, however, significant positive effects to society (e.g., caring for the poor and disabled, improving population health) are not represented in private market transactions. In this section we discuss several of these issues, all of which indicate a need for additional structure or regulation around any market-based policy solutions. The issues include:

- structural differences between urban and rural delivery systems due to differing goals;
- difficulty in crafting equitable rural payment policies;
- greater sensitivity in rural places to precise policy details, due to the greater role of public funding of health care; and
demographics in many rural places that differ from those in urban places, including a greater degree of poverty, an older population, fewer large employers to provide health insurance, and in general lower attainment of many of the factors considered to be the “social determinants of health.”

One key aspect of rural health care delivery systems that sets them apart from their urban counterparts is that they are much more likely to play a central role in the rural community. They are viewed as the hub of public health and community benefit initiatives, and as such the overall well-being of the community is in their hands. Rural hospitals, like urban hospitals, may qualify for Federal tax exemption due to “community benefit” status, and these savings are meant to correct for the fact that the market, on its own, will fail to adequately fund such social benefits. (This is an example of the economic concept of “positive externality,” a situation in which benefits accrue to society at large due to market activities.) However, the community benefit policy incentive only exists when hospitals run a budget surplus, whereas the need is probably most severe in underfunded hospitals in very poor areas. As rural hospitals struggle to meet needs of the community, providing services that increase the health of the community at large, a dedicated payment to offset these hospitals’ costs may make sense. Recognition of this community-level issue is part of what motivated the CMS innovation grants for Accountable Health Communities (AHCs). In April 2017, 32 communities were selected to pilot this model, including four that operate predominately in rural settings and five more that operate in a mix of urban and rural counties and will have significant rural presence.66 If successful, these AHCs may demonstrate a way for the unique role of rural hospitals in their communities to be addressed through a similar policy that recognizes the hospital as the health hub of the community. Such payments dedicated to community benefit activities, in this case in the form of referrals and navigation of social services that are at the foundation of public health, would be added to the operating revenue of a rural hospital. Firms wanting to offer plans in any of the managed care markets may be more likely to do so, knowing that the potentially costly social determinants of health are being addressed.

In addition to issues discussed above that are tautologically rural/low-volume problems, payment policies have sometimes been a source of unequal outcomes for certain rural populations. While some payment policies target rural places, such as those for Critical Access Hospitals and Rural Health Clinics, other policies have deliberately paid less in rural places because some measure of costs tends to be lower. The MA program prior to the PPACA is an example: county-level benchmarks, against which private firms’ bids would be assessed, were closely related to the FFS average Medicare costs in the county. Benchmarks were so low that few firms offered plans in many rural counties—until a separate “rural floor” was created. This example supports the general observation that the formation of
networks, including building relationships, negotiating contracts, and ensuring access to specialty care, adds to the costs of care. Making an organization (e.g. an insurance company) responsible for availability of care for an individual, as opposed to leaving the individual to navigate such issues for himself, represents both a cost and a benefit. In an urban setting, the responsibility for making care available is fairly easy to meet, but in many rural settings, it requires deliberate effort that may be further hampered by network adequacy standards. Payment policy could be designed to recognize the benefit of making care available and cover the costs of providing it.

Another challenge in rural areas stems from the volatility in the economic environment—in terms of demand by paying patients and contracts with providers coping with variations in uncompensated care—which makes a functioning private insurance market more challenging. As argued above, firms make decisions on the basis of consistent profitability and are more likely to avoid situations that are unpredictable. In general, rural residents are more dependent on public dollars for health care funding, due to an older and poorer demographic mix. This dependency means that rural people’s and communities’ health can be more sensitive to changes in public policy at the State and Federal levels. In particular, during economic downturns, if budget neutrality is a policy goal, then public funding shrinks. While this is true across the board, it has a larger impact in places that depend more heavily on public dollars. This is not to argue that such dependency is inevitable or that measures to offset its impact should be codified into payment or other policy; ideally, policies outside the health sector should address income inequality and render the point moot. But, in the meantime, recognizing that fluctuations in public dollars in rural communities create volatility, policymakers could consider tying certain payments to the business cycle, so that they rise when economic growth falters and/or when unemployment rises.

Several demographic factors also combine to produce rural places that have a higher need of health dollars, but in which the market mechanism will be unable to achieve such an allocation. The argument that a market outcome will be efficient relies upon the assumption that the demand for a product or service is a representation of what people are willing to pay, which indicates how much they (and therefore society) value the item. However, economics also states that willingness to pay comes from an individual’s choices subject to a budget, which means that ability to pay also affects demand. For those who are unable to pay, in theory there will not be demand even for services that may be lifesaving. Several demographic factors are likely to contribute to such a scenario. First, the rural population is older: 17.0 percent of the rural population is aged 65 years or older, compared to 13.4 percent of the urban population. Second, the rural population experiences greater poverty: 17.9
percent of residents of micropolitan statistical areas and 18.3 percent of residents of rural (neither metropolitan nor micropolitan) counties earn incomes below the Federal poverty level, while 15.0 percent of those in metropolitan statistical areas live in poverty. Health status, unhealthy behaviors, and all-cause mortality rates across all age groups show that health care needs increase as location becomes more rural. Furthermore, availability of employer-sponsored health insurance is lower in rural areas mainly because there are fewer large firms that are required to offer it. A total of 55.6 percent of all people in urban counties, compared to 49.1 percent of people in rural counties, have health insurance through an employer. All of these factors combine to create a greater potential need for affordable (publicly subsidized) options for accessing health care in rural areas. Beyond that, the “social determinants of health” concept is that poverty itself leads to worse health outcomes, so the fact that rural populations face greater poverty predisposes them to a higher level of health care need. Addressing those needs is a necessary step to reverse the causality; an investment in health can be viewed as an investment in the future earning potential of this portion of the workforce.

Rural Policy Analysis

Successful Aspects. Over the course of several decades and many different programs, numerous policies have been adopted with the goal of combatting the market failure inherent in health care delivery and health insurance provision. A handful of approaches have proven successful in utilizing a market mechanism in rural places. Growth in the private insurance sector has been relatively successful in geographic areas with a strong history of private sector managed care. Strong local leadership has been critical in creating health systems that connect rural and urban providers. The creation of Medicare Part D has closed the underinsurance gap for rural elders. The slow, steady enrollment growth in MA in both rural and urban areas signifies continued increase in choices available to rural seniors, although an enrollment rate differential remains. Finally, over the past four years, the PPACA has brought about significant gains in the number and percent of insured persons in rural areas, due to the combined impact of HIMS, Medicaid expansion, and the increase in eligibility standards and uptake rates in the Children’s Health Insurance Program. Financial support in the form of premium subsidies, cost-sharing reductions, and direct provision of services has clearly been beneficial to many rural residents.

Building on these successes may be accomplished by spreading some of the strategies used. First, incentivizing firms to participate in any program in lower-volume places by creating a minimum, or floor, payment can compensate firms for the value they create by network formation, in terms of having providers of various services accessible and available. Second, a bidding mechanism or process that contains rebates to lower-bidding firms may better encourage firms to participate. Third,
standardization of coverage levels (such as the “metal levels” of the HIMs) is an important component to any consumer-directed approach, so that consumers have the information needed to make comparisons. Fourth, creation of relatively large pools of enrollees is critical for firms to predict risk, and therefore price their products, accurately. On that note, a “nationwide” plan (as in the FEHBP) with universal community rating (at each age) is one potential way to achieve this—with the caveat that the HIM and MA populations differ from the FEHBP population.

**Problematic Aspects.** Other aspects of market-based policies have not performed as well in rural places. Allowing the county to be the unit of geography at which firms can decide prices and participation discourages firms from offering affordable coverage in many rural counties; because of population characteristics (sparsely populated regions, high health risk population), the additional benefit may not be worth the additional fixed costs incurred. Setting MA bidding benchmarks as a function of FFS Medicare costs, even though these depend heavily upon utilization, is detrimental to firm participation in rural areas because such values do not adequately reflect the underlying cost structure (including costs to insurers not included in traditional Medicare payment) in rural areas.

In some cases, the classical economics assumptions may not hold, as in the case of few or no providers in many rural areas and a lack of competition among some rural hospital systems. In this context, the “moral hazard” that is created by the standard FFS model—when, for example, the provider recommending certain tests or treatments, for which he or she will be reimbursed, knows more than the patient about their condition—can potentially be more pronounced. In urban areas, the recourse of a second or third opinion is more easily accessed than in rural areas.

**Specific Policy Considerations for the Individual Market.** Allowing private firms to compete for the opportunity to provide a service is a fundamental value of the capitalistic, market-driven U.S. economic system. The challenge is to provide enough structure, through regulation of the health insurance market, that efficiency gains can be captured without sacrificing equity across subgroups of the economy. Thus, government regulation is designed to help markets function more like the perfectly competitive ideal market, to the extent possible. In order to improve the functioning of private individual insurance markets in rural areas, policymakers may wish to consider a range of options. We describe several below, drawn from the literature and policy actions, without favoring as specific recommendations:

- **Maintain insurance reforms.** A number of insurance market reforms have significantly improved the access, costs, and quality of insurance plans to all citizens, including rural people, and these reforms could remain in place. This includes but is not limited to reforms such as setting essential health
benefits, expanding access to preventive care, allowing access to coverage for dependents up to age 26, and banning restrictions on pre-existing conditions.

- **Redesign rating areas.** Policies that would encourage or require states to consolidate rating areas would expand the size of risk pools (including statewide risk pools), helping insurers spread risks across a greater number of people and perhaps discourage insurers from exiting rating areas with small populations. Any higher fixed costs associated with hedging risk and with forming networks in rural areas could be spread across many individuals, resulting in nominal increases for all residents of the rating area and more choice in rural areas. In particular, consolidated rating areas in which each rural county is included in the same area as its nearest urban neighbor could be considered.

- **Rethink network adequacy.** State insurance commissioners could consider requiring plans to offer insurance across an entire rating area if the plan is offered anywhere in a rating area, essentially requiring that rating areas and service areas align. Network adequacy determinations and enforcement could be left to the states, as travel customs and expectations vary in different places, with the caveat that this information should be conveyed to the consumer in some form as he or she is purchasing the plan. Thus, some standard measure of networks or travel distance should be developed to increase transparency on this issue.

- **Offer plans across multiple rating areas.** Policies that create explicit incentives to establish plans offered across multiple rating areas, including across an entire state or across state lines as multi-state plans, could encourage insurers to develop and maintain these plans, which have not grown as anticipated in the PPACA. For example, it may be possible to attract a truly nationwide plan, which would guarantee the offer of coverage across all counties in the U.S., in return for a lower medical loss ratio of, say, 78 percent instead of the standard 80 percent.

- **Strengthen risk reinsurance and risk adjustment.** Reforms that offer insurers protection, such as a reinsurance pool, could insulate firms from concentrated risks in some areas or volatility in insurance costs over time. Adjustments to risk formulas—the current geographic component of the risk adjustment methodology redistributes only at the state level—could also be made to encourage firms’ participation in more rural parts of the country.

- **Encourage demand for marketplace plans.** Policies that encourage individuals to purchase “on exchange” insurance plans could help stabilize markets in rural areas and would encourage firms to enter and stay in those areas. Some of these policies include increased outreach, guaranteed payment of cost-sharing reductions, and automatic (opt-out) enrollment. Other policies include sunsetting “off exchange” grandfathered plans and discouraging “off exchange” enrollment.
• **Encourage the development of rural provider networks.** In order to enhance the development of rural health insurance products, policy could recognize that creation of provider networks and access to care, defined as a network of providers who will see patients with a given type of insurance, is in itself a service that incurs a cost. It is a service that is relatively easy for insurers to provide to metropolitan and even many micropolitan residents, but it is much more challenging to provide to rural populations. This is especially true in the more remote and the more poverty-stricken parts of the rural landscape. As such, policies could be redesigned in a way that explicitly reimburses this cost. Additionally, policies that encourage rural providers to form networks across larger geographic spaces would create single entities to contract with health plans, considerably lowering transaction costs for those plans.

**Conclusion**

We conclude with some general guidelines for evaluating the potential of policies that utilize market-based solutions to succeed in rural areas, noting that success may depend on the degree of rurality. Many programs could be improved from a rural standpoint by scaling up the level of geography well beyond the county level, both for bidding/pricing purposes and as a decision point for firms offering coverage. Expansion of the Medicaid managed care PCCM model in rural areas to a more enhanced version, in which providers perform more active case management, could be piloted to determine appropriate reimbursement strategies. In general, the economic approach is for payment to reflect the higher fixed costs per capita of comprehensive care management—of actually improving health outcomes—in rural areas. A similar observation holds for MA: firm participation may be much more readily incentivized by the offer a fixed payment for participation in a rural county, partly offset by lower variable (per enrollee) payments. Firms could potentially receive rebates for underbidding on each component of the reimbursement formula.

Going even further, policy would ideally shift entirely from a focus on the provision of medical interventions to a focus on health maintenance and prevention. For this to happen, many payment models must be redesigned. We believe that this approach can be strengthened for rural places by an explicit provision in the funding mechanism for higher fixed costs in rural places. Moreover, we suggest that these models can flourish within the Medicaid, Medicare, and HIM settings if payment policies are based upon health indicators in the geographic area of the program, rather than upon direct costs incurred. A formula that specifies payment indexed to mortality, presence of chronic conditions, and poverty, giving the states flexibility to address these issues on a population level by innovative means,
could benefit both urban and rural citizens. In an environment of increasing Medicaid managed care, locked-in budget limitations will make it difficult to find bidders for contracts that include significant rural territory, especially in the short to medium term, as investments in better health cost more over this time horizon before paying dividends over the long term.

Market-like structures have the potential to work in many—although probably not the most remote—rural areas. Large, possibly nationwide, risk pools and a payment structure that acknowledges the fundamental differences in the cost structure of providing access to care in rural areas are essential. Financial assistance scaled according to income expands the pool of purchasers, mitigating the deterrent that lower average incomes in rural areas may create. Flexible ways to direct funds to programs that meet local needs and preferences are also key. Finally, a commitment to transparency, as well as efforts to increase health literacy and health insurance literacy, will aid all consumers in doing their part—shopping and comparing options—which is needed in order for these government-regulated marketplaces to become socially efficient.
References

28. Individuals are classified as being disabled if they cite having hearing, vision, cognitive, ambulatory, self-care, or independent living difficulties.


66 See https://innovation.cms.gov/initiatives/ahcm/ for further details. The four predominately rural AHCs will be in western CO, southern GA, northern KY, and western MS. The five AHCs with significant rural presence are in upstate NY, southwestern OH, northwestern OR, western VA, and western WV.


70 Authors’ calculations from 2015 ACS 5-year estimates, Table C27004.
