Accountable care organizations (ACOs) are a health care payment model designed to reduce costs while improving quality. In an ACO, a group of providers is collectively held accountable for the overall cost and quality of care for a defined patient population. Patients are typically assigned to a primary care provider (or, in some cases, a specialist) who helps ensure that patients receive efficient, coordinated care.

ACOs are intended to address concerns of both cost and quality through several mechanisms. These include encouraging better care coordination (for example, provider communication across care settings); providing incentives for prevention and management of chronic diseases (for example, increased focus on primary care; disease management programs); and reducing overutilization (for example, emergency department use). By incorporating meaningful performance measures, the ACO model is intended to ensure that cost savings come not from stunting on needed care, but rather through improving the quality of care.

Implementation of these models is happening in the private sector as well as in both Medicare and Medicaid. The Medicare Shared Savings Program, for example, allows groups of providers to achieve shared savings for Medicare beneficiaries. It is the single largest ACO program under way: Twenty-seven organizations were participating as of April 2012, and eighty-nine additional organizations were named as participants in July 2012.1

Although all populations could benefit from better quality of care, those with complex medical problems or social needs may stand to gain the most from improved care. Scholars, policy makers, and health care leaders, however, have expressed concerns about potential risks to these vulnerable populations in ACOs.2

These discussions are grounded in a common principle that the promise and implementation of accountable care should not be available only to the privileged, but rather that all groups should have equal access to and benefit from this new health care delivery model. Discussion has focused first, on policies that may facilitate the implementation of ACOs in Medicaid and safety-net systems3,4 and, second, on ensuring inclusion of all patients into accountable care2,5 and...
related pay-for-performance programs.6–8

In this article we suggest a framework for considering probable challenges faced by vulnerable populations in ACOs, and we outline policies and programs that may be important to ensure that ACOs achieve their full promise. We first discuss two conceptually distinct categories of vulnerable populations, and we then describe challenges that ACOs will need to overcome to achieve potential benefits. Finally, we offer suggestions for policy levers intended to address these challenges and ensure that ACOs improve care for vulnerable populations.

Defining ‘Vulnerable Populations’
Within the broad term vulnerable populations, it is useful to identify two distinct but overlapping populations (Exhibit 1). The first is clinically at-risk populations: patients with clinical conditions or risk factors that render them at risk for poor health and medical outcomes, particularly if they do not receive timely and high-quality health care.

Clinically at-risk groups could benefit from the emphasis on quality and coordination associated with accountable care. Effective care coordination and chronic disease management could, for example, provide more patient-centered care, improve adherence to treatment plans, and prevent chronic disease progression.

The second vulnerable population is socially disadvantaged groups. The socially disadvantaged are characterized by social, economic, or geographic characteristics that may directly or indirectly affect their ability to obtain high-quality care and achieve desired health outcomes. Examples of socially disadvantaged groups include racial minorities, the poor, and those with low social support, who may feel financially or socially isolated.

Socially disadvantaged groups also have much to gain from accountable care, particularly in terms of quality, because they experience overall worse health, have a higher prevalence of many conditions (for example, chronic medical conditions and substance abuse), and receive much lower quality of care overall.9 A major driver of this overall poor quality is the concentration of care for socially disadvantaged groups in a subset of hospitals and providers that are lower performing.10,11

The focus of ACO contracts on financially rewarding improved care has the potential to provide both incentives and financial resources needed to foster improvements in quality. In addition, the capacity of ACOs to allocate shared savings to services other than those covered by traditional fee-for-service arrangements may foster closer collaboration among health care providers and social service organizations, addressing a more holistic set of patient needs. For example, ACOs serving a sizable homeless population may be able to use a portion of their shared savings to work with local housing agencies to help patients get into stable housing and thereby reduce related, unnecessary medical spending—such as a longer-than-necessary hospital stay that occurs simply because a patient doesn’t have a home to go to.

Although socially disadvantaged and clinically at-risk groups are conceptually distinct, the two groups overlap substantially, affording both challenges and opportunities for ACOs. For example, many beneficiaries who are dually eligible for Medicare and Medicaid are both socioeconomically disadvantaged (86 percent have incomes below 150 percent of the federal poverty level) and in poor health (60 percent have multiple chronic conditions).12

Social disadvantages compound the difficulty in receiving timely, appropriate, and high-quality health care. Language barriers, for example, can make it more difficult for providers to share

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**Exhibit 1**

Categories And Overlap Of Vulnerable Populations In The US Health Care System

<table>
<thead>
<tr>
<th>Socially disadvantaged:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Racial and ethnic minority</td>
</tr>
<tr>
<td>Live in low-income neighborhood</td>
</tr>
<tr>
<td>Have low incomes</td>
</tr>
<tr>
<td>Have low education levels</td>
</tr>
<tr>
<td>Reside in rural areas</td>
</tr>
<tr>
<td>Homeless</td>
</tr>
<tr>
<td>Non-English-speaking</td>
</tr>
<tr>
<td>Uninsured/underinsured</td>
</tr>
<tr>
<td>Have low social support</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Clinically vulnerable:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have complex chronic illnesses</td>
</tr>
<tr>
<td>Have acute serious illnesses</td>
</tr>
<tr>
<td>Have high health risks</td>
</tr>
<tr>
<td>Frail elderly</td>
</tr>
<tr>
<td>Patients nearing the end of life</td>
</tr>
<tr>
<td>Very young children</td>
</tr>
<tr>
<td>High-utilizer patients</td>
</tr>
<tr>
<td>High-cost patients</td>
</tr>
<tr>
<td>Dual-eligible beneficiaries</td>
</tr>
</tbody>
</table>

**Important characteristics:**
- Geographic concentration
- High use of social services
- Health care concentrated in low-performing health care systems

**Important characteristics:**
- Social needs exacerbate clinical needs
- Greatest opportunity to reduce cost, improve quality, and reduce disparities

**Important characteristics:**
- Geographically dispersed
- High use of clinical care
- All socioeconomic groups affected

**Source:** Authors’ analysis.
treatment plans for chronic conditions with non-English-speaking patients.

Despite these challenges, it is with this highly vulnerable group that ACOs may have the most potential to make notable gains in cost and quality and to reduce overall disparities. For example, work in Camden, New Jersey, has focused on meeting the needs of this set of highly vulnerable patients, making tremendous strides in reducing costs and improving patients’ health outcomes.13

Pathways To Accountable Care: An Analytic Framework
Despite substantial and important overlap, the distinction between being socially disadvantaged and being clinically at-risk is important when considering how ACOs might affect vulnerable populations. We developed an analytic framework to take into account concerns about each group.

Clinically at-risk individuals and groups are present in all health systems and potential ACOs. The potential obstacles these people face will be whether or not any one of them actually receives high-quality care within a given ACO. In contrast, socially disadvantaged individuals and groups are highly concentrated in a subset of communities and receive care at a subset of health systems. For these people, obstacles to accountable care largely hinge on whether their health system or community is able to form an ACO, and if that ACO is able to achieve high quality and cost savings.

The distinction between individual-level challenges and community- or health system-level challenges allows us to clarify the different processes whereby vulnerable populations may encounter obstacles on the path to accountable care (see the online Appendix).14

We first consider the process by which a given patient may encounter obstacles to receiving high-quality accountable care. These are most relevant for clinically vulnerable patients.

First, the patient must be eligible for an ACO, meaning that the patient must receive care at an organization with an ACO contract and must have the insurance associated with that contract. If the patient is not eligible—for example, if he or she is uninsured—the patient is diverted off the path to accountable care. If the patient does have the correct type of insurance—namely, insurance with a payer that participates in the specific ACO—the patient may become an ACO patient. This is known as being “attributed” to the ACO for purposes of cost and quality evaluation.

The literature on performance measurement, public reporting, and pay-for-performance has shown that providers may either try to avoid caring for a patient or refer patients elsewhere, known as “patient dumping,” if the providers are concerned that being responsible for such a patient would make it harder to meet quality or cost targets.15,16 If an ACO avoids or selectively refers out certain types of patients, such as high-cost or high-need patients, a patient may end up unassigned to the ACO patient population and ineligible for ACO interventions. Once again, such a patient would be diverted from the path to accountable care.

Finally, the patient must receive attention from providers appropriate to the patient’s needs and conditions. If an ACO is unable to provide appropriate care because of a lack of resources or tools, or is unwilling to provide adequate attention because of insufficient reimbursements to cover patient needs, the patient might not receive high-quality ACO care.

Socially disadvantaged populations face additional barriers on the road to accountable care. Because socially disadvantaged people are frequently concentrated within geographic areas, the challenges to their participation in an ACO largely occur at the level of communities and health care organizations (see the online Appendix).14

Consider a provider system in a given community. The group of providers first must be able to enter into an ACO contract. Safety-net organizations in particular may lack the financial capital, capabilities, and infrastructure required for ACO formation. For example, systems serving a large share of socially disadvantaged patients may face greater challenges to ACO formation resulting from the lack of an adequate health information technology infrastructure,17,18 from the current fragmented structure of the safety net,19 or from having too few beneficiaries to participate in an ACO arrangement.

If providers are unable to form an ACO, the patient community will not have access to accountable care. Additionally, if providers are able to form an ACO, the ACO must then be able to perform well on quality and cost measures—both for the sake of the patients and for the organization to obtain additional resources through shared savings required to improve care.

If the ACO is unable to meet cost and quality benchmarks, the ACO initiative may end up widening existing disparities between high- and low-performing systems. Again, a lack of capabilities such as health information technology, care management, and care coordination may impede ACO performance on both quality and cost.

Overall, the processes delineated here suggest that there are real obstacles for both clinically at-risk patients and socially disadvantaged groups
to achieve access to ACOs and receive high-quality, low-cost care. These issues are important to consider in developing policies that foster inclusion of vulnerable populations in ACOs and allow them to fully share in benefits that may be accrued.

Policies For Ensuring Full Inclusion
Recognizing the barriers that exist both within ACOs and across communities, specific policies are needed to enable both patients and health systems to benefit from accountable care. We identify nine policies aimed at fully including vulnerable populations in the ACO model (Exhibit 2). We organize them into three broad areas: financing strategies, performance measurement and monitoring, and promoting ACO formation and performance. For each, we include illustrative examples.

FINANCING STRATEGIES
▸ START-UP FINANCING: Start-up funding for financially pressed systems may encourage ACO formation in communities that would otherwise lack access to this care. Small and underfinanced systems may have a difficult time allocating resources toward ACO development. Policies or programs that provide up-front funding could fill this gap.

For example, the Medicare Advance Payment Initiative aims to help smaller organizations, such as small rural and physician-based organizations, participate in the Medicare Shared Savings Program by providing up-front capital to invest in necessary infrastructure and resources for care coordination. Five organizations were awarded Advance Payments in the April 2012 round of applications, and another fifteen organizations were awarded them for the July 2012 start.

Participant organizations receive two types of up-front payments: an initial payment (part fixed and part variable, based on the number of assigned beneficiaries) and a monthly payment. These payments are made “in advance” of the savings that the organization achieves, and Centers for Medicare and Medicaid Services (CMS) expects to recoup payments from future shared savings. Private payers, state Medicaid programs, and Medicaid managed care organizations could consider similar types of advance funding programs to help ACOs that are rural, small, or less affluent.

▸ APPROPRIATE RISK ADJUSTMENT: Appropriate risk adjustment could address challenges in caring for vulnerable populations by ensuring that ACOs have spending targets that accurately reflect their mix of clinically vulnerable patients. Such a structure of risk adjustment and spending targets will ensure that providers serving a high proportion of vulnerable patients are willing to enter into an ACO contract—and that high-risk patients within an ACO are not avoided, selectively referred out of the ACO, or dumped so as not to negatively affect ACO cost benchmarks.

For example, the Medicare Shared Savings Program uses a method of risk adjustment that takes into account diagnostic codes as well as Medicaid status, disability, and nursing home residence. By accounting for more than just clinical diagnoses, this type of risk adjustment might help alleviate concerns among systems that serve a high proportion of patients that may be more challenging or complex, such as dual-eligible beneficiaries.

Coupled with effective performance measure-
ment, risk adjustment will not result in a lower standard of care for vulnerable patients. Rather, it ensures that ACO spending targets are sufficient to cover the needs of all patients.

**Well-Designed Reward Systems:** Careful design of financial rewards will ensure that ACOs caring for more challenging populations are able to succeed. Financial rewards are tied to performance on quality measures under ACO contracts. ACOs providing care to more complex or costly populations or who begin with lower quality will have a harder time achieving absolute quality targets or thresholds.

Approaches that provide rewards only for absolute performance may widen financing disparities across systems if well-financed, high-performing systems consistently achieve more bonus payments than underfunded, low-performing systems. In contrast, approaches that reward incremental improvement will offer the greatest potential gains to those ACOs with initial poor performance.

The Medicare Shared Savings Program financial rewards were intended to balance the two approaches of absolute performance and relative gains by creating a minimum threshold but providing more savings for higher performance. A second example of carefully designed incentives is provided by the Premier Hospital Quality Incentive Demonstration, a pay-for-performance program under which participating hospitals were awarded incentive payments for specific quality improvements. In phase 1 of the demonstration, hospitals were rewarded only for absolute performance. In phase 2, incentives were changed to reward hospitals for relative improvement. This design resulted in more hospitals receiving incentive payments, particularly among hospitals serving a higher proportion of disadvantaged patients.

**Performance Measurement and Monitoring**

**Effective Performance Measurement:** Effective performance measurement can ensure that ACOs serving a high proportion of disadvantaged patients are not held to a lower standard of care. Additionally, high-quality performance measures may allow ACOs or payers to identify high-risk and vulnerable patients, stratify patient populations, and intervene to achieve better care or lower costs.

Effective performance measures will be meaningful to both patients and providers. One example of measures that hold much promise are patient-reported outcomes. Meaningful measures of patient experience, such as communication with physicians or ease of seeing specialists, are particularly salient for vulnerable populations. The Medicare Shared Savings Program has taken steps in this direction by including a domain on patient and caregiver experience as part of the thirty-three quality measures it uses, drawing seven measures from the Consumer Assessment of Healthcare Providers and Systems survey.

Medicaid programs should consider incorporating similar measures, but they will need to address the costs associated with administration of such surveys. For example, Medicare has agreed to fund the first two years of the Consumer Assessment of Healthcare Providers and Systems survey for Medicare Shared Savings Program participants. States or participating managed care organizations could provide similar investments for Medicaid ACOs.

**Monitoring Patient Populations:** ACOs are intended to improve care for all patients. However, one concern is that these improvements will not be uniform throughout an ACO’s patient population. Two potential obstacles to accountable care for vulnerable patients are patient dumping or avoidance and the possibility of provider inattention. These concerns may be mitigated through careful monitoring of patient populations on both enrollment and quality by payers, regulating agencies, states, or the federal government.

One mechanism to address concerns about patient avoidance or patient dumping is to monitor patient disenrollment or patient avoidance by ACOs. An example of such monitoring is in the Medicare Shared Savings Program, which is authorized to sanction ACOs that engage in patient avoidance or dumping. This process will involve monitoring beneficiary complaints and changes in risk scores from year to year. In addition, to ensure that all patients that an ACO sees are receiving high-quality care, quality reporting by population subgroups would allow payers, patients, and communities to monitor how ACOs are performing across subgroups, such as racial minorities or dual-eligible beneficiaries.

**Timely Evaluation:** Although the concept and implementation of ACOs have progressed rapidly over the past few years, we are still in the early stages. Most Medicare, Medicaid, and private-payer ACO contracts are just beginning their first performance periods. By conducting comprehensive evaluation on the implementation and performance of ACOs, we can learn how clinically at-risk and socially disadvantaged groups are being incorporated into ACOs.

Empirical work focusing on the challenges that safety-net organizations are facing in becoming ACOs, for example, would further enlighten policy makers and implementers on how to best advance accountable care in all segments of US health care. Additionally, several
Accountable care contracts may allow states to control costs while improving the quality of care. These programs could work with fee-for-service provision or could work within or in conjunction with existing managed care organizations and health plans.

Minnesota’s Health Care Delivery System Demonstration, for example, allows provider-led ACOs to test shared savings models for Medicaid patients. To date, nine organizations responded to the call for proposals, and contract negotiations are under way with the state. A similar example is Oregon’s Coordinated Care Organizations, which launched in Medicaid in August 2012. Coordinated Care Organizations will locally integrate and coordinate care; the program incorporates physical and mental health services and eventually dental care into one global budget that grows at a fixed rate. Early results from such demonstrations may provide a blueprint for other states interested in starting similar initiatives.

Rural and Regional ACO Collaboratives: A particular problem in rural areas or among small provider systems is having enough beneficiaries to form an ACO. Regulations for Medicare’s Shared Savings Program require a minimum of 5,000 beneficiaries, and private contracts thus far are often including several times that many. Policies that foster regional collaboration could create networks with enough beneficiaries for viable ACOs.

For example, Colorado’s approach to Regional Coordinated Care Organizations has broken the state into seven regions and encouraged collaboration and coordination within regions. These regions each chose a targeted community to start in the first year, and are now expanding efforts to their broader regions in the second year. Although no results are yet available on how the regional ACOs are performing, the Colorado model is a preliminary example of how regional initiatives could be developed.

POLICIES PROMOTING ACO CAPABILITIES: Policies that promote capabilities for ACO success—particularly in small, safety-net, or underperforming systems—may facilitate ACO formation and performance. Policies include those that improve health information technology capabilities; promote integration and care coordination, such as instituting care transition programs or employing care coordinators; and develop care management capacity, such as developing disease registries or implementing patient self-management programs. Such policies may have the most potential to influence safety-net ACOs’ ability to achieve cost and performance targets. In addition, systems that develop these capabilities may be less likely to avoid or dump patients and may be more likely to provide appropriate, high-quality care to their populations of clinically at-risk patients.

The federal government, states, managed care organizations, and other payers could take a variety of approaches. Programs could fund or provide incentives to providers to develop new programs or implement existing programs tailored to their patient populations. Alternatively, states could develop broader infrastructure and programs to aid several ACOs at once.

For example, in conjunction with its ACO initiative, Colorado contracted a Statewide Data Analytic Organization to build a data repository that can provide close to real-time data for regions, provider groups, and individual providers.

Another example of a broader state project is Project ECHO, based at the University of New Mexico, which provides protocol-driven statewide care management for patients with hepatitis C and other chronic conditions. The care is delivered by primary care clinicians under the guidance of the specialists at the university, who provide consultations when needed by video conferencing. Statewide initiatives such as these can build a broader infrastructure for accountable care in Medicaid and the safety net.

Conclusion

Care must be taken to ensure that the implementation of ACOs benefits not just the most advantaged, but also extends its potential benefits to vulnerable populations. In this work, we have defined two overlapping but important vulnera-
able groups: the clinically at-risk and the socially disadvantaged. Although overlapping, these groups face distinct obstacles on the path to accountable care.

Notably, because clinically vulnerable populations are geographically dispersed and use a good deal of clinical care, these patients are most susceptible to problems within a given ACO. In contrast, socially disadvantaged groups are geographically concentrated and receive a disproportionate amount of care in low-performing health care systems. They face barriers to care largely at the level of communities or health care organizations.

ACOs offer sizable potential benefits to each of these groups: the promise of improved care coordination and care management for the clinically vulnerable; and the promise of overall improved quality of care and coordination with social services for the socially disadvantaged. Obstacles to receiving accountable care involve access, quality, and cost. We must carefully design ACO programs and policies so that all Americans may experience the intended benefits of these organizations.

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NOTES


4 Shortell SM, Weinberger S. Advancing the capabilities of safety net accountable care organizations (ACOs). Berkeley (CA): University of California, Berkeley, School of Public Health; 2012.


14 To access the Appendix, click on the Appendix link in the box to the right of the article online.


In this month’s Health Affairs, Valerie Lewis and coauthors detail risks that vulnerable populations may not be fully incorporated into new accountable care organizations (ACOs). They define two distinct vulnerable populations, clinically at-risk and socially disadvantaged groups; discuss how ACOs may benefit each group; and provide a framework to use in considering challenges for both vulnerable patients and policies that can help overcome the obstacles.

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Fisher's current policy work focuses on advancing the concept of accountable care organizations and includes codirecting a joint Brookings-Dartmouth program to advance ACOs through research, coordination of public and private initiatives, and the creation of a learning collaborative that includes several pilot sites across the United States. Fisher holds a medical degree from Harvard and a master's degree in public health from the University of Washington.