# It's Time to Re-Examine Gainsharing

# An Elegant Solution to Critical Issues Facing Rural and Unaffiliated Hospitals

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## What is Gainsharing?

Gainsharing, one of the earlier shared savings models in the post-HMO era, seems to have taken a back seat to more comprehensive, broad gauge approaches to solving the cost/quality conundrum that has plagued our health care system for decades. Seeking to achieve the "triple aim," (Improving Population Health — Reducing Per Capita Cost — Improving the Patient Experience)[1], so-called "alternative payment models" or "APMs" have proliferated.[2]

Not all alternative payment models, however, fit all types of hospitals. Some are indeed a poor fit for many unaffiliated, rural hospitals.[3, 4]

Instead of focusing on the triple aim, rural and unaffiliated hospitals face a triple threat: (1) slim-to-negative operating margins; (2) physician mis-alignment; and (3) poor strategic positioning for APMs generally.

Gainsharing, on the other hand, is a proven cost-saver, a physician relationship builder, and helps position hospitals and physicians to participate in other forms of APMs such as Accountable Care Organizations (ACOs), bundled payments programs and clinically integrated networks (CINs).

This article discusses the gainsharing model in general and discusses impediments to the adoption of alternative payment models by unaffiliated, rural hospitals. The case is also made that, for certain unaffiliated rural hospitals, gainsharing is a particularly elegant solution for their current economic challenges and their path into the future.

Gainsharing is a hospital based program that financially incents physicians to be mindful of their choices of expensive medical supplies, diagnostic testing, equipment and use of the facility itself. If the hospital's costs are reduced based upon those choices, the physicians receive a payment that is tied to those reductions. (Gainsharing can drive shared savings among payors and providers, or, it can be used entirely as an internal hospital based cost savings plan in which hospital savings are shared with physicians.)

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Surgeons ordinarily have relatively unfettered discretion to determine length of stay, order diagnostic tests, order pharmaceuticals, use operating rooms and telemetry units, and select the medical devices, hardware and supplies used in connection with the procedures they perform. It has been reported that more than 80% of total medical costs is controlled by physicians.[5] Those choices can lead to dramatically different costs within the same hospital, for the same procedure. A study released by the Minnesota Department of Health in 2018 revealed that a spinal fusion procedure at one hospital cost $12,326 in one instance and $80,518 in another.[6] Gainsharing, which sensitizes physicians to hospital costs and rewards them financially if they control those costs, aligns the hospital's and physician's financial interests and aims to eradicate the results found in Minnesota.

The mechanics of a gainsharing program involve the use of proprietary software and acquisition of related consulting and administrative services from an expert consultant. Typically, the software developer provides consulting and necessary administrative services. Financial and utilization analysis is based upon existing claims and payment data that hospitals submit and receive in the ordinary course. Gainsharing does not require new data collection or new data creation. Gainsharing programs also incorporate quality measures to protect against underutilization and are adjusted for severity of illness so physician performance can be fairly evaluated.

Gainsharing programs do not, however, run on autopilot and can be successful only with adequate support and commitment from senior hospital and physician leadership. Successfully launching and operating a gainsharing program requires the creation of an effective implementation team and steering committee comprised of the gainsharing consultant and senior leadership from the hospital and physicians.

Gainsharing is used in conjunction with Medicare (e.g., Medicare ACOs and BPCI[7]) and commercial health plans.[8]

Key advantages:

- no new legal entity
- no new provider network
- no new governing bodies
- no new legal infrastructure
- no new data collection system
- no long lead times before bonus payments can be distributed
- less administrative, actuarial, or financial resources compared to ACO, CINs and bundled payment models.

## Structural Barriers to Alternative Payment Models Facing Rural and Unaffiliated Hospitals

Commentators have acknowledged that the shift from fee-for-service to value based purchasing has left many rural hospitals behind, which is consistent with the recent findings of the U.S. Government Accounting Office.[9,10]

In its August 2018 report of Rural Hospital Closures, the GAO cited increased competition for the small volume of rural residents, *prompted by the shift towards payment for value rather than volume*, as a factor that resulted in fewer patients seeking inpatient care and thus, contributing towards closures of rural hospitals.[11]

### *Startup and Operating Expenses*

Based on a survey taken in 2012, the National Association of ACOs estimated that ACO startup costs were approximately $4 million.[12] CINs are similarly costly endeavors. It has been estimated that the initial startup costs for legal and professional services to create the legal structure and governing documents approach $1 million, and the operating costs required to achieve the goals of the CIN have been estimated at approximately $14.79 PMPM.[13] Assuming the CIN includes 50,000 covered lives, its ongoing operating expense could be approximately $739,000.

### *Timing*

Timing is often an existential issue. Developing new legal infrastructure, adhering to governmental schedules, engaging in lengthy negotiations with commercial payors, and ultimately having to wait for distributions of bonus payments earned from participating in governmental and commercial alternative payment programs such as ACOs, CINs and government sponsored bundled payment initiatives (*e.g.*, CMS's Bundled Payments for Care Improvement, or BPCI) may not be an option for struggling unaffiliated rural hospitals. Between January 2010 and January 2019, 95 rural hospitals closed, 32 of which were Critical Access Hospitals.[14] For the period 2013 – 2017, more than twice the number of rural hospitals closed than during the prior five-year period.[15]

### *Depopulation*

Pressures caused by depopulation and outmigration weigh on rural hospitals. Their already sparse populations are getting smaller.[16] The obvious implication is simply fewer admissions and a lower census due to population loss. Low volume can also preclude participation in value based purchasing models that require a minimum volume of diagnostic conditions or orthopedic procedures. The Bundled Payment for Care Improvement Advanced program created by CMS requires hospitals to meet a minimum volume threshold of at least 41 clinical episodes in the applicable baseline period, the most common of which are major joint replacement of the lower extremity, congestive heart failure, and sepsis.[17] Small volume rural hospitals may simply not have enough volume to meet the 41-episode threshold in a given baseline period.[18]

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### *Physician Recruitment and Retention*

The centrality of physician involvement in every form of value based purchasing and alternative payment models is indisputable. *None can succeed without physician leaders and physician followers.* Recruiting and retaining physicians in rural areas, however, are difficult. Physician shortages in rural areas have been well documented for decades.[19] A range of variables has been cited for this phenomenon, such as lifestyle, spousal professional opportunities, public school quality, lower compensation in general, and considerable financial pressure to pay back substantial medical school loans.[20] Limited continuing education, training and supervision have also been cited as discouraging newly minted physicians from relocating to rural settings.[21]

### *Access to Capital*

As noted above, startup costs for ACOs and CINs can be significant. Purchasing and upgrading information technology and obtaining necessary professional services (consultants, attorneys, etc.) constitute substantial financial commitments. Rural hospitals, operating at narrow margins, have limited ability to access capital and can have difficulty qualifying for U.S. Department of Agriculture or U.S. Department of Housing and Urban Development mortgage guarantees that are needed to upgrade facilities and procure necessary equipment. If these hospitals will be participating in these types of value based purchasing models or most other forms of APMs, the models: (1) must be affordable; and (2) cannot put those hospitals in financial jeopardy.

The following have also been cited as challenges to rural hospitals that seek to participate in value based purchasing models:

- Leadership tension between survival versus transformation
- Change fatigue
- Limited data capabilities and lack of interoperability
- Limited trust.[22]

The foregoing discussion identified current leading forms of alternative payment models: ACOs, bundled payment and CINs. For additional context, each of those models is discussed in more detail below.

## Leading Forms of Alternative Payment Models

### *Accountable Care Organizations*

The term "accountable care organization" was initially coined in 2006 during a public meeting of the Medicare Payment Advisory Committee. [23] It incorporates the objectives of the Triple

Aim, which, along with the focus on quality and cost savings, broadens the scope of inquiry from individual patient outcomes to population outcomes. The Medicare Shared Savings Program (MSSP) institutionalized the federal government's commitment to ACOs in the Patient Protection and Affordable Care Act of 2010 (the ACA). Recognizing some type of accountability for cost and quality would be forthcoming, providers and payors thereafter began to form their own arrangements, *i.e.*, "commercial ACOs" that incorporate fundamental ACO principles.[24] As of August 2018, there were 714 commercial ACOs and 686 Medicare ACOs.[25] As of the end of the first quarter of 2018, these ACOs covered 32.7 million patients, *i.e.*, approximately 10% of the U.S. population.[26]

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An ACO is a specific type of provider network whose financial outcome rises or falls based upon the quality of care it delivers and the cost savings it achieves. Fundamental to the ACO model is the "attribution" (CMS uses the term "assignment") of a patient to the ACO. Care rendered to "attributed" patients is measured in terms of quality and cost control. Unlike an HMO model, where patients select their primary care physician and thus are included in the PCP's "panel," patients are attributed to ACOs based upon how frequently they use physicians within the ACO network. For example, under the federal MSSP program, Medicare beneficiaries are "assigned" to ACOs based upon their use of primary care services by physicians who belong to an ACO network.[27] Commercial ACOs may be similarly structured, whereupon a commercially insured patient would be "attributed" to the commercial ACO based upon an analysis of the patient's use of certain types of services provided by a physician in the commercial ACO network. Another distinction between ACOs and HMOs involve the patient's ability to obtain services outside of the provider network. Whereas HMOs typically restrict patients to network providers, ACOs often impose no such restriction (the federal Medicare Shared Saving Program expressly prohibits such restrictions). Nevertheless, the ACO is accountable for its patients' total cost of care – including costs arising from care rendered by non-ACO providers.

As ACOs are responsible for health care outcomes and the total cost of care for their attributed members, attention is now being paid to those members' environmental and lifestyle components which affect those costs. The term "social determinants of care" refers to those variables that affect health status (and treatment costs), that are beyond the scope of traditional medical care. Support services and data gathering pertaining to housing, nutrition and safety are now on the ACO's agenda. Recognizing the importance of these social determinants of health care, hospitals and hospital systems are now investing in housing programs and community outreach that had previously been the exclusive jurisdiction of governmental and private social services agencies.[28, 29]

The internal operations of ACOs must be capable of network contracting and network management, utilization review and analysis, quality improvement, professional leadership, and implementation of effective and efficient medical management initiatives. ACOs require experienced executive and management personnel to perform operations, identify opportunities for innovation, and fulfill various reporting obligations to governmental and commercial payors. Taken together, ACOs require substantial investments in time, human resources, and information technology. And even though investments in housing and community programs may ultimately achieve a positive ROI, making those investments by a small, rural hospital with limited administrative resources may not be financially or administratively feasible.

*Bundled Payment*

Bundled payment reimbursement involves having the payor of health care services pay a fixed amount to be distributed among a defined set of providers involved in the treatment of an individual (*e.g.*, hospital, physician, rehabilitation facility, physical therapists, home health agency, laboratory, etc.) for a specified episode of care (*e.g.*, joint replacement, cancer treatment, coronary artery bypass graft). These models typically include the potential for bonus payments to providers, *i.e.*, distributions of shared savings. Theoretically, bundled payment programs lead to enhanced clinical integration, oversight and conformity with best clinical practices among participating providers, which in turn lead to: (A) as good or better quality of care[30]; and (B) better cost control.

Bundled payment has in fact been shown to be effective in controlling costs without diminishing quality,[31] which is why the adoption of bundled payment arrangements by commercial carriers, self-funded health plans, and government sponsored health plans is accelerating.

Bundled payment arrangements include certain fundamental components[32]: The time period to which the bundled payment applies must be unambiguous. Determining when it begins (*e.g.*, at the time of hospital admission? On the date a lab test is confirmed?) and ends (*e.g.*, three months after hospital discharge? Six months?) requires a sophisticated actuarial assessment that providers and payors must agree upon. Also, the types of cases to which the bundle applies

must be precisely and clearly defined. A clear understanding of which cases will be included and excluded is essential.[33] Situations will arise that require a case to be terminated before the completion of the bundled payment period (*e.g.*, loss of coverage, patient expires, admission to a hospital that is not included in the bundled payment arrangement). Actuarial expertise should also be sought to assist in determining the items to include in the bundle, its duration, early termination scenarios and pricing. Bundled payment models can be designed so the payment is made either prospectively or retrospectively.[34] Shared savings is another fundamental element of bundled payment arrangements and involves distributions among providers and the payor involved (if savings are achieved). The potential for these distributions typically arises if the bundled cases are managed less expensively than a matched comparison group or if the total cost of managing the bundled cases is lower than a previously agreed upon benchmark, provided quality of care has not been compromised.

Successfully operating a bundled payment model requires a high degree of care coordination among the set of providers included in the bundle (*e.g.*, hospital, surgeon, anesthesiologist, internist/PCP, physical therapist, skilled nursing facility, home health, lab, etc.). The entity that operates the bundled payment, *i.e.*, the "convener," handles that coordination, and typically, "conveners" are hospitals or hospital systems. The convener, therefore, must have in place sufficient professional, administrative, managerial, and information systems resources and must be financially capable of underwriting the additional expense of operating the bundled payment program. And as noted above, bundled payment models require minimum volume thresholds.

### *Clinically Integrated Networks*

Clinically integrated networks bind providers to rules and governance structures intended to result in improved quality of care and efficient utilization of health care services. CINs then seek contracts with payors based on the promise of improved quality and reduced costs.

A clinically integrated network is distinguishable from a simple PPO network in that the latter is merely a contracting vehicle; the former is an entity that monitors quality, imposes clinical guidelines and best practices, uses a uniform electronic health records (EHR) platform, and agrees upon leadership and a governance structure that could result in the imposition of sanctions – including termination from the network. CINs require physicians (and possibly hospital leadership) to play a substantial role in developing best practices, adopting clinical guidelines, and participating in clinical outcomes reviews, all functions that would be rare in a typical PPO.

CINs require analysis of antitrust laws prohibiting contractual arrangements among horizontal competitors (*e.g.*, competing physician practices). *Clinically integrated* provider arrangements are an exception to the general prohibition, however, and would be analyzed under a "rule of reason" analysis. [35] The "rule of reason" analysis weighs the benefits of economic efficiencies attained by the contractual arrangement, against the harm that an anti-competitive agreement might cause (higher prices).[36]

Creating a clinically integrated network requires a significant commitment of capital and human resources. As noted above, cost of creation can approach $1 million and ongoing operational expenses can be expected to range from $11 to $17 per member per month.[37]

## Where to Go From Here

Unaffiliated rural hospitals are not well suited for the current leading forms of alternative payment models. They lack the startup capital, the administrative resources, and the clinical volume needed to successfully operate ACOs, CINs or bundled payments. In the meanwhile, their beds remain vacant as treatment modalities have shifted to outpatient care and the patients they do have tend to be sicker, needing higher intensity treatment and sub-specialty care.

These hospitals can contemplate alternative payment models only if they are affordable and practical, and, the model should contribute to the hospital's bottom line sooner rather than later. An APM that could strengthen relationships between hospital administrators and key admitting physicians would be a substantial benefit, offering promise for more ambitious value based purchasing programs – *i.e.*, the path to the future.

Evidence has shown that gainsharing, perhaps uniquely, offers a well-tested, affordable alternative payment model that not only contributes to the bottom line (and relatively quickly), but also delivers key residual benefits that provide a realistic path towards more comprehensive value based purchasing models.

The Federal Agency for Healthcare Research and Quality (AHRQ), part of the U.S. Department of Health and Human Services, published one of the more comprehensive discussions of CMS's three-year pilot of gainsharing involving 12 New Jersey hospitals, *i.e.*, the New Jersey Care Integration Consortium.[38]

***AHRQ's report explains in detail how the three-year gainsharing program was designed and implemented. It resulted in savings to the 12 participating hospitals — net of payments to physicians — of $94 million, i.e., approximately $7.8 million per hospital over three years.***

Physicians who participated were paid incentive payments, on average, between $5,000 and $10,000 every six months. Some high-volume physicians received payments above $25,000. Total aggregate savings, inclusive of physician incentive payments, were nearly $113 million. The New Jersey Care Integration Consortium was organized and facilitated by the New Jersey Hospital Association and relied upon technical support, analysis and methodologies provided by Applied Medical Software, Inc. (AMS).

Hunterdon Medical Center is a relatively small independent community hospital (176 beds) that participated in the New Jersey program. It realized more than $4 million in savings for the period 2010 to 2012.[39]

In New York City, Beth Israel Medical Center, a 1,000 bed tertiary university affiliated teaching hospital – admittedly not a rural hospital – implemented a three-year gainsharing program from 2006 to 2009 and saved $25.1 million.[40] Interestingly, even physicians who did not participate in the gainsharing program contributed to the savings, suggesting a non-trivial halo effect involving non-participating physicians.[41] The hospital distributed 9.4% of its savings to participating physicians who received $1,866 quarterly on average. Residual benefits included improvements in medical records completion rates.[42] This gainsharing program also relied upon technological, methodological and analytic support from AMS.[43]

An earlier 2008 study of six hospital-based cardiac catheterization labs found that gainsharing reduced the rate of spending growth by $315 per patient.[44] Most of these savings were attributable to a single isolated change in physician behavior: reducing the use of drug eluting stents, which accounted for 88.5% of total savings.[45] Gainsharing also resulted in improved quality of care.[46]

In addition to a gainsharing's ability to save hospitals money on one hand and deliver bonus payments to physicians on the other, the implementation process itself has its own rewards. Successful collaboration of hospital administrators and key admitting physicians creates foundational support for more ambitious alternative payment models, including those that involve risk assumption.[47]

***What works, therefore, is an arrangement that meshes: (1) a group of hospitals that desire to participate; (2) an association whose constituency would include those hospitals; and (3) the technical consultant that provides software and necessary gainsharing analytics.***

In more than one instance, gainsharing is credited with creating the foundation that led to development of alternative payment models that would not appear to have been possible without having gainsharing as a catalyst for that institutional change.

At NYU Langone in New York City, a clinically integrated network was formed based on the success of the hospital's gainsharing program. According to Hopkins, *et al.*, "The gainsharing program was seen to encourage greater alignment between NYU Langone and the medical staff, and placed organizational focus on achieving high-quality outcomes in the most cost-effective way."[48] At Inspira Health Network in southern New Jersey, a successful gainsharing program led to development of an employee based ACO and adoption of the federal Program for All-inclusive Care for the Elderly (PACE).[49]

It should also be noted that the time between implementation and incentive payments is dramatically shorter in gainsharing programs compared to ACOs and bundled payment models. That is, nine months for gainsharing, versus 18 – 24 months for ACOs and bundled payment programs.[50]

### *Cost*

Gainsharing installations are most economical when startup expenses are spread among multiple hospitals. In New Jersey and New York, each of those states' hospital associations played a key role.[51] Startup costs were shared among all participating hospitals and some costs were absorbed by the state hospital associations themselves. What works, therefore, is an arrangement that meshes: (1) a group of hospitals that desire to participate; (2) an association whose constituency would include those hospitals; and (3) the technical consultant that provides software and necessary gainsharing analytics (*e.g.*, utilization, financial, best practices metrics, etc.). The author has not found any published materials reporting the cost for installing a gainsharing program for an individual hospital on a one-off basis. It is assumed, however, that even in that scenario, startup costs would be a fraction of the cost for an individual hospital to successfully launch an ACO or CIN.

### *Legal Review*

Gainsharing programs require careful analysis of the federal anti-kickback statute and related fraud and abuse laws and participants are well advised to seek competent health care counsel before implementing a program. Operators of gainsharing programs involving multiple hospitals must also be sensitive to antitrust concerns.[52] That being said, ample guidance from the U.S. Department of Health and Human Services Office of Inspector General and the U.S. Department of Justice demonstrates that gainsharing arrangements, if properly designed,

would not trigger enforcement action by federal regulatory agencies.[53]

## Conclusion

Gainsharing is a practical, effective solution for unnecessary inpatient spending. It cures the historic economic misalignment between physicians and hospitals and, in doing so, delivers financial rewards to both. It achieves this by creating common-sense, but sophisticated, feedback loops derived from existing claims data. Analyses of these data reveal how cost savings can be achieved when best clinical practices are followed. Savings are distributed among the physicians who helped achieve them and the hospital. Numerous studies report the effectiveness of gainsharing at reducing costs, maintaining quality, and producing meaningful financial results faster than other alternative payment models.

Hospitals seeking to implement gainsharing do not face the daunting, if not prohibitive, financial and administrative challenges of forming an ACO or clinically integrated network. Gainsharing does not require formation of new legal entities and does not require minimum thresholds for any particular type of procedure. It is therefore a particularly good fit for unaffiliated rural hospitals that can't meet minimum utilization thresholds for bundled payment and do not have the financial or administrative wherewithal to embark on ACO or CIN creation. Moreover, the cost of implementation can be split among hospitals participating in an association sponsored gainsharing program.

Gainsharing also has the welcome residual effect of forging critical alignments among high-volume admitters and hospital administrators. These new alignments create an essential foundation to embark on more ambitious alternative payment models such as ACOs and bundled payment models.

The U.S. health care system is not elegant. It is hyper-politicized, rife with competing interests, and replete with financial conundrums. Attempts to wrangle it into rationality have been elusive for decades. One narrow band of the health system spectrum, occupied by unaffiliated rural hospitals, reveals specific challenges. Quite remarkably, an analytic technology known as gainsharing can mitigate these challenges simultaneously. It saves them money, does it quickly, helps then build relationships with physicians necessary to survive value based purchasing, and, its startup expenses, startup timeline and administrative requirements are feasible.

For unaffiliated rural hospitals, this tried and tested model for reducing hospital expenditures and starting new forms of collaboration with key physicians deserves serious consideration.

## About Gibbons' Healthcare Practice

Gibbons has a deep and varied background in healthcare. The mission of the Healthcare Team is to represent leaders in the healthcare sector in connection with their sophisticated and complex legal issues and transactions, helping them meet the challenges of the changing healthcare delivery system. The attorneys on the Gibbons Healthcare Team are widely recognized for their exceptional talents, skills, and insight and are deeply involved in healthcare issues on a broader scale.

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Barry Liss devotes his practice to healthcare law and has extensive experience representing institutional and individual providers of healthcare services, organized delivery systems, independent practice associations, and other related business enterprises in the healthcare sector. His practice focuses on corporate and regulatory healthcare-related law, including accountable care organization development, integrated delivery systems, managed care, hospital reimbursement, physician practices, third party payor appeals, governmental payor disputes, fraud and abuse counseling, provider network contracting, hospital vendor contracting, general hospital corporate representation and related areas of healthcare practice.

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**Endnotes**

[1] The Triple Aim was initially proposed in 2008 by researchers at the Institute for Healthcare Improvement and later became part of the US national strategy under the CMS's leadership by Donald Berwick, MD, its former Administrator. Pursuing the Triple Aim: The First 7 Years, J. W. Whittington, K. Nolan, N. Lewis, T. Torres, The Milbank Quarterly, Vol. 93, No. 2, 2015 (pp. 263-300).

[2] Comment regarding terminology: The term "alternative payment model," as defined in the Social Security Act, means a health care reimbursement model that has been developed in connection with certain federal legal authority pertaining to the Center for Medicare & Medicaid Innovation, the Medicare Shared Savings Program, federally authorized demonstration programs, and demonstration programs required by federal law. 42 U.S.C. 1833(z)(3)(C). This paper uses that term more broadly, to mean any type of provider reimbursement model that deviates from strict fee-for-service reimbursement by incorporating some form of incentive payment (or financial penalty) based upon quality and efficiency. The term "value based payment" is a form of alternative payment model whereby the purchaser of the services (*i.e.*, Medicare, commercial insurer, etc.) requires evidence that the patient received value for the service (usually in terms of health outcomes). See B. Herring, "An Unfortunate Inconsistency Between Value-Based Purchasing And Price Transparency," Health Affairs Blog, Aug. 21, 2018, at 2.

[3] The term "unaffiliated hospital" refers to a hospital that is neither part of a hospital network, hospital system, or other form of health care delivery system (*e.g.*, ACO or CIN). Often, these hospitals are referred to as "independent" hospitals.

[4] The term "rural hospital" refers to hospitals that are not located in a Metropolitan Statistical Area or a Metropolitan Division, as those terms are defined by CMS. See "Medicare Geographic Classification Board Rules," Version 3.0, CMS, July 9, 2018.

[5] U.S. Department of Health and Human Services, Agency for Healthcare Research and Quality, "Hospital Gain-Sharing Program Offers Incentives to Physicians Based on Their Efficiency, Producing Significant Cost Savings Without Decline in Quality," AHRQ Innovations Exchange, March 17, 2014.; I.M.Leitman, R. Levin, M.J.Lipp, L. Sivaprasad, C.J. Karalakulsingham, D.S. Bernard, P. Friedmann, and D. J. Shulkin, "Quality and Financial Outcomes From Gainsharing for Inpatient Admissions: A Three-Year Experience," Journal of Hospital Medicine, November-December 2010, at 1.

[6] C. Magan, "One patient paid $12,326 for a spinal fusion surgery, another $80,518 – at the same hospital," Pioneer Press, Aug. 9, 2018; D. Kraker, "They charged what? Price of surgical procedures vary widely by hospital, patient," MPR News, Aug. 9, 2018.

[7] The Bundled Payments for Care Improvement (BPCI) initiative developed by the Center for Medicare and Medicaid Innovation.

[8] See J. Surpin and A. Venable, "Integrating Gainsharing into Inspira Health's Clinically Integrated Network," Garden State FOCUS, HFMA New Jersey Chapter, Fall 2018.

[9] J. LaPointe, "Top 4 Rural Hospital Challenges with Revenue Cycle Management," Revcycle Intelligence, Aug. 3, 2017.

[10] GAO Report to Congressional Requesters, "Rural Hospital Closures, Number and Characteristics of Affected Hospitals and Contributing Factors," Aug. 2018.

[11] Id.

[12] "ACOs Take $4M of Startup Capital, Survey Finds," M. Gamble, Beckers Hospital Review, Jan. 27, 2014.

[13] P. Kumar, MD and E. Levin, MD, "Clinically integrated networks: Can they create value?" McKinsey & Company 2016. Kumar and Levin estimate that CINs can expect operating expenses in the range of $11.67 to $17.92 PMPM. The average of their estimate is therefore $14.79.

[14] U.S. Health Resources & Services Administration website, Federal Office of Rural Health Policy, "Rural Hospital Programs," accessed March 28, 2019.

[15] GAO Report to Congressional Requesters, "Rural Hospital Closures, Number and Characteristics of Affected Hospitals and Contributing Factors," Aug. 2018.

[16] Id.

[17] Center for Medicare & Medicaid Services, CMS Announces Participants in New Value-Based Bundled Payment Model, Oct 09, 2018. Baseline periods can span several years. The initial baseline period for BPCI Advanced includes clinical episodes that began on or after January 1, 2013 and ended on or before December 31, 2016.

[18] Center for Medicare & Medicaid Services, BPCI Advanced Frequently Asked Questions (FAQs) – March 2018.

[19] D. G. Mareck, "Federal and State Initiatives to Recruit Physicians to Rural Areas," Policy Forum, American Medical Association Journal of Ethics, May 2011, Vol. 13, No. 5:304-309.

[20] Id.

[21] C. Chipp, S. Dewane, C. Brems, M. E. Johnson, T. D. Warner and L. W. Roberts, "If Only Someone Had Told Me . . Lessons from Rural Providers," J. Rural Health, 2011, 27(1): 122-130.

[22] "2016 Rural Provider Leadership Summit Report: Strategies for Rural Provider Engagement in Transitioning to Value-based Purchasing and Population Health," National Rural Health Resource Center, Duluth, MN, Aug. 10, 2016.

[23] "The Impact of Accountable Care, Origins and Future of Accountable Care Organizations," T. Tu, D. Muhlestein, S.L. Kocot, R. White, Leavitt Partners, May 2015.

[24] Id.

[25] "Recent Progress In The Value Journey: Growth Of ACOs And Value-Based Payment Models In 2018," D. Muhlestein, R.S. Saunders, R. Richards, M. B. McClellan, Health Affairs, Aug. 14, 2018.
[26] Id.
[27] See 42 CFR 425.400
[28] See, for example, D. Tuller, "To Improve Outcomes, Health Systems Invest In Affordable Housing," Health Affairs, Vol. 38, No. 7, July 2019.
[29] See "In Depth: Hospitals tackling social determinants are setting the course for the industry," S.R. Johnson, Modern Healthcare, Aug. 25, 2018.
[30] See, for example, American Hospital Association, (March 2014), "The Value of Provider Integration," TRENDWATCH; Claffey, T.F., Agostini, J.V., Collet, E.N., Reisman, L. and Krakaur, R., (2012), "Payer-Provider Collaboration In Accountable Care Reduced Use And Improved Quality in Maine Medicare Advantage Plan," *Health Affairs* 31(9) 2074-2083.
[31] The JAMA Network, (2016, Sept. 19), "Hospital Participation in Medicare Bundled Payment Initiative Results in Reduction in Payments for Joint Replacement," Retrieved from http://media.jamanetwork.com/news-item/hospital-participation-in-medicare-bundled-payment-initiative-results-in-reduction-in-payments-for-joint-replacement/; RAND Corporation (2010), "Analysis of Bundled Payment, Technical Report," (TF-562/20), Retrieved from RAND Corporation Website: http://www.rand.org/pubs/technical_reports/TR562z20/analysis-of-bundled-payment.html.
[32] See, B. Liss, (2016, Dec. 19,) "Bundled Payments Gain Traction in Health Care Top Ten List - Part I," *New Jersey Law Journal*, 222(50) 50; and B. Liss, (2016, Dec. 26) "Bundled Payments, Part II," *New Jersey Law Journal*, 222(51) 50.
[33] Inclusion criteria can be based upon diagnostic and/or procedure codes and the case must be tied to the payor involved in the arrangement. Circumstances that could trigger exclusion might be those in which unintended high utilization costs would result, *e.g.*, from co-morbidities, trauma, acute conditions, or chronic conditions unrelated to the bundle. Inclusion of prescription drugs should also be carefully weighed.
[34] If the latter, the payor and provider entity perform a reconciliation of actual expenditures that occurred during the bundle period and make an adjustment depending on whether the actual expenditures were above or below a target amount. The target amount could be established by a comparison group of patients or an agreed upon benchmark.
[35] See, for example, "Statements of Antitrust Enforcement Policy in Health Care," published by the U.S. Department of Justice and the Federal Trade Commission, August, 1996, at 110-111.
[36] Id.
[37] P. Kumar, MD and E. Levin, MD, "Clinically integrated networks; Can they create value?" McKinsey & Company 2016.
[38] See n.5, AHRQ Innovations Exchange, March 17, 2014.
[39] R.G. Coates, "The New Jersey Gainsharing Experience," PEJ, January-February, 2014, at 50.
[40] Leitman, et al., at 1.
[41] Physicians who did participate saved $6.9 million more than those who did not. Id. at 4.
[42] Id. at 5.
[43] Id. at 1. Subsequent to the Beth Israel Medical Center program, the Greater New York Hospital Association (GNYHA) initiated a statewide gainsharing opportunity to its entire 100 hospital membership which also would rely on AMS for technical, methodological and analytic support. For a detailed discussion of the statewide GYNHA program and related legal analysis of antitrust issues in connection therewith, see: "Response to Greater New York Hospital Association's Request for Business Review Letter," U.S. Department of Justice, letter from Baer to Kass, Jan. 16, 2013.
[44] J.D. Ketchum and M.F. Furukawa, "Hospital-Physician Gainsharing in Cardiology," Market Watch, Health Affairs, Vol. 27, No. 3, May/June 2008, at 806.
[45] Id. at 808.
[46] Id. at 809.
[47] S. Hopkins, J. Surpin, and A. Stanowski, "Lessons Learned from Implementation of Gainsharing," hfm, Healthcare Financial Management, March 2015, at 4.
[48] Id., at 5.
[49] Id.
[50] Id., at 4.
[51] Those programs also engaged AMS to provide technical, methodological and analytic services.
[52] See, for example: U.S. Department of Justice, letter from Baer to Kass, Jan. 16, 2013.
[53] See: U.S. Department of Health & Human Services, Office of Inspector General (OIG) Advisory Opinion 17-09; OIG Advisory Opinion 09-06; OIG Advisory Opinion 08-21; OIG Advisory Opinion 08-15; OIG Advisory Opinion 08-09; OIG Advisory Opinion 07-22; OIG Advisory Opinion 07-21; OIG Advisory Opinion 06-22; OIG Advisory Opinion 05-06; OIG Advisory Opinion 05-05; OIG Advisory Opinion 05-04; OIG Advisory Opinion 05-03; OIG Advisory Opinion 05-02; OIG Advisory Opinion 05-01; OIG Advisory Opinion 01-01.