Co-Management Arrangements in Orthopedic Surgery

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Abstract

A co-management arrangement (CMA) is a contractual relationship between physicians and a hospital that results in a shared-responsibility management structure for a specific service line. In orthopedic surgery, CMAs are becoming increasingly popular as stakeholders in the health care market seek increased value (ie, higher-quality care at lower costs). A CMA can significantly improve the efficiency and the outcomes of a musculoskeletal service line if it adheres to the basic principles of a focus on the patient, evidence-based decision-making, physician leadership, appropriate physician compensation, transparency, reasonable and modifiable goals, and accountability. While the specifics of each CMA will vary, all CMAs have common operational elements that include the arrangement's legal structure, legal compliance, leadership and reporting structure, facilities management, personnel management, clinical data management, financial data management, and quality and effectiveness reporting.

In the post–Affordable Care Act landscape of American health care, an explosion of alternative payment methods and other creative initiatives has occurred as patients, providers, and payers all seek higher-quality care at lower costs.[1] These factors impact every level of the health care system, from large academic medical institutions in major cities to small single hospitals in rural community settings.[2] Co-management arrangements are among the many innovative organizational structures that have arisen with the goals of efficiency and quality. For many reasons, a co-management arrangement has specific applicability and appeal in orthopedic surgery, and the popularity of this form of physician–hospital alignment is growing.[3]

Definition

In health care, and particularly even within orthopedic surgery, the term *co-management* can have multiple definitions. It can refer to shared responsibility for patient care across service lines—such as the "co-management" by both hospitalists and orthopedic surgeons of elderly patients with multiple chronic medical comorbidities as well as an acute hip fracture or a total knee replacement.[4-7] In academic settings, it may refer to the delegation of duties from attending professors to residents in co-managing patients.

In the realm of health care business and finance, however, the term *co-management arrangement* (CMA) refers to the shared responsibility for a hospital service line by the hospital administration and the physicians involved in that service line. While the basic concept is not necessarily a new one, it is growing in popularity and expanding in scope, creative application, and effectiveness within the current post-reform environment.[8] This model of clinical and financial integration has been implemented in multiple different medical subspecialties, from cardiology and oncology to gastroenterology and vision care.[9,10] As applied to orthopedic surgery, CMAs create a situation in which orthopedic surgeons participate intimately in the management of the entire musculoskeletal service line, including inpatient and outpatient services. Orthopedics was identified as 1 of the top 3 specialties for clinical CMAs (after cardiology and imaging) in a recent survey of more than 258 hospital executives.[11] Because orthopedic surgery represents an extremely profitable service line for most hospitals, it becomes an ideal target for optimization under a CMA because even relatively small percentage increases in efficiency or profitability can pay relatively large dividends for the hospital.[12]

Under a CMA, the physicians are compensated for their time and efforts, and they provide services across clinical and nonclinical areas. Because orthopedic surgeons are most familiar with the details of their specialty and the unique needs of their patients, they are the best suited to make decisions, both clinical and nonclinical, that impact the provision of that care. The details of individual CMAs will vary based on specific situational factors, but the common goal of improved patient care and greater economic efficiency drive the underlying theme of shared responsibility and physician–hospital alignment.[13]

A CMA is different from some other recent innovative forms of organizational or financial structure. A CMA is not the same as direct employment[14,15] or "pay-for-perfor-

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mance,"[16] because both of these methods of physician–hospital alignment lack the incentivized structure of a CMA. While a CMA is similar to a "gainsharing" arrangement because both hospitals and physicians benefit, it has a very different legal structure.[17] A CMA also resembles a joint venture, but it differs in its goal of a focus on *management* roles.[18] Bundled-pricing arrangements tend to focus on the end-price of an "episode of care" rather than the system that provides it.[19] While CMAs may be more involved than many other forms of organizational structure, a CMA does not have the level of complexity and interaction required for a formal accountable care organization (ACO).[20]

Principles of Co-Management Arrangements

Because countless variances exist across the country within local and regional orthopedic markets, no single prescription for success exists to guide co-management arrangements for every potential situation.[21,22] Several basic principles, however, should characterize any attempted CMA. Without a foundation in these principles, the CMA may risk suboptimal performance or overt failure.

Focus on the Patient

The most basic shared concern of the 2 parties of a CMA (surgeons and hospitals) is the patient. While each side may have different strengths and varying methods of reaching clinical and financial goals, they should be able to agree on the fundamental idea of patient-centered care. Indeed, the *patient experience* has become a popular buzzword in many areas of medicine,[23] and it particularly applies as a foundational principle of CMAs. A focus on the patient does not directly guarantee success, because there are numerous other details and features of a productive CMA. Failure to focus on the patient, however, will lead to problems.

Evidence-Based Decision-Making

As the information age progresses, clinical, operational, and financial decisions are all best made based on data. Over the last 10 years, evidence-based medicine (EBM) has become the norm in orthopedic surgery for the evaluation of techniques, implants, medications, and other treatment options.[24] This data-based clinical concept parallels the development of its cousin on the administrative side, evidence-based *management*.[25] Both forms of "EBM" focus on using a synthesis of the best available data to inform decision-making to maximize outcomes. In a CMA, evidence-based decision-making should pervade all aspects of the endeavor.

Physician Leadership

Co-management arrangements cannot succeed with involvement and input exclusively from hospital officials. Physicians must not only participate in these arrangements, but they must take the key leadership roles.[26] Physicians can learn relevant skills in business administration much quicker and easier than administrators can gain clinical skill and experience. Therefore, effective CMAs should have appropriately qualified physicians in essential leadership positions whenever possible.[27,28]

Appropriate Physician Compensation

While physicians may benefit from CMAs in many intangible economic ways, such as increased volume or increased time efficiency, the process of creating and operating a CMA does not inherently generate any revenue for the physicians involved. Indeed, the primary raw materials that an orthopedic surgeon possesses are time and expertise. Investment of an orthopedist's time and expertise represents utilization of a considerably valuable resource that demands commensurate compensation.[29] Hospitals can save exponentially more money through a robust CMA than they might spend for the surgeon's time and efforts to create it,[23] and they should expect returns commensurate with the amount invested.[30] Stated simply, the CMA will not work unless physicians are compensated to make it work.

While appropriate compensation for time and effort may seem an obvious and basic element of success for any endeavor, the determination of such compensation for a CMA is fraught with difficulty and danger.[3] The primary concern is the calculation of "fair market value" or "commercial reasonableness" of the management services provided by the orthopedic surgeon to the hospital.[23,31-33] Any amount perceived as too low may discourage surgeon participation. On the other hand, amounts that exceed fair market value may constitute remuneration that can result in severe federal legal penalties. Any compensation agreement must comply with provisions of the Stark laws and the federal Anti-Kickback Statute, as well as the Civil Monetary Penalties Statute, the more recent Sunshine Act, and other laws.[34-37]

Consequently, creation of a well-designed compensation plan is thus one of the most critical principles of a CMA.[38] Physician compensation for participation in a CMA should focus on 2 major areas—a base payment for time spent in design and management of the arrangement, and a bonus payment for reaching certain predefined quality and efficiency goals through the arrangement.[3,22,27,32,34,39] As mentioned above, physicians must, at a minimum, receive fair compensation for their time and efforts. In addition, creation of incentives through a clearly defined, performance-based reward structure can further drive surgeons' motivation for dedicated effort and creativity.[9] It is critical to note that a CMA differs from a gainsharing arrangement because physicians usually do not share a percentage of actual hospital savings under a CMA.[31] A gainsharing arrangement, however, usually involves physicians receiving a defined percentage of any real dollar savings created for the hospital through the relationship.[17]

Transparency

Transparency is a common feature of any business relationship in which 2 distinct entities must work together to achieve a mutual goal. Co-management arrangements are no exception to this rule; multiple experts have identified transparency

and trust as foundational elements for success.[30,40] To ensure transparency without compromising patient confidentiality, trade secrets, or other valuable restricted information from unnecessary or potentially dangerous exposure, participants in the CMA should develop a transparency plan in the early stages of the relationship. This plan should expressly state exactly what information is to be shared, when, with whom, and in what manner. By balancing information sharing with information security, CMA participants can more comfortably communicate and develop trust.

Reasonable and Modifiable Goals

While the overarching *raison d'être* of a CMA is to increase efficiency and improve quality, these worthy purposes must be broken down into specific, measurable goals that are unique to each arrangement. These goals should be aggressive enough to make an impact, but they should also be reasonably achievable within a designated period. In many cases, these goals will reflect or follow the regulatory stipulations of various governing bodies, such as the Centers for Medicare and Medicaid Services (CMS) or The Joint Commission.[31] Because these entities may frequently change or update their rules (and even their own institutional names!), the CMA must also have a structure that can rapidly respond to alterations in the regulatory landscape.[31] The goals should be modifiable and amendable on an as-needed basis with an appropriate vote of the CMA stakeholders, rather than renewable only when the arrangement's term ends. Without such situational responsiveness, the rapidly undulating world of health care may render the CMA's goals either laughably low or impossibly high.

Accountability

A CMA must incorporate the concept of accountability throughout its organizational structure. Although this principle will take many different forms and have different applications, it is critical to the effectiveness of a CMA. Traditional hospital management often focuses on financial goals rather than patient-care goals, and physicians must be able to hold management accountable when these goals conflict. A CMA's legal structure must have elements of accountability and methods of resolving conflict, such as provisions for arbitration or mediation by a designated third party. When goals are not met or if they are exceeded, there must be ways of both disciplining and rewarding those responsible. Ultimately, accountability must be woven into the culture created under the CMA, and this process flows through every element of the agreement, from its contractual legal and leadership structure to its operational and financial logistics.

General Operational Elements of Co-Management Arrangements

While CMAs must be governed by basic principles, they must also involve several general operational elements. The specifics of these elements will vary by situation, but surgeons must consider each in the creation and operation of a CMA.

Legal Structure

Most CMAs involve the creation of a separate legal structural entity that will assume responsibility for management of the hospital's service line.[37,39] This entity often takes the form of a limited liability company (LLC).[33] Its members may be all physicians, or it may be jointly owned by the hospital and the physicians.[39] The legal structure of the company will depend on state laws and local precedent, and a lawyer with extensive experience in health care law should create it and its governing documents.[37] Alternatively, some hospitals may consider directly employing physicians to co-manage a service line, but this simpler model may prove less effective than a true CMA because of the lack of independence for the physicians involved.[30,36] Indeed, the maintenance of physician independence is one of the strongest features of a CMA, and it should be carefully protected in the entity's legal structure.

Like any relationship, a CMA may end, and its creators need to "begin with the end in mind" when creating its formative documents. Physicians should engage expert legal assistance in the structuring of the parts of the contract that govern the unwinding of the agreement. If the CMA performs poorly, or if the hospital becomes insolvent in spite of the CMA, the involved physicians may face liability charges or other legal entanglements. Because the escape clause of the CMA contract may be the doctors' only shield in such situations, this part of the agreement should be meticulously reviewed by the physicians and by knowledgeable legal counsel.

Legal Compliance

Ultimately, the CMA may implicate federal Stark laws, antikickback laws, antitrust laws, Civil Monetary Penalties Statute, the False Claims Act, 501(c)(3) tax exemption rules, and provider-based status rules. These may have severe penalties, including imprisonment, if violated.[32,34,36,37] As such, the participants in any arrangement must make certain that the CMA complies with all applicable regulations in both its composition and function.[38,41] Participants in CMAs should make all efforts to avoid such legal pitfalls through investigation of safe harbor provisions, special exemptions, and other key features of the relevant laws.[37,42] While these regulations will remain in constant flux, governmental regulatory agencies have given guidelines about acceptable structure for CMAs.[43,44]

For CMAs, a critical feature is the level of participation of the LLC members in the defined activities of the CMA.[42] Participation requirements, such as meeting attendance, changes in practice based on defined goals and metrics, and financial contributions, must be included in the operating agreement of the LLC.[33] Compliance of all active members with these clearly defined requirements will both improve operations and morale and also decrease legal risk for both the CMA and its individual members.[28] Furthermore, certain conduct that may run afoul of regulations should be very specifically prohibited in the member contracts. Such behavior may include pay-for-referral arrangements rather than pay-for-performance, asymmetric income distribution through the

LLC, and other activities that limit patient choice.[37] The salary and bonus structure must be very carefully designed and monitored, because they can have significant legal implications if not managed correctly. Independent audits should be part of the compliance plan for any CMA, and many authorities recommend limits on the total compensation to physicians as part of a CMA, as well as time limits on the agreement itself.[44]

Leadership and Reporting Structure

All CMAs should have a medical director who is responsible for the success of the operation. Beneath the medical director, the leadership and reporting structure will vary based on the size of the hospital and the number of surgeons. In some situations, single individuals may assume multiple roles; other situations may dictate the need for many more people. The structure may take the shape of multiple directors and even a committee for the principal areas in a large institution, but only 1 or 2 additional individuals may be required in a small hospital setting. In any case, the leadership and reporting structure should be established as part of the basic formative documents of the CMA, with all duties and responsibilities of each participant clearly defined.

Facilities Management

Management of the physical and operational aspects of the site of service is a core component of any CMA. While the hospital usually owns the facilities, it is the surgeons who must work within them. The specifics of the physical plant can impact issues such as infection rate, inventory availability, maximum volume levels, and patient perception or satisfaction. The manner in which the facilities management conducts operations is also important; large size and nice equipment do not necessarily translate into efficiency or quality. A CMA should, therefore, have a surgeon or committee whose primary role is to oversee the relevant details of the hospital's physical and operational issues. These details will include topics such as assignment of operative suites, choices of implants, room turnover, supplies, antibiotic availability, and other matters. Because of their experience and knowledge of the operational effects of administrative decisions, orthopedic surgeons are uniquely positioned to maximize the value of existing facilities and to oversee updates or changes as needed.

Personnel Management

Even in disadvantaged or smaller facilities, maximization of human resources can often overcome challenges of inadequate physical plant or tight finances. Alternatively, poor management of staff can thwart the efforts of even the largest and best-endowed hospitals. Because practicing orthopedists are likely to know the talents and skills of key local personnel from having worked alongside them, surgeons are well suited to help direct placement and management of personnel as part of a CMA. Surgeons can effectively identify behaviors that deserve reward and can identify staff members that refuse to be team players or otherwise do not help meet larger goals. Involvement of surgeons in personnel management also helps speed the ability to have near real-time responsiveness to issues that may arise.

Clinical Data Management

Ultimately, quality metrics become the grading scale for the clinical aspects of the CMA. Selection of appropriate metrics constitutes a foundational element of the overall process and demands meticulous attention to detail.[38] Multiple site-specific clinical scoring systems exist in orthopedic surgery, from the International Knee Documentation Committee (IKDC) score for knees to the American Shoulder and Elbow Surgeons (ASES) score for shoulders.[45,46] Additional quality metrics exist for more generalized clinical success measurement, such as the Short Form–36 Health Survey (SF-36) score.[47] Governmental agencies and other national organizations have also mandated certain clinical metrics through programs such as the Surgical Care Improvement Project (SCIP).[48] Once the type and manner of desired clinical data are identified, they must be collected, processed, stored, and evaluated. Surgeon participation in and oversight of clinical data management is crucial, because orthopedists will be the best suited to interpret and apply the data and relevant trends and conclusions.

Financial Data Management

Financial concerns constitute perhaps the strongest driving force behind many of the current reform initiatives and alternative payment options in the health care landscape. For a CMA, financial success must be clearly and constantly measured and displayed for the endeavor to be successful. Since both sides have a large potential for financial gain and loss in a CMA, surgeons and hospitals must ensure that the best-qualified and most dedicated individuals oversee financial issues. Although transparency is important in all areas of a CMA, it is imperative and must be a dominating feature of the arrangement's financial management. Financial goals, furthermore, must be clearly defined and realistic, with continuous reevaluation as the relationship moves forward. As part of the transparency plan, relevant financial data should be shared and discussed at regular intervals.

Quality and Effectiveness Reporting

An ideal co-management agreement not only reaches its goals of improved patient care and increased financial efficiency, but it can document and report achievement of these goals as well. Just as corporations must report their financial effectiveness to their shareholders, CMAs must report their own overall effectiveness to their respective stakeholders. Payers, patients, providers, and participant hospitals all have a stake in proving that the CMA has been successful—and that it will continue to be successful. Effectiveness reporting becomes the most important element of all, because the ultimate purpose is self-preservation of the CMA. Reporting should document successes and failures in all relevant elements of the arrangement, with a focus on clinical and financial data. Reports should employ both internal and external benchmarks as a means of evaluating results. Most

CMAs will have a designated officer or committee tasked with the responsibility for measurement and reporting of quality and effectiveness.[26] Clinical and financial data are combined into an overall big picture of the achievements of the CMA.

Conclusion

Co-management arrangements represent a popular current option for physicians and surgeons to increase alignment and achieve the mutually beneficial goals of increased quality and efficiency. In orthopedics, CMAs essentially consist of surgeons and hospital administrators working together to manage the musculoskeletal service line at a hospital. While the details of specific arrangements will vary according to individual situations, certain basic principles and important general operational elements characterize most successful CMAs. Since physician ownership of hospitals is now banned under the Affordable Care Act, CMAs can be seen as a physician-managed hospital within a hospital, with many of the benefits that have historically resulted from physician ownership and participation in management.[27,49] As health care reform progresses, CMAs will likely become more widespread, more refined, more effective, and more profitable.

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