Our Age of Anxiety is, in great part, the result of trying to do today's jobs with yesterday's tools.

—Marshall McLuhan

This chapter is divided into two parts. Part I covers the organization of medical group practice and deals with the various structures, characteristics, methods of governance, and other important issues related to the many forms of medical group practice. Part II discusses the operations of medical group practices and how these operations are organized into functional departments, or divisions in the case of large groups. The issue of quality and the management implications of quality are also addressed.

Part I: Organization

When Home State Mining Company opened the first medical practice in 1870 to care for their growing workforce in the remote parts of the West, it could not have been predicted that medical groups would become such a significant modality for physician practice in the delivery of medical care in the United States. Although over 130 years have passed, consolidation of group practices has been slow, and group practice size on average has remained small.1

The answer to this, very likely, lies in the nature of medical practice itself and the nature of technological uncertainty as described by James Thompson. Thompson classified technologies as being either long-linked, mediated, or intensive. Medical practice is an example of an intensive technology where a “customized response” is necessary to a given set of circumstances or contingencies,2 as shown in Figure 2-1.

In addition, Robbins discusses the concept of decision-maker divergence as a significant reason why organizations and decision makers' interests do not coincide. In this construct, the ability of an organization to grow and become efficient is directly related to the divergence of the interests of the decision makers,3 as shown in Figure 2-2.

Regardless of the organizational challenges facing medical groups, many variant structures have been developed. In its simplest form, a medical practice can exist as a solo proprietorship with no formal organizational structure at all; a simple general partnership is the next step in the development of a group practice.
Chapter 2: Organization and Operations of Medical Group Practice

Taxonomy of Medical Groups
By definition, medical groups must contain at least three practitioners working within a common organizational structure. Groups share expenses and services and almost always bill under a single tax identification number. Special requirements for designation as a group practice are also defined by the Department of Health and Human Services Office of the Inspector General and will be discussed later in this chapter. Furthermore, one can think of groups as being either confederate models, in which the practices tend to be loosely affiliated, or centralized models, in which the practices tend to be closely affiliated.

Figure 2-3 shows a taxonomy of medical groups and the relationship of the different forms. There are many variations in the structure of a group practice, but all typically fit into one of these categories.

Of course, this taxonomy is incomplete. Groups are also organized by single- or multispecialty status. Single-specialty groups are common in cardiology, surgical specialty, OB-GYN, pediatrics, orthopedics, behavioral medicine, rehabilitative specialties, internal medicine, neurology, and many others. The more divergent the specialties in terms of their economics and the nature of practice, the more difficult they can be to bring together under one structure.

The many organizational forms of medical groups have evolved in response to the needs and interests of medical practitioners as they have sought to adapt to a changing environment and to overcome the inherent nature of practices to stay small. In this sense, the medical group practice is a pragmatic entity. The definitions of each form are constantly varying and assuming characteristics of several forms.

One question needing to be answered when considering which group practice structure to use is, “How will the structure influence the culture of the group and the governance system that the group envisions?” As illustrated in Figure 2-4, the governance structure of a group affects the culture, which ultimately influences the operational nature of the group. For example, if there is not a centralized governance system and the culture of the group is biased toward significant physician autonomy, then operations will likely be variable with standardization lacking.

The degree of integration varies widely according to design and group type. Solo practices obviously have no integration with other practices, while in confederate models such as independent practice associations (IPAs) and management service organizations (MSOs), some services, identified in Figure 2-5 as "soft resources," are shared and integrated by the organization. In the fully integrated centralized group, all resources are shared.

Consideration for Structuring Practices
The choice of practice form has a number of points to consider. In general, organizational forms offer different advantages and disadvantages to the physician and patients. They are generally related to:

- Liability of owners
- Control
- Continuity of the business entity
- Transferability of assets and ownership
- Capital formation
- Taxation
- Benefit plans

Virtually every state has adopted statutes that govern the formation and operation of corporations, partnerships, and other forms of commercial ventures. Since 1961, most states have special statues specifically related to the organization of professional organizations. In some states, these are referred to as “Service Corporations,” signified by the designation “S.C.” In other states, the designation “P.A.” is used, which stands for “Professional Association.” The principal distinguishing feature of these organizations from other incorporated entities is that med-
economic professionals are not protected by malpractice liabilities in an incorporated medical practice. A malpractice claim can and does pierce the corporate veil, and the physician is held liable individually for any acts of malpractice.

The other major difference in the treatment of P.A.s and S.C.s is in the area of taxation. These entities are essentially treated as individual taxpayers. They are taxed at the highest individual tax rates and are required to have a calendar year for their fiscal year for tax purposes. This was a response by the IRS to the use of the professional corporation by small practices to defer income between tax years.

In addition, centralized practice structures and confederate forms have different attributes that determine the level of satisfaction of the physician with the practice form. Figure 2-6 shows a list of several attributes that have been identified by physicians as being important to their satisfaction with practice. Centralized forms have a tendency toward certain attributes and confederate forms tend to move in the opposite direction.

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**Figure 2-3** Taxonomy of Medical Groups

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**Figure 2-4** Governance
Organizational Forms

There are a large number of practice structures and variations of those structures that are possible for the medical practice. Although clear distinctions are sometimes made between these forms, they often have much in common and in some cases, vary more by name than function.

General partnerships (see Figure 2-7) are the simplest form of group-practice organization. Partnerships are created by a contract commonly referred to as a partnership agreement, which specifies the terms of the partnership. These entities are characterized by:

1. An agreement on the nature of the enterprise. Two or more individuals (remember that a corporation is an artificial person in the eyes of the law; and therefore, may form partnerships) agree to work together by contributing their assets, skills, and efforts in whole or part in the pursuit of the practice activity.

2. Partnerships are pass-through entities for taxation. Profits or losses are divided in accordance with the partnership agreement, and the partners then declare those profits as income on their personal tax returns.

3. General partners have unlimited liability for the debts and torts of the partnership and their partners.

4. Upon the death of a general partner, the partnership ceases to exist.

<table>
<thead>
<tr>
<th>Personal Physician Autonomy</th>
<th>Group Practice Centralized</th>
<th>Confederation Models</th>
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</thead>
<tbody>
<tr>
<td>Personal Flexibility</td>
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<tr>
<td>Services Offered</td>
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<td>Capital Formation</td>
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<td>Quality</td>
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<td>Efficiency/Standardization</td>
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<td>Professional Interaction</td>
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<td>Stability/Transferability</td>
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<td>Decision Making Process</td>
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↑ Less Likely (decrease)
↓ More Likely (increase)
— No Inherent Tendency
Corporations are created by filing articles of incorporation in accordance with state law. A charter is then granted for the corporation to operate and engage in the lawful activities it was created to do. It is important to note that corporations may not practice medicine and may not be licensed to practice medicine. Furthermore, corporations, being constructs of legislation and having no free will, are required by law to operate according to their charter or bylaws. It is, therefore, essential that the group practice carefully consider the operating parameters established in its organizing documents.

Most large medical groups operate as corporations. Physicians typically join the practice under an employment agreement. Unlike publicly traded companies, becoming a shareholder in a group practice is usually not automatic and often requires more than the simple purchase of the stock. The incoming shareholder purchases the stock in the medical group in accordance with the stock purchase agreement. These agreements specify the terms for the purchase and sell of group stock and any restrictions related to its sale. One common restriction, for example, is that the stock must be sold back to the corporation upon death or departure from the practice for any reason. The use of a stock restriction agreement is extremely important, because, although states have statutes that require

![Figure 2-7 Partnership (straight partnership or limited liability partnership, LLP)](image)

The greatest advantage of the partnership is that it is easily formed. They are generally controlled by the owners, and decision making is usually by consensus.

Unlike the partnership, a corporation (see Figure 2-8) is an “artificial person created by the law.” However, state legislators have placed a number of limits on what a corporation can do and what their legal rights are. First, corporations have a right to buy and own assets, borrow money, enter into contracts, sell interests or shares in the ownership of the corporation, commit torts, commit crimes, and make income. They can be taxable or tax exempt, but are taxed under the corporate tax provision of the Internal Revenue Code. Ownership of the corporation is seen as having some level of independence from the corporation. Individuals that have an interest in the corporation are called shareholders. An important distinction between corporations and partnerships is that corporations and their shareholders can easily exchange their ownership interests without dissolution of the corporation. This allows the medical group practice to add shareholders and remove shareholders as needed while the integrity of the organization remains.

Although they are seen as a person under the law, a corporation does not have all the rights of a living person. A corporation may not vote and has no Fourteenth Amendment rights; so, states may tax and impose fees on corporations for the privilege of doing business in a particular state.

![Figure 2-8 Corporate Forms](image)
all members of a professional corporation to be licensed professionals, the state does not require that stock be sold to members of the existing corporation or to the corporation in the absence of a stock restriction agreement.4

Figure 2-9 shows the organization of a typical group practice.

Hybrid Corporate and Partnership Forms
Although the corporate form is the dominant practice organizational form for medical groups today, they can take some variation in form.

The limited liability partnership, or LLP, is a variation in the partnership form that has some characteristics of a corporation in the area of taxation and extends liability protection to its partners. Similarly, limited liability corporations, LLC, and the S-Corp, are variations of the corporate form and have some characteristics of the partnership. S-Corps, for example, are pass-through entities for taxation much like a partnership, but still have the corporate veil for protection from nonprofessional liability. A more detailed discussion of this can be found in J. Stuart Showalter’s book, Southwick’s The Law of Health Care Administration.5

Physician Hospital Organization (PHO)
One form of group practice that combines the hospital and the physician group or groups into a single organizational structure is the PHO (see Figure 2-10). This form usually occurs when a hospital or its parent company acquires the medical group through the purchase of the group practice’s assets and the employment of the physicians directly by the hospital corporation or through a medical services agreement executed by the corporation.
This form offers some clear potential advantages. Many arrangements, which would be prohibited or very difficult and complex, can be accomplished in the routine course of business for the PHO. This includes such things as joint marketing, contract negotiation for professional services contracts, managed-care contracts, purchasing, and the sharing of such assets as information technology. Another advantage is the access to capital for the purchase of increasingly expensive new technologies and practice development.

The major potential disadvantage is the loss of control over decision making and potential inflexibility of a larger organization.

Management Service Organization (MSO)
Management service organizations are not actually medical groups at all in the sense that the MSO and the medical practice are usually two distinct organizations (see Figure 2-11). MSOs are entities that provide management service support to practices through a contract relationship. The MSO generally contracts with several practices to provide similar services. These contracts specify the nature of this relationship, which generally involve billing and collection of practice accounts receivable, personnel management contract administration, and most of the administrative functions of any medical practice. The advantage of this arrangement is the potential for having higher-quality management and administrative service at a lower cost.

A large MSO has the ability to employ more highly skilled and, consequently, more expensive people in the organization and leverage more expensive technologies for more efficient operations because these costs can be spread over a larger number of physicians. In most cases, MSOs often are capitalized by outside investors and are managed independently of the medical group.

The disadvantages are largely related to the difficulty of separating out these essential functions from the practice should the relationship with the MSO prove to be unsatisfactory. Once the arrangement is in place, it is extremely difficult to undo, rehire staff, and rebuild the necessary aspects of the practice operation. It is essential that practices contemplating such an arrangement do so with great care and due diligence. Performance benchmarks in the contract with procedures for resolving problems and potential compensation for fee relief for poor performance is advisable.
Practice Management Company (PMC)
Practice management companies (see Figure 2-12) have fallen largely out of favor with some notable exceptions. These entities essentially took the MSO concept a step further by serving as a vehicle to amalgamate practices under one corporation. Many of these organizations were able to tap large amounts of capital for acquisitions by becoming publicly traded companies. The advantage of this practice form is its ability to raise capital in the financial markets, but that has turned out to be as much a problem as an advantage.

The need to generate profits from aggregated businesses accustomed to distributing 100% of the income to the physicians as income, seemed to be a clear problem with the model. PMCs simply could not live up to their promise of increasing income to physicians, improving group performance, and providing an acceptable return to public shareholders. PhyCor, one of the largest and oldest of the PMCs, was delisted by the NASD in November of 2000 after posting over a $400 million loss.6

Pediatrix is a publicly traded medical group that has met with great success, even though its business model is similar to the PMC. The PMC is not a complete relic of the past, and as with many medical business models, it requires a careful examination of asset acquisition cost and operations to produce an optimum outcome.

Independent Practice Association (IPA)
These are loosely affiliated entities and are not as widely employed today as in the recent past. Many IPAs formed when managed-care plans were seeking to contract with a smaller number of providers at discounted fees with the promise to direct larger numbers of patients to those providers. The IPAs often share risks with the managed-care plans and accept a defined number of patients while agreeing to provide care at a fixed price or capitated fee (see figure 2-13).

IPAs are usually operated by a board or management committee derived from the practice participants and a professional staff.

The popularity of IPAs has demised as capitation and risk-sharing arrangements with physicians has declined. IPAs that experienced difficulties did so because it was often difficult to properly evaluate risk for the patient population being serviced. Managed-care organizations also had difficulty in providing enough patients to an IPA so that the risk associated with the contract was predictable in actuarial terms.

IPAs may also function similarly to MSOs by providing management services and a way for many practices to share resources. In the case of the IPA, however, such relationships tend to be partnerships between the practices, and the IPA agreement is actually a partnership agreement.

Typical Activities of Service Organizations (MSOs and IPAs)
MSOs and IPAs serve a variety of different functions for the practices they support and in many respects, can replace some or all of the administrative functions that are traditionally contained within the medical group. These services typically include:

![Figure 2-12 Practice Management Company (PMC)](image-url)
Assessing and developing local market plans

Providing practice management support through the employment of professional managers

Increasing coding expertise

Developing a compliance plan

Developing and complying an OSHA plan

MSOs and IPAs also offer:

- Practice assessment
- Billing assistance or provide the billing function
- Wage and hour administration
- Practice positioning, by serving as a clearing house for managed-care contracts
- Telemedicine
- Promotion and other marketing activities
- Continuing medical education
- Quality initiatives
- Vendor leverage and other economies of scale
- Access to capital
- Data collection and management
- Contract administration

Faculty practice plans and medical foundation models offer several advantages to the physician practice.

1. They allow several independent practices to come together and contract as a single entity, which may offer strength in numbers to the managed-care company.

2. Because the organization is tax exempt in most cases, more flexibility is available to the physicians for certain employee benefits such as nonqualified deferred compensation plans.

3. The legal barrier to joint activities with the parent organizations is greatly reduced because they are a single organization.

4. In the case of a physician with a faculty appointment at a medical school, it simplifies the ability of the practice to provide teaching services and maintain a private practice at the same time, with less legal concerns and barriers as these activities are coordinated by one administrative organization.

The greatest potential disadvantage concerns the complexity of the organization and some of the unique regulatory challenges of working within a tax-exempt environment. Many medical groups distribute all or most of the organization’s income to the physician owners. IRS regulations have standards on reasonable compensation for employees of tax-exempt organizations, so care must be taken to properly implement compensation plans to avoid private inurement.
Joint Venture (JV) Relationship
These are special partnerships. They are usually entered into for a specific project or service. They can be between the medical groups, between hospitals and a medical group, or other entities (see Figure 2-15). These entities are highly regulated by the Office of the Inspector General (OIG) of both the federal and state governments because of the potential for fraud and abuse. JVs are often permissible when there is a low potential for abuse or the potential for community good exceeds the potential for harm to the Medicare or Medicaid program.

Most JVs attempt to comply with the various regulatory requirements by fitting into one of a number of safe harbors:

- **Investments in Group Practices**
  Physicians are protected when they invest in their own practice if the practice meets the physician self-referral (Stark) law definition of group practice. This does not apply to physician or group-practice investments in ancillary services joint ventures, but those ventures may qualify under other safe harbors.

- **Investments in Ambulatory Surgical Centers (ASCs)**
  Certain investment interests in four categories of freestanding, Medicare-certified ASCs are protected: surgeon-owned, single-specialty, multispecialty, and hospital–physician owned. The ASC must be an extension of a physician’s office practice for the physician to be protected as an investor.

- **Specialty Referral Arrangements**
  A physician or entity is protected when referring a patient to another provider with the understanding that the patient will be referred back to that physician or entity at a certain time or under certain circumstances. Referrals must be clinically appropriate.

- **Cooperative Hospital Services Organizations (CHSOs)**
  CHSOs are relations between two or more tax-exempt hospitals to provide specific services, such as purchasing, billing, and clinical services, solely for the use of the patron hospitals. The CHSO can be supported through operational costs and payments from a CHSO to a patron hospital.

- **Joint Ventures in Underserved Areas**
  Raises the limit on investments in a venture in an underserved area by “tainted” investors—those who refer to or provide services to the entity—from 40–50% and allows unlimited revenues from referral source investors.

- **Practitioner Recruitment in Underserved Areas**
  Protects recruitment payments made by entities to attract needed physicians and other health care professionals to areas in need of health professionals. Places certain restrictions on patient percentages and payment time limits.

- **Sales of Physician Practices to Hospitals in Underserved Areas**
  Allows hospitals in underserved areas to buy practices of retiring physicians for the purpose of holding them until the hospital can find a new physician buyer. The sale must occur within three years.

- **Subsidies for Obstetrical Malpractice Insurance in Underserved Areas**
  Protects entities that pay malpractice insurance premiums for practitioners engaging in obstetrical services in areas in need of health professionals.

In addition, there are five standards of the group practice safe harbor:

- Equity interests must be held by licensed professionals who practice in the group or by solo professional corporations owned by individuals who practice in the group.
- The equity interest must be in the group itself, not a subdivision of the group.
- The practice must meet the definition of a “bona fide group practice under the Stark law and implementing regulations.”
- The practice must be a “unified business” with centralized decision making, pooling of expenses and revenues, and a compensation–profit distribution system that is not based on satellite offices operating as if they were separate enterprises or profit centers.
- Ancillary revenues must be derived from services that meet the Stark law and implement the regulations’ definition of “in-office ancillary services.”
The complexity and extent of the various legal restrictions on JVs has made them less attractive as possible business models for group practice. The penalties can be so onerous that, frequently, JVs will not service patients with Medicare or Medicaid because the JV cannot qualify for harbor status. The most serious economic penalty for the medical group and its physicians is exclusion from the Medicare and Medicaid program.

**Governance**

One of the most significant issues for medical group practice today is the issue of governance. What makes a group practice a focused and effective organization has much more to do with how the governance structure is organized than the practice’s legal structure. As Figures 2-16 and 2-17 illustrate, the effective interaction of governance and operational activities are essential for the execution of the group’s mission. Such interaction also ensures through monitoring operational and governing activities that the organization’s mission is advanced.

Medical groups are traditionally viewed as professional collegial organizations. They have many unique features, but some that affect governance: the primary producers are all the owners (in many cases); the governed are also the governors (which leads to many policy quandaries); and the notion that “My view should be considered above all else.”

This issue becomes more difficult, as well as more important, the larger and more diverse the group gets. As groups grow, the need for a more centralized form of governance becomes important for many reasons:

1. It becomes more difficult for members of the group to find time and to get adequate numbers of the group together to make policies.
2. Information disequilibrium increases. Some people are aware of and understand the issues, and some do not. This may be due to poor communication or the lack of time to understand the issue or to be informed.
3. The geographic limitations of attendance at meetings, calls, and other necessary absences from meetings makes it difficult to deal with important issues.
4. There is a lack of interest in topics for discussion.
5. There is a sense that members do not understand the issues or that their participation is not needed or welcomed.

**The Role of the Governing Body**

The governing body of the medical group must deal with a number of stakeholders in its quest to provide effective governance of the group, such as:

- Physicians in the practice
- Other physicians in the community
- Employees
- Patients and families
- Payers
- Federal, state, and local government
- Communities at large
- Hospitals

There is widespread agreement that the principle role of the board is to:

1. Develop the organizational mission.
2. Provide institutional goals and target (monitor).
3. Hire, evaluate, compensate, and interact with senior management (CEO).
4. Be responsible for providing quality of care.
5. Deal with external constituents (media, community, and government).
6. Monitor the organization.
7. Develop plans (financial and other).
8. Evaluate its own performance as a body.

In medical groups, most members of the board are physicians; although their duty is to the group as a whole, they may find it hard from time to time letting their own interests or the interests of their specialty take a back seat for the good of the whole. Much of this may be a matter of experience on a governing body, adequate structure in
the group for operational concerns that address individual and specialty needs, and education. Members that value the group tend to have a much easier time serving in a nonparochial manner.

**Mission**

One of the most important but often most neglected aspects of a group-practice organization is the lack of a clear mission statement that is consistent with the values of the organization’s members. Here is an example of a mission statement:

The Good Clinic will provide care of the highest quality to our patients within an environment that is compassionate, ethical, and economically sound. We will accomplish this by:

1. Always putting patients first, maintaining clinical excellence, and seeking to improve care through research, system enhancement, innovation, and continuing education.
2. Being ethical in all of our dealings with patients, colleagues, employees, our hospitals, third-party payers, vendors, and our community.
3. Providing value to our patients, insurance carriers, and hospitals, and being seen as an asset to our community.
4. Having an effective organization that provides quality care, efficient service, effective communication, cost-effective treatment, and a competent and positive work force.
5. Recognizing the value of the group—that we are greater than the sum of our parts.
6. Being focused on the creation of a positive environment that shows compassion and caring for our patients and our staff members.
7. Providing attractive salary and benefit packages that are competitive with all national standards allowing the Good Clinic to attract and keep the most talented physicians and employees.

**A Board Job Description**

It is very important that every potential member of the board understand his or her role and the expectations of the job. As an example, the following is what a board prospect sheet might look like.

**Member of the Board**

**Job Description and Expectations**

**Purpose:** To advise, govern, oversee policy and direction, and to assist with the leadership and general promotion of the clinic so as to
support the organization’s mission and needs and to work closely with the administration of the clinic in order to achieve its goals.

**Number of Members:** Specify the number of members. The typical number is between 5 and 11, depending on the size of the group.

**Major Responsibilities:**
- Organizational leadership and advisement
- Organization of the executive committee officers and committees
- Formulation oversight of policy and procedures
- Financial management (to be defined)
- Review and adopt budget for the organization; to review quarterly financial reports, and to assist administration with budgetary issues as necessary
- Oversight of program planning and evaluation
- Hiring, evaluation, and compensation of senior administrative staff
- Review of organizational and programmatic reports
- Promotion of the organization
- Strategic planning and implementation

**Length of Term:** Specify length of term, which may be staggered.

**Meetings and Time Commitment:** Specify the time and location of meetings such as, “The executive committee will meet every other Friday commencing at 7:30 a.m. and meetings will typically last one (1) hour (this may need to be revised). An alternative is to have monthly meetings (2–3 hours) in the afternoon or evening (consider payment to participants).”

**Expectation of Board Members:**
- Attend and participate in meetings on a regular basis and special events as possible.
- Participate in standing committees of the board and serve on ad hoc committees as necessary.
- Help communicate and promote mission and programs of the clinic.
- Become familiar with the finances and resources of the clinic as well as financial and resource needs.
- Understand the policies and procedures of the clinic.

**Board and Committee Structure**

**Establishing Committees:** It shall be the responsibility of the executive committee to establish ad hoc and permanent standing committees as necessary to assist in the functioning of the clinic. Whenever possible, these committees should contain a representative of the executive committee to provide a proper liaison as well as an administrative staff person.

**Typical Committees:** Include finance, personnel, marketing, quality care, and technology. In an area where managed-care risk contracting is a significant part of the business environment, a utilization management committee is common to oversee the risk management of such contracts.

**Board Selection**

Board members are typically selected by election. Election rules are specified in the bylaws of the organization. It is extremely important that the bylaws be properly adopted and that the procedures adopted by the bylaws be adhered to carefully. Failure to follow an organizational process correctly could result in a challenge to the legitimacy of the process and invalidation under state law.

**Board Retreats**

An essential element of group planning and strategic activity is the board retreat. This event combines educational time, by internal and external speakers, with time to consider issues that are of strategic interest to the group. These issues are often:

1. Related to growth
2. Competition
3. Change in or development of new services
4. Examination of future scenarios and how they will play out: What their effect will or will not be on the organization
5. A reexamination or development of a mission statement
Outside Board Members

Increasingly groups are beginning to behave more like traditional business corporations. As part of this change, groups are adding outside persons to the board to improve the governance process and to bring new ideas and perspectives to the board. These individuals must be chosen carefully with consideration to a number of important criteria.

An example of these selection criteria for a clinic’s outside board member might be:

1. Has a general understanding of the region, its business climate, political environment, and some of the key community drivers; has some perspective on health care and what is happening in the broad view
2. A strategic thinker
3. Willing and able to attend meetings
4. Able to treat information discreetly
5. Some experience as a member of a board
6. No conflicts of interest or its appearance (not someone looking to do business with the clinic)
7. General business acumen
8. Someone who can contribute but not dominate the board
9. Someone who has a history of working well in a group setting—a good fit
10. Willing to sign a confidentiality agreement
11. Willing to accept fair compensation

The Process of Governance Change

Many groups have boards that consist of all of the physicians or all of the physicians that have reached full shareholder or partnership status. Although this method may address the perennial question of autonomy and control, it does little to improve decision making or the speed at which decisions are made. To improve the speed of decision making, many large boards elect an executive committee that has the ability to make certain decisions on behalf of the organization without the vote of the full board. For other decisions, typically those that are significant in magnitude, the executive committee develops preliminary information about a matter and makes recommendations to the board for voting.

Changing governance and modifying the manner in which the board operates is assessed through observations about the effectiveness of the board. Such assessments can be gained by using a survey instrument similar to the following:

Physician Survey

At the physician retreat, we agreed to examine the issue of group governance for the Good Clinic. This survey is intended to provide input to the committee to help guide the process.

Please rate the following statements based on how strongly you agree or disagree with each of these issues in your association with the Good Clinic.

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<tr>
<th>Strongly Agree</th>
<th>Strongly Disagree</th>
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I. GOVERNANCE

1. The current governance practices need to be changed. 5 4 3 2 1
2. I feel the executive committee could handle many issues without full board approval as long as I was kept informed of the process (e.g., last year’s malpractice issue). 5 4 3 2 1
3. I feel the full board should meet less often. 5 4 3 2 1
4. I would be willing to allow a smaller group of physicians to make major clinical decisions so long as they are held accountable for their actions. 5 4 3 2 1
5. I would be willing to allow our clinic management greater autonomy in decision making for the clinic so long as they are held accountable for their actions. 5 4 3 2 1
6. We attend too many meetings on a regular basis. 5 4 3 2 1
7. There are too many physicians involved in the clinic decision-making processes. 5 4 3 2 1
8. The three divisions of the Good Clinic should be more coordinated in terms of their decision making, not less. 5 4 3 2 1
9. I would be willing to have less personal autonomy to expedite decision making in the group. 5 4 3 2 1
10. I would be willing to devote significant time to the governance of the clinic. 5 4 3 2 1

II. MISSION

1. The Good Clinic should offer comprehensive care to the region even if that occasionally means
investing in technologies or staffing that may not be profitable.

2. I would be willing to make less 5 4 3 2 1 money to preserve lifestyle issues such as time off.

3. In a few sentences, please describe your view on the mission of the Good Clinic.

**Monitoring by the Board**

It is important to develop a series of benchmarks that can be tracked by the board over time to monitor the progress and status of the group's performance. This includes quality indicators, such as results of quality initiatives, comparisons with peer databases, and financial indicators such as:

- Gross revenue/per RVU
- Collections/per RVU
- Profit/net income/per RVU
- RVU per MD
- Operating cost/per RVU
- Employee salary/per RVU

Relative value units (RVUs) make excellent measurement tools because they have become a standard part of group-practice management and reimbursement systems.9

Benchmarks need to be understandable and communicate a clear message as to their meaning, be reproducible over time, and be timely (old news is no news, and it is not helpful for quickly reacting to changing situations). Benchmarks also need to measure a key competency or key success indicator for the practice. A complete discussion of benchmarking will be found in another section of this text.

### Part II: Operations

Having discussed the structural aspects of group practice, Part II explores the functional and operational components found in most physician practices.

**Administration**

Nonphysician leadership and implementation of board policies is the principle role of medical group administration. This is accomplished by a coordination of the group's departmental functions to produce the desired outcome. One of the most critical activities is the translation of policy to procedure (see Figure 2-18).

Policies must be stated in terms of actionable steps and procedures that can be communicated to employees. Policies should be documented in a way that allows for consistent application of policy in a reproducible way.

The function of administration varies in groups depending on a number of issues:

1. Size matters. Larger groups often have more departments headed by professional managers that require less supervision and management by administration. In small groups, functions such as human resources (HR), marketing, and finance may be combined under the title of administration. In the context of this chapter, administration is synonymous with executive management.

2. How involved are the physicians in the management structure of the clinic? The physician administrator team has been recognized as an important success factor for groups.

3. The skill and education of the administrative group.

Administration generally falls into three board domains of group-practice administration:

1. The strategic, which can be either mission oriented or competitive in nature
2. The adaptive, reactive, or proactive
3. The operative, maintenance, or implementation

Strategic planning and marketing are major functions found in the strategic domain. Michael E. Porter talks about three general strategic aspects of strategy:

- Cost leadership
- Differentiation
- Focus

The medical reimbursement system does not provide a mechanism for strategies based on price. In our system, pricing has very little to do with what is actually paid for a service, and price elasticity is not as relevant a concept as in most industries. Differentiation and focus have been the dominant strategies for medical groups. Group differentiators are becoming an increasingly important concern. Chief among these are quality and customer satisfaction. Focus is another widely used strategy. The single-specialty group and the specialty hospital are clear examples of focus strategies.

The American College of Medical Practice Executives (ACMPE) has developed an extensive document, which seeks to define all of the critical areas of knowledge and skill necessary for an individual to be a successful administrator of a medical group practice.

The ACMPE Body of Knowledge defines five general areas of competency for the group-practice administrator.
Chapter 2: Organization and Operations of Medical Group Practice

Five General Competencies for Medical Practice Management

1. Professionalism: Achieving and preserving professional standards
2. Leadership: Supporting the organization’s strategic direction
3. Communication skills: Interacting and presenting information clearly and concisely
4. Organizational and analytical skills: Solving problems, making decisions, and developing systems
5. Technical and professional knowledge and skills: Developing the knowledge base and skill set necessary to perform activities unique to the job, role, or task within the eight performance domains or areas of responsibility:
   - Financial management
   - Human resource management
   - Planning and marketing
   - Information management
   - Risk management
   - Governance and organizational dynamics
   - Business and clinical operations
   - Professional responsibility

Best Practices
A significant body of research exists on medical group practices and the traits that distinguish better performing organizations. According to data published by Medical Group Management Association, better performing groups have the following characteristics:

- Physician compensation usually rewards productivity.
- There is excellent communication between physicians and administrative staff.
- There is a productivity-oriented culture in the group.
- An emphasis is placed on quality care, reputation, and patient satisfaction.
- There is a physician administrative leadership team in place.
- A good relationship exists with referral physicians.
- Excellent control systems and budgets are used.
- Cost structures are known and understood.
- Central organization (delegation of decision making as opposed to consensus) is key.
- The entire staff focuses on customer service.
- New physicians are recruited to fit with the group and its culture.
- Management is delegated to administration.
- Administration is seen as professional colleagues and specialists in business.
- A culture of respect is in place.

The Legal Environment and Risk Management
Another important function for medical group administration is in the area of risk management. In very large
groups, this may be contained in a separate legal department, but typically this is a function of administration. Groups need an active risk management program.

The mitigation of risk is the purpose of risk management and may be organized as a department within the organization, as a part of the legal department, or it may be part of administration. Risk management activities involve:

1. The purchase of insurance for physical assets and liability (fiduciary liability directors and officers, malpractice, and bonds); however, these activities are certainly not limited to those that can be insured against
2. Antitrust, fraud and abuse, criminal acts of all kinds, HIPPA violations, unfair trade practices, contract disputes, private inurement issues, and Stark I and II, all issues that have the potential to cause considerable harm to the practice, even as much as malpractice suits can
3. The development of an effective quality assurance program as described later in this chapter
4. Contract administration, which includes a number of documents common to all medical groups

Contracts and other legal considerations These are another major concern for administration. Health care, including the medical group practice, is one of the most highly regulated industries in the United States. It is essential that the well-managed medical group consider this and be familiar with this enormous body of law and how it applies to the practice. This information is also critical in the proper development of policies and procedures to ensure compliance and legal operation.

Although malpractice is the first subject to come to mind in a discussion of legal matters that affect medical group operations, it is by no means the only issue. These issues can be generally divided into:

Patient care issues Standards of care, informed consent, medical records, advance directives, malpractice, and reporting requirements

Business issues Reimbursement, Medicare and Medicaid; Stark and anti-kickback rules, credit and collection; contracts with payers and vendors

Employment contracts A host of law devoted to human resource issues

Licensure issues Regards physicians, physicians’ assistants, nurses, nurse practitioners, clinical laboratory, nuclear medicine, radiology, and cytology technicians are a key management concern for the medical group. Corporations and partnerships are also required to maintain business licenses, which requires filing with states in which the organization has been incorporated, and in which it operates.

Credentialing Thousands of applications and renewals must be handled by this functional unit of the practice on an annual basis. Managed-care companies, hospitals, insurance companies, state regulators, and federal programs such as Medicare and Medicaid, require an application for provider status and maintenance of pertinent records on a regular basis. Unfortunately, this activity varies dramatically from state to state and from company to company. A practice of 50 physicians could easily have over 2000 pieces of credentialing that must be handled each year.

A medical license is required for each state in which the physician or other licensed professional practices.

- Medicare provider number
- Medicaid provider number
- Provider number for managed-care organizations and insurance companies such as Aetna, CIGNA, United, Blue Cross and Blue Shield (several across the country)

Contract negotiations The complexity of contracts and the significant consequences of signing a “bad” contract make this a significant duty for administration to either carry out this function or manage the process if it is delegated to a law firm or in-house counsel.

Patient Flow

Effective group-practice operations begin with a well-organized and managed patient flow system.

Front office activities include the scheduling of patients and preparation for their visit to the clinic as shown in Figure 2-19. These systems are usually integrated with the information technology systems of the organization and may be divided into smaller department functions, for:

- Registration
- Appointment scheduling
- Patient arrival and check in
- Patient management during their visit
- Patient exit

The physical layout of the practice is also critical for efficient patient flow. The steps that patients need to follow in preparing for and receiving their services should be logical, communicated carefully to the patient (verbally and through well-written information), prompted by well-done and informative signage, and by the careful observation of a staff that is well trained in customer ser-
vice and the hospitality arts. Employees for a well-managed medical group should always be selected for their ability to interact well with patients and visitors and not just for technical skill. It is often possible to teach technical information, but many times more difficult to train for customer service attributes.

Because patient waiting is one of the most frequent sources of dissatisfaction, waiting areas should be comfortable, with plenty of reading material or other activities such as patient education, either in written form or as video material.

### Billing, Credit and Collections, Insurance

Managing the revenue cycle is an essential function for the successful medical group. This is a very dynamic process that is constantly changing because of revisions in billing requirements by payers and as information technology continues to improve. Most medical groups use medical-practice software packages that contain all of the subsystems necessary for the effective documentation of service, entry of patient information, and service information. Almost all systems include:

#### Figure 2-19 Patient Flow

Key Documents
- Charge Ticket – Routine Ticket
- Registration Form

Update Material
- Verification and Internal Audit Record
- Documentation of Service
Scheduling and registration of patients and verification of services and payer information
- Patient information
- Billing functions, which include multiple-fee schedules and billing requirements for each payer
- Managed-care requirements and procedures
- Reporting of billing and service information
- Multiple data entry options such as scanning, key entry, and downloading of wireless devices
- Accounts receivable and collections information and reporting
- Electronic claims submission and remittance of payments through electronic data interchanges (EDI)

These systems then provide for the creation of claims for reimbursement to Medicare, Medicaid, and all commercial insurance payers, as well as the creation of patient bills.

Although attempts have been made to standardize claims processing, almost no standardization of billing and payment processes exists among the more than 1000 health insurers in the United States. Among the areas of variability are:

- Patient eligibility verification procedures
- Payer documentation requirements for certain procedures
- Bundling policies
- Modifiers and formats for explanations of benefits (EOBs)

The failure of our health care system to standardize the billing process has led to high error rates, denial of payments, and difficulty for everyone involved—the patient, the practice, and the payers.

The billing and collection process is covered by a significant number of rules and a large body of law. In addition, the billing process is very complex and varies greatly among payers. In an article published in the New England Journal of Medicine, authors Steffie Woolhandler et al. found that the cost of administration in the United States was $1059 per person in 1999, compared to $307 in Canada.

Although some are critical of the study and felt it overestimated the cost of the administrative burden of the American health system (some $300 billion annually), no one doubts that the administration of our health care system is fragmented and cumbersome.

Because these systems vary by their specific functionality, each system requires a significant amount of training by the medical group for all employees that will use the system. Many groups maintain training facilities for this purpose because the cost to the practice for having poorly trained employees can be substantial in terms of revenue loss and potential penalties by payers, not to mention the delay in receiving payment.

Figure 2-20 outlines the revenue cycle for most medical groups from the entry of patient service information until the claim is paid and the cycle is completed.

Medical records: The maintenance and safekeeping of a patient's medical record is the principal function of the medical records unit. These records contain the proof of what was done, who did it, how it was done, why it was necessary to be done, where it was done; and in addition, it contains a plan for future care. One could argue with great success that this is the most valuable and important document within the medical practice.

Most group-practice records contain:

- Physician notes including a treatment plan and treatments provided
- Operative notes
- Laboratory test results and orders
- X-ray tests results and orders
- All other ancillary services that may be applicable to the patient
- Communication from other providers in the form of letters or other forms of communication, such as copies of records
- Hospital records, such as discharge summaries, operative notes, and copies of test results from the hospital
- Consultative reports
- Treatment plan
- Demographic information about the patient
- Identification of the patient within the last provider organization
- Details of the admitting or receiving clerk
- Patient demographics
- Insurance or health plan information
- Relevant appointments
- Diagnoses
- Allergies
- Medication list
- Physician orders
- Anticipated goals (care plan), including rehabilitation plans
- Home health or hospice information
- Follow-up
- Nurse detail
- Self-care status
- Disabilities and impairments
One of the great challenges of medical records management is one of completeness. Patient records come from so many sources, as shown in Figure 2-21.

The new emphasis on patient privacy has also led to new challenges. The Healthcare Insurance Portability and Privacy Act of 1996 (HIPPA), is a very pervasive law that affects many aspects of group practice. The law deals with:

- Privacy of patient information
- Security of patient information
- Transaction and coding standards
- Patient identifiers

It is essential that all employees are properly trained regarding HIPPA, and that all systems within the organization, including physical space, is vetted for HIPPA compliance.

Electronic medical records (EMRs) One of the most dynamic areas of the medical group practice has been, and continues to be, the electronic patient record. After many years of development, however, electronic records are beginning to fulfill their promise of creating a reduced amount of paper records in the office. Although there have been electronic records systems for a number of years and many of them have been capable systems, adaptations have been very slow, principally because innovation can be adopted only so quickly (see Figure 2-22).

This fact can largely be attributed to the inherent difficulty of getting 100% adoption of the innovation, which is necessary to prevent the need to maintain multiple records systems.

Another problem is the multiple systems of medical records material; often there is a plethora of technological platforms and media formats. It is frequently impossible to find compatible ways to integrate the records, and these different medical records formats produce a regression to the lowest technological denominator. In many cases, it is paper. Scanning technology and the develop-
ment of e-interfaces with computer systems, making them easier to use, have overcome these issues. In addition, developers of systems are creating the ability to provide more linkages, either through using common computer code or by using common interface engines. One of the positive forces in the electronic records area is the precipitous drop in prices of storage media.

In spite of the inherent difficulties in the move to the electronic medical record, this is a trend that will continue for many reasons. In a survey of providers conducted by the Medical Records Institute, the driving force for implementation continues to show an upward trend, as shown in Table 2-1.

Finance
The financial structure of medical groups is not substantially different, or at least should not be substantially different, from other organizations. One significant exception to this operation is the fact that most medical groups still maintain their financial records on a cash basis accounting system as contrasted to an accrual system. Cash basis systems recognize expenses when they are paid and income when it is received. Accrual systems recognize expenses when incurred and income when it is earned. Cash basis systems are analogous to the way our income tax system works and is undoubtedly a remnant of proprietorship, which must operate in this way. Other reasons such a system has endured is at least in part the propriety in nature of medical receivables, which at times can be difficult to determine. In addition, the reversion to an accrual system once a cash system has been in place represents a formidable challenge as it requires the recognition of receivables as income. In addition, most medical groups are privately held, where a strict adherence to generally accepted accounting principles (GAAP) is not required.

Financial systems typically maintained by a medical group are:
- Payroll
- Accounts receivable
- Billing systems
  - Insurance
  - Government third party
  - Self-pay
- Employee benefits
- Accounts payable
- Financial reporting
  - Balance sheet
  - Profit/loss statements (income statements)
  - Budgets
  - Variance analysis
  - Service and receipt (and its various forms)
- Financial control and audit functions
  - Internal
  - External
- Compliance
- Maintenance of fee schedules and charge masters
- Chart of accounts

Human Resources
The human resources department is responsible for the orderly management of the most important resource in the medical group practice, its people. As shown in Figure 2-23, this involves a large number of functions:
- Evaluation of positions needed by the organization
- Creation of position-control procedures
Establishing and preparation of job descriptions
Salary administration, which includes the establishing of pay ranges
Recruiting, which includes seeking candidates, interviewing, and testing
Credential evaluation and verification
Selection of applicants
Hiring and the required statutory and organizational documentation
Orientation
Evaluation of performance
Documentation of work to payroll

In addition, administration of employee benefits is a vital function. Some of the benefits plans include:

1. Paid time off or PTO: This is sick leave and vacation or personal time off
2. Statutory benefits: FICA, Medicare, FUTA, and state unemployment benefits
3. Pensions
4. Insurance benefits: Health, dental, life, and disability
5. Section 125 plans: These are special employee reimbursement plans that allow pre-tax reimbursement of certain expenses, such as uninsured medical expenses, co-pays, deductibles, and child care; they are so named because they are enabled by Section 125 of the Internal Revenue Code

Another critical function of the human resources department is development and management of personnel policies, which cover a vast number and variety of issues beyond the scope of this book. However, a typical personnel manual, which contains an extensive list of issues that must be addressed by the human resources department, might look something like this:

**Introduction**
Welcome ............................. .1
Introductory Statement .................. 2
History of Clinic ........................ 3
Mission Statement ............................. 4
Employee Acknowledgment .................. 5
Customer Relations .......................... 6

**Employment**
Contributions and Solicitations .......... .9
Donations ................................ 9
Equal Employment Opportunity ............ 9
Business Ethics and Conduct ............ 9
Gifts/Gratuities .......................... 10
Conflicts of Interest .......................... 10
Security and Privacy .......................... 11
Hiring Relatives ............................ 11
Immigration Law Compliance ............ .11

**Table 2-1: Trends**

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<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Improve the ability to share patient record information among health care practitioners and professionals within the enterprise</td>
<td>90%</td>
<td>83%</td>
<td>85%</td>
<td>73%</td>
</tr>
<tr>
<td>Improve quality of care</td>
<td>85</td>
<td>83</td>
<td>80</td>
<td>72</td>
</tr>
<tr>
<td>Improve clinical processes or work flow efficiency</td>
<td>83</td>
<td>83</td>
<td>81</td>
<td>67</td>
</tr>
<tr>
<td>Improve clinical data capture</td>
<td>82</td>
<td>78</td>
<td>68</td>
<td>61</td>
</tr>
<tr>
<td>Reduce medical errors (improve patient safety)</td>
<td>81</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Provide access to patient records at remote locations</td>
<td>70</td>
<td>73</td>
<td>71</td>
<td>59</td>
</tr>
<tr>
<td>Facilitate clinical decision support</td>
<td>70</td>
<td>69</td>
<td>66</td>
<td>58</td>
</tr>
<tr>
<td>Improve employee/physician satisfaction</td>
<td>63</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Improve patient satisfaction</td>
<td>60</td>
<td>59</td>
<td>54</td>
<td>40</td>
</tr>
<tr>
<td>Improve efficiency via previsit health assessments and postvisit patient education</td>
<td>40</td>
<td>38</td>
<td>36</td>
<td>n/a</td>
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<tr>
<td>Support and integrate patient health care information from Web-based personal health records</td>
<td>30</td>
<td>28</td>
<td>29</td>
<td>n/a</td>
</tr>
<tr>
<td>Retain health plan membership</td>
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<td>9</td>
<td>7</td>
<td>n/a</td>
</tr>
<tr>
<td>Other</td>
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<td>4</td>
<td>1</td>
<td>3</td>
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<tr>
<td>Responses to these questions</td>
<td>729</td>
<td>293</td>
<td>296</td>
<td>358</td>
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</table>
Part II: Operations

Outside Work
Job Posting
Identification Badges
Employment Status & Records
Employment Categories
Access to Personnel Files
Employment Reference Checks
Personnel Data Changes
Introductory Period
Employment Applications
Performance Evaluations

Employee Benefit Programs
Paid Time Off (PTO)
Sell Back PTO
Service Years
Holidays
Bereavement
Uniform Allowance
Jury Duty

Workers, Compensation
Health Insurance
Dental
Change of Status
Short-Term Disability
Long-Term Disability
Life Insurance
Retirement
401(k) and Profit Sharing Plans
Continuing Education
Family Medical Leave Act (FMLA)
Educational or Personal Leave
Military Leave
Parental Involvement Leave

Timekeeping/Payroll
Timekeeping
Paydays
Administrative Pay Corrections
Pay Deductions and Garnishments
Overtime

Figure 2-23 Human Resources
Information Technology

Information technology (IT) is widely used for many of the functions found in medical group practices. Most larger medical group practices have now developed integrated networks to provide ready access to information and the ability to instantly update records and information related to various activities within the practice.

The IT department touches virtually every department in the clinic and provides the opportunity to share data and information and to easily access information for management and clinical use.

Often these networks include many subsystems that carry out a specific function. This includes accounting, financial management, personnel and file maintenance, accounts receivable, accounts payable, billing, medical records, clinical reporting, quality assurance, and training. Figure 2-24 shows a simplified schematic of a group-practice information system.

Increasingly, systems between organizations are being linked through network interfaces. In some cases, these networks become quite extensive and encompass many aspects of the medical community. Such systems are known as community health information networks (CHINs). A typical system includes:

- Patient portals
- Web sites
- Clinical portals
- HIPAA compliance
- Easily exchanged information to authorized parties
- Links between different providers to share the patient’s longitudinal care record

As the Internet has become faster and more available, especially high-speed access, the interaction of the medical group practice with all of its stakeholders has become increasingly possible.

The Internet has begun to significantly change how the group practice operates. Both clinical and business operations are involved in this revolution. The World Wide Web is cost-effective, makes possible ready access to information for review, and is a vehicle for updating records.

Web portals have become the key to an effective Internet strategy. The key element is the practice Web site. Frequently, a practice’s Web site becomes the portal of entry to the practice, and serves not only as a vehicle for the prospective patient to obtain information about the practice, but increasingly it is becoming a method of two-way communication.

Web sites should:

- Be easy to navigate
- Be updated frequently
- Contain accurate and relevant information, including such topics as services, directions, physician information, specialized care and services, policies, community activities, and research being conducted
In addition to the availability of records, the notion that organizations can be connected to better service the patient is a concept that has been developing over the years. These CHINs will likely gain additional vigor as more emphasis is placed on patient-centered care.

The specialist referral process can create significant frustration for both referring physicians and patients. In interviews with physicians, here are some of the most common statements and findings:

- Referral coordinators are often on the phone 20 to 30 minutes to get an appointment.
- Managed-care influences access and administrative burden.
- Appointments are difficult to get in timely fashion.
- Despite the proliferation of information technology, the referral process continues to lack sophistication, clear customer interfaces, and information flow.
- Specialist feedback, when provided, is written and sent through the mail.
- Patient records are often misplaced.

**Patient Communication and Access**

Some 25% of patients use the Internet for health information. The Internet is becoming the great “democratizer” of health care information. Patients, however, want that information to come from their physicians. In a recent survey of 400 patients with an average age of 59.1 years, 44.1% indicated they had access to e-mail, and of those, 58.6% said they would like to communicate with their physician in this manner. Certainly this data supports the idea that health care is becoming a more collaborative venture between the physician and the patient.

**Facilities Management**

For smaller practices with a single location, facilities management may be a function within administration. The function of facilities management is to acquire and maintain the physical facilities of the organization. This involves:

1. Leasing or purchase of the space
2. Construction management of building or renovation projects
3. Acquisition of fixtures, such as office furniture and equipment
4. Maintaining the property and equipment to ensure that the clinic is able to function at all times

These activities may also be done through a series of outsourcing and maintenance arrangements, such as maintenance contracts, but the coordination and supervision of this function cannot be overlooked. Facilities that are in poor condition or not functioning are not only ineffective, but can be a considerable liability to the practice.
Purchasing and Supply Management

The purchase of supplies and other necessary items for the practice requires special attention to the following concerns:

- Dependability
- Discounts for bulk orders
- Price and quality
- Relationship with current vendors
- Customization
- Market exclusivity
- Value
- Delivery schedules
- Guarantees
- Safety for the purchasing agent

The current state of the art in medical group management uses computerized systems to purchase supplies and equipment for the organization and to manage the supply chain for the practice. The characteristics of these systems are:

1. A common catalogue (used to control items that are ordered. Many groups with automated systems have a difficult time controlling the number of sources and the scope of the items purchased. This is especially true in groups with a number of offices in different geographic areas.)
2. A rule-based per established ordering program which requires authorization of purchases from the approved catalogue
3. A system to control and document receipt of goods and the accuracy of the ordered items, which provides an effective method to verify delivery of products and establish if the order is correct in terms of quantity and price

Important software features included in many of the newer software products include:

- Online requisitioning (electronic catalogs incorporated)
- Transaction based audit trails
- Online approvals and purchasing
- Automated faxing
- Internal messaging
- Request for quotation
- Electronic ordering capabilities
- Standing orders
- Freeform orders
- Rule builder
- Transaction-based reporting
- Predictive reporting

- Multiuser defined pick lists
- In/out status tracking
- Purchase order attachments
- Real-time status updates
- Purchase order consolidation

In addition to control, automated procurement provides the practice with better opportunities for inventory control and taking advantage of economies of scale when purchasing.

Clinical Activities and Departments

Medical group practice provides a large variety of patient services in addition to the physician visit. Physician services are often loosely divided into office-based services and hospital-based services, but the line is rapidly beginning to blur. Group clinic operations often include:

- Clinical laboratory services
- Radiology services
- Ultrasound
- Nuclear medicine
- Computerized axial tomography
- Nuclear magnetic resonance imaging
- Outpatient surgery, sometimes within the context of the ambulatory surgery center
- Dietary counseling services

Other clinical services such as preventive care is often organized into a unique department of the group practice.

The organization of each medical service department requires careful attention to a host of legal, licensing, and regulatory requirements. It also may be necessary in many states to obtain a Certificate of Need (CON) or other regulatory approval for certain services depending on cost of the service and the compliance of the service with community standards of care and state health plans.

Clinical service must be organized and managed by properly licensed and knowledgeable professionals. Such services also require adherence to standards that are established by various professional society and credentialing bodies. Often approval and certification of operations are required by state departments of health and by major payers before payments are be made on behalf of covered individuals.

Quality Assessment an Important Focus

A major barrier to change and improvement activities in medical groups is the problem of variation. Variation equals cost. This variation, as noted earlier, is one inherent reason for the slow growth of group medical practice.
In addition, the variability in the delivery of care has been associated with the fragmentation of quality and the inability to leverage economies of scale to any great degree in physician practice.

This has become one of the most important areas of concern for the medical group. The Institute of Medicine (IOM) released a report “To Err is Human,” which has been a hotly debated topic, but nonetheless has strong support from the social science and economics disciplines. These are issues that everyone in group management needs to understand, and these issues should be the basis for quality assurance and risk management activities.

Regardless of our feelings on the matter, there are many critics of the health care system and all of its components. These voices are increasingly being heard and simply cannot and should not be ignored. The medical group is a quasi-public organization, although most groups are privately owned. To illustrate this point, consider that:

1. Sixty percent of all health care in the United States is paid for by government entities.
2. Public scrutiny of health care and its regulations is increasing.

Medical groups will continue to be a source of public interest and debate.

It is important to have some background on the nature of quality improvement and its critical need in the medical group. Unlike most other industries, quality is difficult to define and measure for the typical consumer/patient. First, consider the great asymmetric nature of health care, which is characterized by situations in which the parties on the opposite side of a transaction have differing amounts of relevant information. Examples of asymmetric knowledge are:

- Vendors typically know more about the strengths and weaknesses of their products than do purchasers.
- Employees typically know more about their health problems than do human resource or health plan managers.
- Subordinates typically know more about the effort that they have put into assignments than do their superiors.
- Providers typically know more about the treatment options than do their patients.

Another widely discussed concern by critics of the medical industry is that physicians and other health care providers have the unique ability to create supplier-induced demand (SID). SID is characterized by a change in demand for medical care services associated with the discretionary influence of providers, especially physicians, over their patients. This is demand that provides for the self-interests of providers rather than solely for the patients’ interests.

In addition, critics of the health care system and physicians in general have often pointed to small area variations (SAV) as evidence of a physician’s ability to increase the use of services. SAV was documented by John Wennberg and defined as large variations in the per capita rates of utilization across small, homogenous areas for many medical and surgical procedures.

**The Social Concerns for Health Care Delivery**

The detractors of our health care system do not stop with Wennberg and, in fact, go much further.

Ivan Illich in his book, *Medical Nemesis*, delivers a stinging indictment of the health care system. He says,

> The major threat to health in the world is modern medicine. The medical community has actually become a great threat to people. Doctors and others (pharmaceutical industry) serve their own interests first. People become consumers and objects.

He identifies three levels of damage:

1. Clinical treatment actually often harms people. Patient safety has not been a high priority.
2. More and more problems are seen as amenable to medical intervention. Pharmaceutical companies develop expensive treatments for nondiseases.
3. Over 100,000 people a year die from adverse drug effects.

**People Are Consumers and Objects**

It is a new idea that everything, including labor and culture, can be assigned a market value. Such a practice destroys traditional ways of dealing with death, pain, and sickness.

Thomas McKeown, a leading expert on social medicine and another prominent critic of our health care system, in his book, *The Role of Medicine*, asserts the role of medicine and doctors in improving human health has been greatly overstated. Disease is basically addressed through prevention and only secondarily through treatment.

Longevity of life has increased through factors such as:

- Reduction in infectious diseases because of genetic reactions
- Better nutrition
- Elimination of infanticide
McKeown goes on to say medical research is of limited value and researchers too often focus on “basic research” at the expense of socially useful research.23

It is essential that we have programs to demonstrate quality care that is appropriate, cost-effective, and in the best interest of patients. We need to understand our outcomes and our process so we can better explain away the “blackbox” nature of the profession to our detractors.

**Quality Improvement and the Effective Medical Group**

The issue of quality in the service provided by group practices is paramount to group-practice operations and the future of health care. In addition to the critics of our services, paying for performance is becoming a reality. It starts with understanding what the medical group is really about. The first section of this chapter discusses the many structures and lists attributes of group practice. Organizing for delivery of quality has not been a central theme in group practices because many structural and operational considerations have been focused on issues other than the quality of care. The lack of standardization, the absence of any formal adherence to best practices, and lack of formalized quality improvement for programs all contribute to a lack of progress in delivering quality service.

This is not to say that financial issues are not important. Medical group structures are not designed, or in some cases are antithetically designed, to invest in quality initiatives. The extreme short-term focus of financial performance is a chief culprit. Groups do not invest either financially or in the training needed to carry out large-scale improvement initiatives. Investment dollars can only come from the shareholders’ pockets, a prospect that has long curtailed the development of modern medical groups.

In Dr. Deming’s book, *Out of the Crisis*, he asks a question that should serve as the cornerstone of any group’s quality initiative:

> What are you doing about the quality that you hope to provide to your customers four years from now?24

The issue of quality in the American health care system is an increasingly important one as we begin to better understand the issue of quality. For most of history, quality has been virtually undefined. As Voltaire would have said, it is indeed “in the eye of the beholder.” However, that is changing dramatically as the ability to measure quality evolves and expectations of the quality of health services become higher.

Variation, or put another way, lack of standardization, is a central theme throughout group practices. We know our health care system produces superior outcomes usually, so why the variation? There are many potential causes of variation.

So what do we do about it? Quality must be a core value of medical group practice and that value must be expressed by having a systematic way of monitoring and improving quality in the medical group practice.

**Identifying Issues That Require Examination and Correction**

There are many opportunities to evaluate the practice. Some of the most fruitful areas to find projects for quality improvement activities are:

1. Patient satisfaction surveys
2. Malpractice claims review
3. Benchmarking clinical and nonclinical data
4. Standards established by specialty societies
5. Review and understanding of national data such as all of the departments of the National Institutes of Health (see http://www.nih.gov/icd) and the Agency for Health Research and Quality (see http://www.ahrq.gov).

Initiatives on quality require a systematic approach to reduce the influence of bias and emotions on the process. Many techniques have been used, including:

- Total Quality Management or TQM25
- Continuous Quality Improvement or CQI26
- Six Sigma27,28,29

All of these processes use statistical measure to evaluate an identified process to determine the source of error and variation in outcome. There are many resources on the actual technique, and the reader is referred to these sources for more complete information.

However, all of these techniques have the same fundamental premise. They all involve the following steps:

1. Plan and determine the process to be examined and a clear delineation of the process.
2. Measure the process activities.
3. Analyze using various statistical techniques. This can involve one or more of the tools shown in Table 2-2.

All of these techniques seek to identify the variation in outcomes and then assign the nature of the cause of variation or error. These are often referred to as special
Part II: Operations

causes, such as human error, or common cause, which are the results of the process itself. An example of this might be billing error due to improper coding. Run charts are very commonly used to evaluate data for common and special causes, as shown in Figure 2-25.

Variation is depicted as upper- and lower-control limits once the data is plotted. The run chart then shows the natural variation in the system, or the areas between the upper- and lower-control limit. Special causes can then be said to be those that fall outside these limits.

These quality assurance (QA) processes depend heavily on virtually everyone involved in the activity being trained to use the measurement tools needed to evaluate the process. The time and expense involved in doing this is one of the major difficulties in having an effective process-improvement program.

One of the more popular systems being used in process improvement today is Six Sigma. It is interesting considering the level of performance that Six Sigma implies and what users of the system are able to achieve. Six Sigma takes the absolute number of unacceptable outcomes as a percentage of all outcomes to determine the sigma level as shown in Table 2-3.

American industry is seeking the Six Sigma level of performance as a quality standard. It is realistic to achieve this in group-practice activities. Can many medical groups produce an error rate less than 3.4 per million appointments, transaction postings, or filed claims? How about diagnostic or treatment errors? The usefulness of Six Sigma in the medical group practice remains to be seen; even if sigma level six is not achievable, improvement is certainly possible.

Another important issue is the concept of the Type I and Type II error. Type I errors in process improvement occur when the evaluator concludes incorrectly that the observed outcome is caused by the data point being considered. Figures 2-26, 2-27, and 2-28 show examples of a potential Type I error.

It might be logical to conclude that group size would influence total medical revenue per FTE physician; but when regression analysis is carried out, R-squared is only .0001, meaning that this has almost no effect on the outcome. Recall that R-squared is a measure of the percentage of cause that can be accounted for by the variable under analysis while holding all other variables consistent. Figure 2-27 shows a similar analysis for cardiology groups who accept Medicare. Logic might say that groups with high percentages also have lower total incomes; but this is not true according to these data.

And a final example of Type I errors, as seen in Figure 2-28, shows the effect of commercial insurance on total income. The conclusion must mean that other factors are more responsible for effects on total income than those examined.

When action is taken to correct an erroneous cause of an effect, tampering occurs and then systems may actually become more variable.

Type II errors result from situations where the cause is not recognized as being produced by the variable being analyzed. This is most likely caused by a failure in the process, improper data collection, or improper analysis. In some cases the system may be so complex that it defies the use of these techniques. The results would be affected by the tendency to undercontrol the process. This is the inherent nature of health care, and Type II errors are probable.

It is impossible to monitor all activities of the practice continuously in real time. Consider, for example, that in a large practice with 100 physicians, depending on the specialty, there can be as many as 1000 visits a day, with other services adding thousands of additional transactions to the system, all of which have a “customized” feature. Control charts, the patient satisfaction survey, and the other techniques available to the practice are essential to help identify areas of the clinic that need to be examined in a systematic way.

### Table 2-2  Methods for measuring/monitoring quality

<table>
<thead>
<tr>
<th>Technique</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Histogram</td>
<td>Shows the range and depth of variation in a group of continuous data</td>
</tr>
<tr>
<td>Frequency plot</td>
<td>Displays discrete “count” data (number of defects)</td>
</tr>
<tr>
<td>Process maps</td>
<td>Charts a series of tasks (rectangles) and decisions/reviews (diamonds), connected by arrows to show the flow of work</td>
</tr>
<tr>
<td>Pareto chart</td>
<td>Stratifies data into groups from largest to smallest</td>
</tr>
<tr>
<td>Time series plot or run chart</td>
<td>Chart show how things change from moment to moment, day to day, etc. (see Figure 2-25 as an example)</td>
</tr>
<tr>
<td>Scatter plot</td>
<td>Shows the correlation between two factors that vary by count or on a continuum</td>
</tr>
</tbody>
</table>
Chapter 2: Organization and Operations of Medical Group Practice

Research

Many medical groups are engaged in significant research as part of the clinical activity of the group. This is almost always clinical research as opposed to basic research, which is usually divided into two general categories:

1. Premarket research
2. Postmarket research

This research is regulated by the FDA. As the name implies, premarket research is conducted prior to the approval by the FDA to market the device or medication, and postmarket research is conducted to "monitor the ongoing safety of marketed products." This is accomplished by reassessing drug and device risks based on new data learned after the product is marketed, and recommending ways of trying to most appropriately manage that risk. The key players in the research department are:

1. The Principle Investigator (PI): Usually this is a physician, and the PI is responsible for conducting the clinical research
2. The Director: Responsible for the administration of the project and often involved in the acquisition of projects
3. Research Nurses: Conduct research, collect data, and manage the research information as well as reporting
4. Support Staff: Assists the nurses and directs in their duties
5. The Institutional Review Board (IRB): An independent body responsible for reviewing and approving proposed research involving human subjects; the role of the IRB is principally to help ensure that research is as safe as possible and that the potential benefits of the research outweigh any possible harm that could be caused to the experimental subjects.
6. The Protocol: The written procedures and processes required by the project. It indicates which patients are eligible to participate in the research, what the endpoints of the research are to be, what measurements and data are needed, and what must be reported. Follow-up care of the subjects is also typically specified.

Figure 2-29 illustrates the process of medical research in the practice environment. As more new drugs and devices are discovered, research opportunities will continue

<table>
<thead>
<tr>
<th>Sigma level determination</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>The absolute number of unacceptable outcomes per million observations</th>
<th>The percentage of unacceptable outcomes</th>
<th>The Six Sigma level</th>
</tr>
</thead>
<tbody>
<tr>
<td>690,000</td>
<td>69.0000%</td>
<td>1.0</td>
</tr>
<tr>
<td>500,000</td>
<td>50.0000%</td>
<td>1.5</td>
</tr>
<tr>
<td>308,000</td>
<td>69.2000%</td>
<td>2.0</td>
</tr>
<tr>
<td>158,700</td>
<td>84.1300%</td>
<td>2.5</td>
</tr>
<tr>
<td>66,800</td>
<td>93.3000%</td>
<td>3.0</td>
</tr>
<tr>
<td>22,700</td>
<td>97.7300%</td>
<td>3.5</td>
</tr>
<tr>
<td>6,210</td>
<td>99.4000%</td>
<td>4.0</td>
</tr>
<tr>
<td>1,300</td>
<td>99.8700%</td>
<td>4.5</td>
</tr>
<tr>
<td>320</td>
<td>99.9800%</td>
<td>5.0</td>
</tr>
<tr>
<td>30</td>
<td>99.9970%</td>
<td>5.5</td>
</tr>
<tr>
<td>3.4</td>
<td>99.9997%</td>
<td>6.0</td>
</tr>
</tbody>
</table>

Figure 2-25 Chart control

<table>
<thead>
<tr>
<th>Upper-Control Limit (UCL)</th>
<th>Desired Outcome</th>
<th>Lower-Control Limit (LCL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special Cause</td>
<td>Common Cause</td>
<td>Time</td>
</tr>
</tbody>
</table>

The greater the distance between UCL and LCL, the greater the variation due to systemic causes.
Single-Specialty Cardiology Groups

Figure 2-26 Revenue by Number of FTE Physicians

Figure 2-27 Revenue by Percent of Charges from Medicare
to increase and become an increasingly important part of the medical group. Research also offers the advantage of intellectual challenge, and interest can be a source of great professional satisfaction.

**Endnotes**

5. Showalter. 251.
13. The Center for Medicare and Medicaid Services (CMS) has created the standardized 1500 claim form, and The HealthCare Portability and Accountability Act (HIPAA) has mandated some standardization of coding and submission of claims.
Figure 2-29 Research Project

31. Acknowledged that charts in Figures 2-27, 2-28, and 2-29 were prepared with assistance from David N. Gans, MSHA, CMPE, MGMA Practice Management Resources Director, Denver, CO.

General References

Physicians Practice Compliance Report. (MGMA and Opus Publications) 2000. 3(1).

 Participating Organizations

National Institutes of Health http://www.nih.gov

 Components of Participating Organizations