

Reproductive Endocrinology and Infertility

Douglas T. Carrell · C. Matthew Peterson
Editors

Reproductive Endocrinology and Infertility

Integrating Modern Clinical
and Laboratory Practice



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We dedicate this book to our mentors, students, residents, and fellows who have continually refreshed our excitement for reproductive medicine as we learn with them, and to our families who have sacrificed much to assist us in our professions.

Preface

More than 30 years after the birth of Louise Brown, the first child born as a result of in vitro fertilization, the practice of reproductive medicine has grown and evolved in a dramatic and profound fashion. Classical reproductive endocrinology and surgery remain important components of clinical practice, but they are joined with major developments in the laboratory and clinic that have opened the doors of therapy to millions. Furthermore, the outlook for the future is stunning, including novel technologies that may facilitate quantum advances in the clinic and laboratory.

The advances made in the treatment of infertility have made the care of infertile patients more successful, rewarding, and exciting. However, management of the modern reproductive endocrinology and infertility clinic has become very complex. In addition to the medical and scientific knowledge necessary to manage a clinic and laboratory, the modern director must have an understanding of such disparate fields as marketing, accounting, management, and regulatory issues. It is impractical to obtain such a broad range of experience during a doctoral or fellowship program and difficult to follow the advances of each field through traditional methods. This book was developed to assist the practicing reproductive endocrinologist and/or laboratory director by providing an overview of relevant scientific, medical, and management issues in a single volume. While no book can cover everything associated with managing a reproductive endocrinology clinic and laboratory, we have enlisted experts from all relevant areas to provide concise, practical, and evidence based summaries of relevant topics. It is our hope that this resource will be of assistance to physicians and scientists engaged in this exciting field of medicine.

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Part I

Management of the R.E.I. Clinic and Laboratories

Chapter 1

Characteristics of a Successful R.E.I. Clinic and Laboratory

Douglas T. Carrell and C. Matthew Peterson

Abstract This chapter explores a few hallmarks of successful REI clinics and laboratories. While all clinics should fulfill minimal guidelines set for in government oversight and regulations, the successful laboratory will go beyond such guidelines to actively improve the quality of service provided to patients. Pursuit of a high level of success necessitates ongoing employee education, monitoring and evaluation of patient outcomes, and a focus on the objectives set for the institution.

Keywords Leadership • Management • Quality assurance • Continuing education • Focus

1.1 Introduction

The definition of success – To laugh much; to win respect of intelligent persons and the affections of children; to earn the approbation of honest critics and endure the betrayal of false friends; to appreciate beauty; to find the best in others; to give one's self; to leave the world a little better, whether by a healthy child, a garden patch, or a redeemed social condition; to have played and laughed with enthusiasm, and sung with exultation; to know even one life has breathed easier because you have lived – this is to have succeeded.

Ralph Waldo Emerson

The other chapters of this book are aimed at assisting an infertility clinic or laboratory director in understanding the clinical, scientific, business, and management principles necessary to establish and maintain a successful organization. But, what is meant by a “successful organization”?

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Judging success, in our life or the lives of others, is commonly performed, but nebulous, difficult, and potentially dangerous. The task of defining a successful clinic and laboratory is no easier, and also fraught with danger. However, the definition of “success” quoted above should on one level reassure all infertility clinics that they are to a certain degree “successful” since every healthy baby born as a result of the clinic’s service has indeed caused “one life to breathe easier.” However, most would agree that truly successful infertility clinics and laboratories have important characteristics beyond pregnancies.

Each medical and laboratory director of an REI clinic has a distinct set of values that define his perception of a successful clinic or laboratory, and the director’s values and perceptions likely differ from other directors. So, this chapter is not meant to be a blueprint, rather as a starting point for consideration and discussion.

Perhaps, one of the major difficulties in defining a successful laboratory and clinic is the misconception that success is defined by checking off a list of activities or achievements, analogous to a graduate receiving a diploma after completing a required list of coursework. However, there is no “certificate of success” for clinics and laboratories, nor is success bestowed as an honorary degree. Arthur Ashe, the respected tennis player and civil rights leader, has said, “Success is a journey, not a destination. The doing is often more important than the outcome.” In our opinion, establishing a successful clinic and laboratory is similar; destinations are defined, some common to all labs, and the journey is undertaken. However, as situations, regulations, personnel, technologies, and other factors change, new destinations are charted. Therefore, the success in the clinic and laboratory may be looked at as dependent on setting a good course and in the methods employed and the interactions of all during “the journey.”

The journey of becoming a successful clinical operation and laboratory contains distinct and necessary guideposts necessary to mark the journey. Such guideposts include compliance with legal and regulatory mandates, accreditation, and employing good management principles, and other items. Below are a few brief characteristics that, in our opinion, are evident in all successful laboratories. The characteristics

are provided as guideposts, with the inherent understanding that each clinic or lab's priorities and circumstances affect the implementation of the characteristics. The list is not complete, but rather a formulation of some essential characteristics, and simple ideas to assist in the implementation of a successful clinic or laboratory. If there is one firm hallmark of successful people and organizations, it is the attempt to go beyond expectations. The successful team will be constantly looking for ways to improve and set new standards in these, and other, characteristics.

1.2 Successful Leadership Principles

There is a fundamental difference between leadership and management. Leadership has been defined as "...the art of persuading people to work toward a common goal [1]." However, a clinic or laboratory director relies on leadership in setting the expectations and goals of the institution. Leadership shapes the opinions and attitudes of a team of people dedicated to achieving common goals [2]. In short, a director sets a culture of success, mediocrity, or failure through his leadership.

Four approaches have commonly been used to describe and teach effective leadership. The first approach, the *trait approach*, is the most commonly considered method and involves defining characteristics of a successful leader [3]. Such characteristics would undoubtedly include integrity, character, communication skills, patience, passion, energy, vision, credibility, and maturity. According to this approach, the clinical and laboratory directors should continually assess and refine his skills to become more effective. This approach is useful and should be implemented, but it is apparent that other approaches to leadership are also required.

The *behavior approach* to leadership focuses on the manner in which a person acts, particularly in times of stress or in situations relevant to the rest of the group [3]. The approach focuses more on the actions than on a defined set of characteristics. This approach accentuates the "example" set by a director both in routine clinical and lab work, and in striving to move the norms of the operation to higher levels. IVF laboratory directors are often inundated with office work, but this approach highlights the need for a continual, positive presence in the lab itself. Clinical directors are most successful when they grasp the day-to-day operational activities with patients, nursing, laboratory and management staff. The behavioral approach to defining leadership has resulted in the description of various leadership styles, such as authoritative, democratic, and laissez-faire, and others.

The *situational approach* to leadership maintains that each of these styles may be necessary in different situations [4]. This theory implies that a leader should be flexible and

perceptive to the specific styles and techniques needed for different individuals or situations. In a sense, most effective leaders have learned this approach. A successful director will be authoritative on issues of critical importance, and will do so with the traits described earlier, but will learn that effective mentoring of staff also requires flexibility and patience.

It is important to note that leadership in the ART clinic and laboratory does not just come from the director, but also from supervisors, technicians, nurses, staff, referring physicians, and possibly others. In fact, both positive and negative leadership may, and often is, exerted from a nonmanagerial staff member. This effect highlights the *reciprocal approach* to leadership and the need to consider the effect and feedback of others on the team and take actions to implement useful input and eliminate negative influences [5, 6]. For some, this is the most difficult part of leadership.

In summary, leadership consists in doing what needs to be done in the way it needs to be done. The styles and actions will vary dependent on the situation and personalities involved. Laboratory directors should never attempt to bluff or imitate other leaders, but instead cultivate positive characteristics skills, with sensitive application to specific situations. Lastly, the leader sets the goals and expectations and is the example in working toward their achievement.

1.3 Effective Management

Management can be defined as the implementation of processes necessary to keep an organization functioning properly. In the laboratory, this includes such diverse functions as budgeting, accounting, employment policies, organizational issues, and technical and scientific policies [7]. The management needs of ART clinics and laboratories vary depending on the size of the clinic, ownership arrangements, and the scope of services provided, but in any situation, successful laboratories contain systems that effectively manage the resources of the lab. An excellent review of many of these processes is found in this book in the chapter by Peterson and Hammoud.

Two keys to successful management of the both the clinic and the laboratory are organization and accountability. In most laboratories, it is imperative to have an organized, consistent manager available to assist the lab director. While the director should set policies that assist in the mission of the laboratory, the manager is usually responsible for the day to day implementation of the policies [8]. The laboratory director assures that the policies are correctly implemented by oversight of the manager and supervisors, and by daily "hands on" involvement, but usually does not have the time to manage all situations personally. Likewise, clinical directors will make the most effective use of their time and expertise with a seasoned clinic manager.

Leadership without management usually results in failure to achieve goals, and may also result in an increased propensity of errors and problems. This highlights the importance of hiring a good manager/supervisor. Perhaps, no other personnel decision made will be as important as selecting a supervisor or manager to assist you in managing the laboratory. The traits that are most beneficial include organization, consistency, and dedication.

One tool that is of great help in managing the many complex tasks and processes involved in managing the clinical enterprise and laboratory is accountability. Successful operations typically delegate responsibilities to all staff, and then demand accountability. This is done by an organized record keeping of projects and responsibilities coupled with group and private follow-up. The annual review of employees is invaluable in this regard, but more frequent follow-ups are also needed. Staff meetings and quality assurance meetings are also invaluable, but often simple “hallway reminders” are necessary. The good manager will be organized and consistent in following-up on projects, while the good leader will recognize that different techniques and motivations are necessary for each situation.

1.4 Skill

While difficult to define, successful laboratories and clinical operations exhibit a high skill level. The purpose of the ART office is to assist couples in achieving a healthy pregnancy. While the pregnancy rate alone is not very helpful in determining success, good clinics and laboratories do have a good pregnancy rate based on the situations and regulations specific for their clinic. High skill levels are also demonstrated by low error levels.

The factors that contribute to good skills include proper management and application of the quality assurance program [9, 10]. An effective quality assurance program should lead to improvement on all levels of performance. Additionally, proper design and monitoring of facilities and equipment is essential. High expectations by the directors, combined with good training, monitoring, and continuing education, are also necessary [3].

Skill implies accuracy. Several programs are essential in assuring that the results produced by the laboratory are accurate. Internal programs include continual monitoring of key indicators as part of the quality assurance program. One useful tool is internal proficiency testing for semen analysis and other assays in which aliquots of a specimen are independently analyzed by all technicians (Discussed extensively in chapter by Keel). Additionally, periodic “recertification” of employee competence should be performed by testing accuracy in specific skills. As a whole, the laboratory should be

monitored by monthly and quarterly indicators of skill and accuracy.

External proficiency testing programs are also available, and obligatory under CLIA regulations to monitor and improve accuracy and skill. All laboratories are mandated to participate in proficiency testing programs, but the successful laboratory uses the process to identify problems and improve performance. The quality laboratory looks at such programs as beneficial tools rather than regulatory requirements.

1.5 A Focus on Patients

As strange as it may seem, clinics and laboratories sometimes lose sight of the fact that their reason for existing is to serve the patient. Reference laboratories assist the patient indirectly without any direct contact with the patient, but ART laboratories are usually in close and direct contact. The truly successful clinic and laboratory goes beyond providing skillful analysis and therapies to educate the patient and provide a private, comfortable environment.

Patient education can be facilitated through several means, including the production and distribution of literature such as handouts and pamphlets. While pharmaceutical companies often provide useful patient literature, the clinical and laboratory programs can improve the quality by customizing the literature to clinic specific protocols. Websites can be invaluable in providing information, and pamphlets can easily be posted online. Lastly, patients seminars are also useful in educating patients about the specific processes the clinic and lab undergo to assure quality and safety during therapy.

Within the clinic, privacy is imperative. While HIPPA assures minimal levels of privacy, the successful clinic goes further. For example, patients should not be exposed to crowded waiting rooms through accurate scheduling and overflow areas. Registration should be performed in private offices rather than in the common waiting area. CAP accreditation inspections include inspection of the collection rooms for privacy, but laboratories can improve further by providing soundproofing, comfortable facilities, and private exits.

One useful method of improving patient service is to provide useful feedback mechanisms for patients. Patient surveys can help identify areas in need of improvement and should be carefully developed to encourage useful feedback. Another useful technique is to periodically invite a patient to give feedback at a staff or laboratory meeting regarding their experiences and concerns. This technique is useful in increasing empathy to the needs of the patients. In summary, the successful laboratory strives to understand protocols and procedures through the patients’ eyes, then improve the process for the patient.

1.6 A Focus on the Staff

The greatest asset of a clinic and laboratory is the staff. Facilities and equipment are important in providing high quality service, but nearly useless without trained nurses, technicians, and office staff. Therefore, a major focus of any clinic and laboratory director should be on training, assessing, educating, and motivating staff. The investment in developing high quality staff must be protected by providing an environment where employees are respected and treated in a manner that it is their desire to remain as a member of the team for a long time [11, 12].

The most basic factors in developing a high quality team are common sense actions, such as treating staff with respect and honesty. But, a director can go beyond that to develop highly committed and loyal staff. Efforts should be made to continue the growth and education of staff, such as by sending staff to symposia, courses, and meetings. Another technique is to involve staff in the education process within the clinic or laboratory. Annual retreats focused on education, planning, and building teamwork are effective team-building activities. To increase ownership of the staff members, many of the talks and activities should be assigned to them.

An internal continuing education program can be developed to help in the education and development of staff. For example, continuing education program for laboratory technicians requires that they obtain a certain number of continuing education units (CEUs) in three different areas: (1) attendance at journal clubs, symposia, courses, etc., (2) talks and presentations, and (3) personal study of journals, or other topics beneficial to the lab. Completion of the required number of CEUs, along with other factors, is necessary for annual recertification as an andrology or embryology technician.

Directors are prudent to solve employee issues while they are minor. This can be done by periodic one on one discussions, either formally or informally. Additionally, periodic lunches with one or a few employees, or as a whole group, can inspire an employee's confidence and a feeling of worth. Periodic group social activities may help resolve petty issues from festering between staff members.

1.7 Conclusions

This chapter has briefly highlighted a few characteristics of clinics and laboratories that are essential to providing a high level of service and a quality workplace for staff. Each clinic and laboratory can build further upon this foundation to build a truly "successful" organization that serves patients with the highest level of skill and caring.

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Chapter 2

Assisted Reproductive Technology Practice Management

C. Matthew Peterson, Ahmad O. Hammoud, Erika Lindley, Douglas T. Carrell, and Karen Wilson

Abstract A basic knowledge of management issues is required in the operation of any medical practice. This chapter highlights the critical practice management principles necessary for effective interaction with other professionals in business management, human resources, payer organizations, legal counsel, accounting, and risk management who interface with the practice.

Keywords Management • Regulations • Legal rulings • Quality assurance • Accounting • Root cause analysis

2.1 AIM

The successful practice of reproductive endocrinology and infertility demands strict attention to service and educational missions, and in the academic setting, research. Whether operating under a profit or not-for-profit, hospital-based or free-standing setting, these missions cannot be adequately addressed without policies and procedures as well as active management strategies that direct the practice's business operations. While many physicians and scientists prefer to avoid this aspect of their career, a basic knowledge of these management issues is required. This chapter highlights the critical practice management principles necessary for effective

interaction with other professionals in business management, human resources, payer organizations, legal counsel, accounting, and risk management who interface with the practice. The aim of this chapter is to serve as a resource and provide references to more detailed information available in specialty publications. The American Society for Reproductive Medicine (ASRM) has a number of management resources on its web site: www.asrm.org.

2.2 Revenue Cycle

The revenue cycle begins with patient registration (Fig. 2.1). Critical information that must be collected and verified before each visit includes demographics, primary and secondary insurance information, policy holder/responsible party, eligibility for benefits and coverage, and updating patient account balances for the collection of copays/ balances at the point of service. Studies estimate that 42% of practice-generated denials are attributable to a failure to set up the patient's insurance correctly and that 88% of patient-generated errors are due to inaccurate personal information. Thus, insurance verification and updated information from the patient at each encounter are critical steps in the revenue cycle [1]. Industry experts estimate that it costs \$25 or more to rework a single claim [2]. Registration can be accomplished over the telephone, on-line, or using written forms. Key strategies to successful registration include appropriate staffing, training, and monitoring of performance indicators. Time studies can be performed to determine new and follow-up patient registration requirements, and staffing should respond appropriately to the findings. The dollar amount of claims denied for registration/ insurance related reasons as a percentage of total denied dollars may be used to assess registration function. Furthermore, registration edit reports track locations and individuals on the team who would benefit by additional training.

Healthcare providers in best practices submit the encounter form, commonly called a superbill, within 24 h of the encounter. Monitoring strategies include nightly reconciliation of missing encounter forms with schedules documenting

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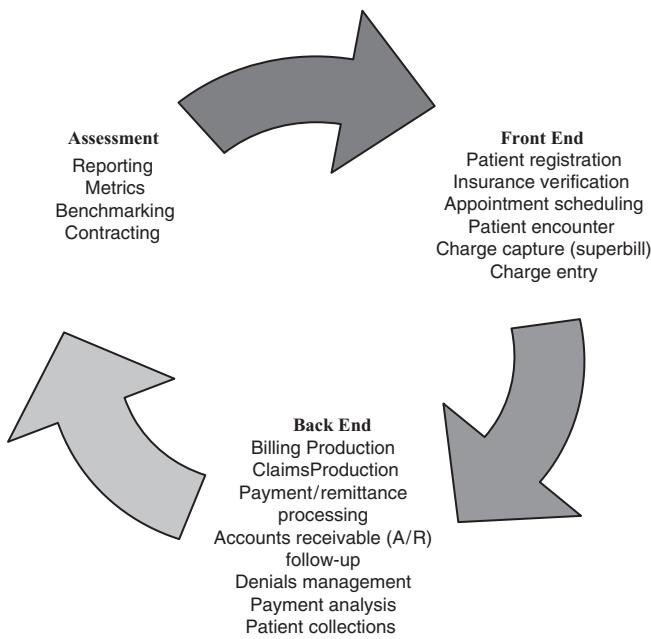


Fig. 2.1 The revenue cycle. The revenue cycle consists of a number of interrelated processes that are categorized as front end, backend and analysis/planning activities. Each process within an activity has numerous subparts which must be analyzed and optimized, for example, the patient encounter component of the front end activities includes check-in, point-of-service collections, provider encounter, checkout, scheduling/referrals and financial counseling

“arrived” patients. Superbills should be designed to facilitate coding the ICD-9 diagnostic codes and CPT procedural codes common to the practice. The superbills should be reviewed annually and reviewed with professional coders. Chart audits insure appropriate documentation of the encounter and its codes. New providers should be audited the first few months in the practice to insure appropriate and maximum coding and completion rates.

Charge entry after a patient encounter should be completed within 48 h. Within 24 h after the encounter, the superbills are collected and batched. In the next 24 h period, the charges should be entered. Best practices reconcile missing charges daily to weekly.

Submission of claims and subsequent payments are improved by the use of a clearinghouse that filters the claim for errors or through the use of a claim scrubber. Claim scrubbers allow the provider to utilize the same software that payers use to deny claims and hold reimbursements longer. Furthermore, practices can identify undercoding in services. Larger volume practices may find the cost/ benefit ratio favors automated claim scrubbing. Payment posting should be reconciled to the maximal contracted amount. Payer policy changes are techniques designed to reduce payments and must be monitored carefully. Larger organizations can consider software that will monitor charges, and contracted payments to actual payments to insure payers adhere to contracted rates.

Analysis/assessment tools include practice metrics and reports that will flag difficulties with the revenue cycle. Useful metrics include accounts receivable (AR), claim denials, write-offs, collection rates, patient complaints, volume of unanswered payer and patient correspondence, claim edits, timely submission of charges, lag days, missing charges, and turnover in revenue cycle employees. An example of a functioning revenue cycle metrics report is found in Fig. 2.2 and in the Appendix. Periodically, supervising individuals should call for a reevaluation of the revenue cycle and the metrics being utilized. Strategic management of the revenue cycle will result in greater margin for the missions undertaken by the practice. Of all improvements that can be recommended for revenue cycle processes, standardization is proven to benefit not only revenue, but also quality and patient satisfaction [3]. Continuous training and cross training in job specific policies and procedures, technology and systems, and practice-specific revenue-cycle-activities will also result in improved financial and patient, provider and employee satisfaction scores. Open discussions of revenue cycle activities will reveal bottlenecks, dropped handoffs, and duplication of work. Figures 2.3 and 2.4 are examples of ambulatory services dashboards, which can facilitate discussions regarding critical practice parameters that affect the revenue cycle. Instituting controls on cash handling/ deposits for point-of-service collections, reconciliation of missing charges, batching/ hashing for charge entry, productivity measures for A/R follow-up and job specific information system access will protect the assets of the practice.

Useful resources regarding the revenue cycle include *The Physician Billing Process: Avoiding Potholes in the Road to Getting Paid* by Deborah L. Walker, MBA, FACMPE; Sara M. Larch, MSHA, FACMPE; Elizabeth W. Woodcock, MBA, FACMPE, CPC (ISBN 1-56829-230-9) and *Financial Management for Medical Groups* by Ernest J. Pavlock, PhD, CPA (ISBN 1568290217). The Medical Group Management Association (MGMA) is a professional association providing many resources (<http://www.mgma.com>) (Figs. 2.5 and 2.6, respectively).

2.3 Employment Cycle

Staffing issues are a time consuming aspect of REI practice management. Concerns related to hospital-based settings include staff unionization and difficulty in providing performance incentives. Furthermore, in hospital-based settings, a clinic staffing model is often applied inappropriately. An optimal staffing ratio for an ART program can be higher than the standard clinic staffing model and ranges from 4 to 12 full-time equivalents per physician with efficiencies gained in multiple provider models. This relatively high fixed cost

Measures	13 months provides trending			Previous allows for seasonality such as: annual conference attendance, etc.			Current Month variance compared to average for fast assessment of status			Year to Year Variance				
	2007/Apr	2008/Mar	2008/Apr	12 Mo Total	Prev 12 Mo Tot	12 Mo Tot Var	12 Mo Avg	CM Var	PFYTD	FYTD	FY Var			
Charges	\$ 516,065	\$ 587,332	\$ 445,066	\$ 4,805,534	\$ 1,450,842	\$ 335,092	\$ 400,494	\$ 44,571	\$ 1,173,455	\$ 4,274,286	\$3,100,830			
Payments	\$ 241,785	\$ 280,658	\$ 274,525	\$ 2,317,468	\$ 873,820	\$ 143,647	\$ 193,122	\$ 81,403	\$ 682,573	\$ 2,099,792	\$1,417,219			
Net Payments	\$ 239,779	\$ 278,667	\$ 270,568	\$ 2,296,101	\$ 851,197	\$ 144,905	\$ 191,342	\$ 79,226	\$ 663,281	\$ 2,079,504	\$1,416,224			
Contract Adj	\$ 182,506	\$ 243,076	\$ 258,305	\$ 1,665,848	\$ 517,881	\$ 147,966	\$ 138,621	\$ 119,484	\$ 404,273	\$ 1,546,604	\$1,142,332			
Refunds	\$ 2,006	\$ 1,991	\$ 3,958	\$ 21,367	\$ 22,631	\$ 1,257	\$ 781	\$ 2,177	\$ 19,293	\$ 20,288	\$995			
Work RVU	3,730,181	4,371,116	3,367,121	41,471,431	12,545,59	28,925,84	3,455,59	188,63	10,118,74	32,777,79	26,159,05			
Total Discounts	\$ 24,348	\$ 20,170	\$ 9,204	\$ 317,767	\$ 198,456	\$ 157,632	\$ 14,757	\$ (55,553)	\$ 16,740	\$ 167,563	\$150,824			
COLLECTION AGENCY ACTIVITY														
TO COLLECTIONS	\$ 11,979	\$ 6,289	\$ 12,784	\$ 119,879	\$ 63,243	\$ 56,638	\$ 9,990	\$ 2,794	\$ 48,262	\$ 107,667	\$ 59,404			
ORIGINAL INSURANCE INFO CAPTURED														
BLUE SHIELD	\$ 93,326	\$ 122,022	\$ 134,471	\$ 1,097,672	\$ 91,849	\$ 12,845	\$ 372,628	25.8%	30.1%	26,57%	22.8%			
COMMERCIAL INS	\$ 3,253	\$ 5,761	\$ 1,759	\$ 46,191	\$ 3,849	\$ 1,235	\$ 1,235	0.4%	0.4%	0.37%	0.33%			
CONTRACTS	\$ 143,248	\$ 161,619	\$ 109,220	\$ 1,410,196	\$ 117,516	\$ 29,345	\$ 548,134	37.2%	24.6%	38.6%	27.6%			
MEDICAID	\$ 156,184	\$ 168,431	\$ 111,425	\$ 1,309,426	\$ 109,119	\$ 24,250	\$ 351,728	24.24%	25.04%	22.66%	27.76%			
MEDICARE	\$ 542	\$ 3,912	\$ 358	\$ 17,699	\$ 1,475	0.37%	\$ 4,764	0.33%	0.08%	0.41%	0.33%			
MISC GOVT	\$ 18,941	\$ 18,580	\$ 14,582	\$ 131,397	\$ 10,950	\$ 2,739	\$ 35,577	2.45%	3.28%	2.39%	2.94%			
OOS MEDICAID	\$ 24,582	\$ 10,037	\$ 8,688	\$ 103,897	\$ 8,658	\$ 2,169	\$ 30,351	2.09%	1.95%	2.25%	2.16%			
SELF PAY	\$ 75,989	\$ 98,571	\$ 64,063	\$ 689,266	\$ 57,459	14.34%	\$ 88,001	6.07%	14.39%	6.21%	15.25%			
PAYER														
BLUE SHIELD	\$ 66,414	\$ 68,320	\$ 57,137	\$ 517,665	\$ 47,639	24.83%	\$ 220,753	25.32%	21.00%	26.6%	24.16%			
COMMERCIAL INS	\$ 1,321	\$ 3,046	\$ 1,463	\$ 20,431	\$ 1,703	0.89%	\$ 5,110	0.59%	0.54%	0.66%	0.96%			
CONTRACTS	\$ 77,682	\$ 91,017	\$ 69,635	\$ 803,750	\$ 66,978	34.91%	\$ 373,552	42.85%	25.59%	43.37%	34.23%			
MEDICAID	\$ 67,049	\$ 79,316	\$ 63,450	\$ 608,071	\$ 50,676	26.41%	\$ 151,933	17.43%	30.67%	16.61%	27.33%			
MEDICARE	\$ 619	\$ 230	\$ 2,110	\$ 8,490	\$ 707	0.37%	\$ 1,110	0.13%	0.78%	0.15%	0.95%			
MISC GOVT	\$ 6,545	\$ 4,428	\$ 4,008	\$ 50,560	\$ 4,205	2.50%	\$ 14,205	1.85%	3.36%	2.05%	2.57%			
OOS MEDICAID	\$ 6,740	\$ 9,115	\$ 14,646	\$ 47,825	\$ 3,985	2.08%	\$ 17,546	2.01%	1.46%	1.30%	2.23%			
SELF PAY	\$ 13,827	\$ 22,023	\$ 34,270	\$ 184,216	\$ 15,351	8.00%	\$ 85,509	9.81%	12.59%	8.77%	8.17%			
OUTSTANDING ACCOUNTS RECEIVABLE														
CURRENT INSURANCE	FEE	MAR	APR	FPSC BENCHMARKS										
AR 31-60	\$ 182,719	\$ 159,963	\$ 141,606											
% AR 31-60	21.30%	17.83%	17.95%											
AR 61-90	\$ 75,879	\$ 127,448	\$ 103,441											
% AR 61-90	8.93%	11.40%	11.24%											
AR 91-120	\$ 78,029	\$ 62,194	\$ 82,893											
% AR 91-120	9.09%	6.93%	10.51%											
AR 120+ Days	\$ 121,490	\$ 172,324	\$ 163,937											
% of AR > 120	14.16%	19.20%	20.79%											
A/R Balance	\$ 857,944	\$ 897,405	\$ 788,640											
CURRENT FSC	91-120 DAYS	121-150 DAYS	151-180 DAYS	> 180 DAYS	TOTAL AR									
BLUE SHIELD	\$ 2,284	\$ 2,330	\$ 496	\$ 272	\$ 123,507									
% OF BLUE SHIELD	1.85%	1.89%	0.40%	0.22%	100.00%									
COMMERCIAL INSURANCE	\$ 405	\$ 509	\$ 118	\$ 1,461	\$ 13,167									
% OF COMMERCIAL INS	3.08%	3.87%	0.90%	11.00%	100.00%									
CONTRACTS	\$ 10,971	\$ 4,261	\$ 4,698	\$ 9,799	\$ 160,320									
% OF CONTRACTS	6.84%	2.66%	2.93%	6.11%	100.00%									
MEDICAID	\$ 11,165	\$ 8,693	\$ 4,685	\$ 12,632	\$ 108,126									
% OF MEDICAID	10.33%	8.04%	4.33%	11.68%	100.00%									
MEDICARE	\$ 151	\$ 99	\$ 164	\$ 2,724	\$ 4,086									
% OF MEDICARE	3.71%	2.44%	4.03%	66.97%	100.00%									
MISC GOVERNMENT	\$ 2,039	\$ 236	\$ 2,571	\$ 694	\$ 25,643									
% OF MISC GOVERNMENT	7.95%	0.92%	10.03%	2.71%	100.00%									
OOS MEDICAID	\$ 4,980	\$ 901	\$ 5,244	\$ 19,798	\$ 45,819									
% OF OOS MEDICAID	10.87%	1.97%	11.44%	43.21%	100.00%									
RESPONSIBLE PARTY	\$ 50,897	\$ 22,908	\$ 32,102	\$ 26,625	\$ 308,072									
% OF RESPONSIBLE PARTY	16.52%	7.44%	10.42%	8.64%	100.00%									
TOTAL AR	\$ 82,893	\$ 39,936	\$ 50,078	\$ 73,923	\$ 788,640									
% OF TOTAL	10.51%	5.06%	6.35%	9.37%	100.00%									
TOP 5 REJECTIONS - OP CODING	Chg	Chg	Chg	2007/Apr	2008/Jan	2008/Feb	2008/Mar	2008/Apr	FYTD					
97-SERVICE NOT PAID SEPARATELY	Chg Amt	\$ 262	\$ 1,049	\$ 1,455	\$ 387	\$ 799	\$ 6,134							
	Rej Count	5	9	8	2	9	63							
11-DIAGNOSIS SUBMITTED INCONSISTENT WITH PROCEDURE	Chg Amt	\$ 16	\$ 82	\$ 82	\$ 92	\$ 164	\$ 1,791							
	Rej Count	2	1	3	7	2	28							
7-INVALID PROC CODE INCONSISTENT WITH PT GENDER	Chg Amt	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 151	\$ 151	\$ 151					
	Rej Count	-	-	-	-	-	1	1	1					
50-NOT MEDICALLY NECESSARY	Chg Amt	\$ -	\$ -	\$ 151	\$ 359	\$ 547	\$ 1,057							
	Rej Count	-	-	1	2	1	4	4	4					
112-SVC NOT DOCUMENTED	Chg Amt	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (85)	\$ 1	2					
	Rej Count	-	-	-	-	-	1	2	2					
REGISTRATION	Chg	Chg	Chg	2007/Apr	2008/Jan	2008/Feb	2008/Mar	2008/Apr	FYTD					
28-CLIENT NOT ELIGIBLE ON DATE OF SERVICE	Chg Amt	\$ 1,889	\$ 1,650	\$ 2,395	\$ 568	\$ 2,824	\$ 13,521							
	Rej Count	13	15	11	6	21	97							
49-NON COVERED SERVICE IN CONJUNCTION WITH ROUTINE	Chg Amt	\$ 1,205	\$ 328	\$ 1,064	\$ 257	\$ 857	\$ 5,424							
	Rej Count	10	4	8	2	5	46							
110-PROVIDE DATE OF IMPONSE/T OF ILLNESS	Chg Amt	\$ 1,642	\$ 113	\$ 2,114	\$ 1,805	\$ 1,595	\$ 13,297							
	Rej Count	11	7	7	5	6	87							
31-INVALID ID NUMBER-UNABLE TO IDENTIFY INSURED	Chg Amt	\$ -	\$ -	\$ 151	\$ -	\$ 509	\$ 874							
	Rej Count	-	-	1	1	4	7							
27-COVERAGE TERMINATED BEFORE DOS	Chg Amt	\$ 660	\$ 233	\$ 233	\$ 793	\$ 747	\$ 4,432							
	Rej Count	5	2	2	6	3	29							
FOLLOW UP	Chg	Apr	Chg	2008/Jan	2008/Feb	2008/Mar	2008/Apr	FYTD						
96-NON-COVERED CHARGES	Chg Amt	\$ 692	\$ 1,199	\$ 6,216	\$ 1,823	\$ 2,854	\$ 15,574							
	Rej Count	6	10	27	12	17	144							
106-INS REQUESTS COPY OF REPORT	Chg Amt	\$ -	\$ -	\$ -	\$ 372	\$ 2,896	\$ 5,281							
	Rej Count	-	-	-	2	15	30							
18-DUPLICATE CLAIM	Chg Amt	\$ 2,844	\$ 878	\$ 1,613	\$ 883	\$ 1,453	\$ 14,963							
	Rej Count	10	2	11	10	10	100							
16-ADDITIONAL INFO NEEDED	Chg Amt	\$ 2,100	\$ 164	\$ 360	\$ 267	\$ 151	\$ 4,454							
	Rej Count	5	1	1	5	5	26							
17-ADDITIONAL INFO NEEDED-REQ INFO INSUFFICIENT OR INCOMPLETE	Chg Amt	\$ 82	\$ -	\$ 943	\$ 442	\$ 1,071	\$ 2,538							
	Rej Count	1	-	2	4	2	9							
2008/Feb	2008/Mar	2008/Apr	12 Mo Total	12 Mo Avg	CM Var	PFYTD	FYTD							
Charges	\$ 516,065	\$ 587,332	\$ 445,068	\$ 4,805,913	\$ 400,494	\$ 44,571	\$ 1,173,455	\$ 4,274,286	\$ 1,173,455	\$ 4,27				

Fig. 2.2 ART practice management divisional revenue cycle report (for illustrative purposes only and does not represent actual operational data)



UTAH CENTER FOR REPRODUCTIVE MEDICINE

Ambulatory Dashboards

2008 Q 1

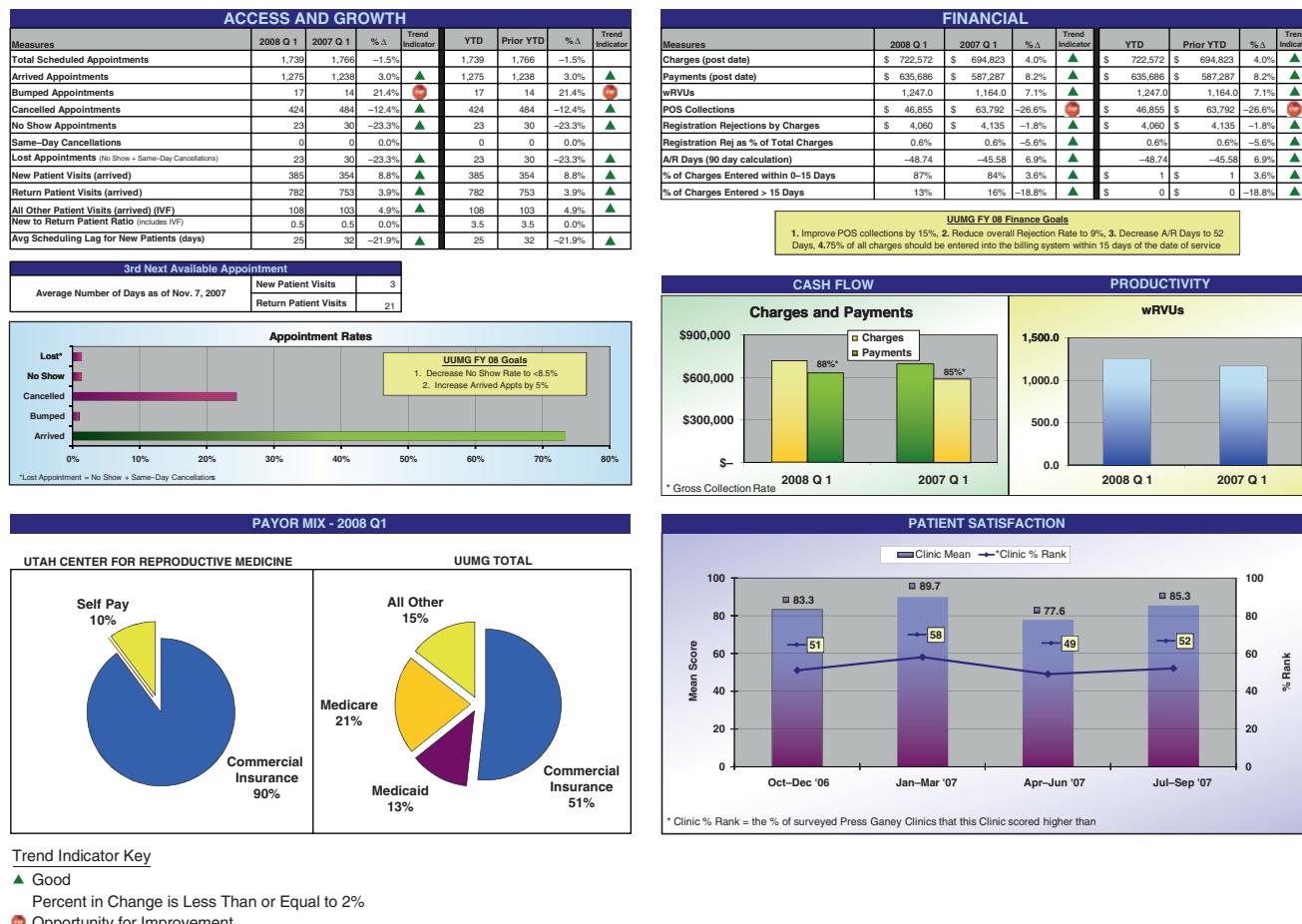


Fig. 2.3 UCRM ambulatory dashboard (for illustrative purposes only and does not represent actual operational data)

requires a significant volume of ART cycles to be economically viable. For these reasons, sound employment principles are mandatory.

Employment advertising should include only the requirements of the position, Equal Opportunity Employer (EEO) statement and avoidance of problematic language which could be construed as discriminatory. Key components of the employment application are found in Table 2.1.

In the offer letter or contract an Employment-At-Will statement is helpful, if applicable in the clinic's governance situation: "You should understand that you will be employed at-will, which means that either you or the company can terminate your employment at any time."

Interviewing questions are governed by federal and state laws. The Department of Labor for each state often has websites that detail laws concerning employment. There are a number of illegal questions to avoid, which can be worked around through proper questioning noted in

Table 2.2. Experienced human resource managers suggest a question, which is often quite revealing: Assume you could have anyone to write a letter of reference for you, who would it be and what would they say? Human resource managers should regularly check the federal and state employment laws.

In those positions where an offer letter is appropriate, the letter should include a start date, rate of pay, wage payment schedule, hours of employment, position, remaining steps to be accomplished before hire, employment at-will disclosure, statement that nothing in the offer letter should be interpreted as a contract, signature and date-line. To reduce staff management difficulties, all clinics should have an employee handbook (Table 2.3).

Wage and Hour Laws define "Exempt" employees as those who are exempt from overtime pay such as physicians, embryologists, registered nurses, and managers. "Nonexempt" employees must be paid at least the mini-



REPRODUCTIVE ENDOCRINOLOGY

Ambulatory Dashboard

2008 Q 1

ARRIVED APPOINTMENT TOTALS BY PROCEDURE CATEGORY

Measures	2008 Q 1	2007 Q 1	% Δ	Trend Indicator	YTD	Prior YTD	% Δ	Trend Indicator
Egg Retrieval	80	77	3.9%	▲	80	77	3.9%	▲
ET Totals	97	95	2.1%	▲	97	95	2.1%	▲
IVF ET	73	70	4.3%	▲	73	70	4.3%	▲
Cryo ET	25	22	13.6%	▲	25	22	13.6%	▲
Ovum Donar	5	5	0.0%	■	5	5	0.0%	■
Surrogacy	0	0	0.0%	■	0	0	0.0%	■
Insemination	291	300	-3.0%	■	291	300	-3.0%	■
Ultrasound	762	747	2.0%	■	762	747	2.0%	■
Viability	67	68	-1.5%	■	67	68	-1.5%	■
Super Ovulation Start	109	116	-6.0%	■	109	116	-6.0%	■

PROVIDER PRODUCTIVITY

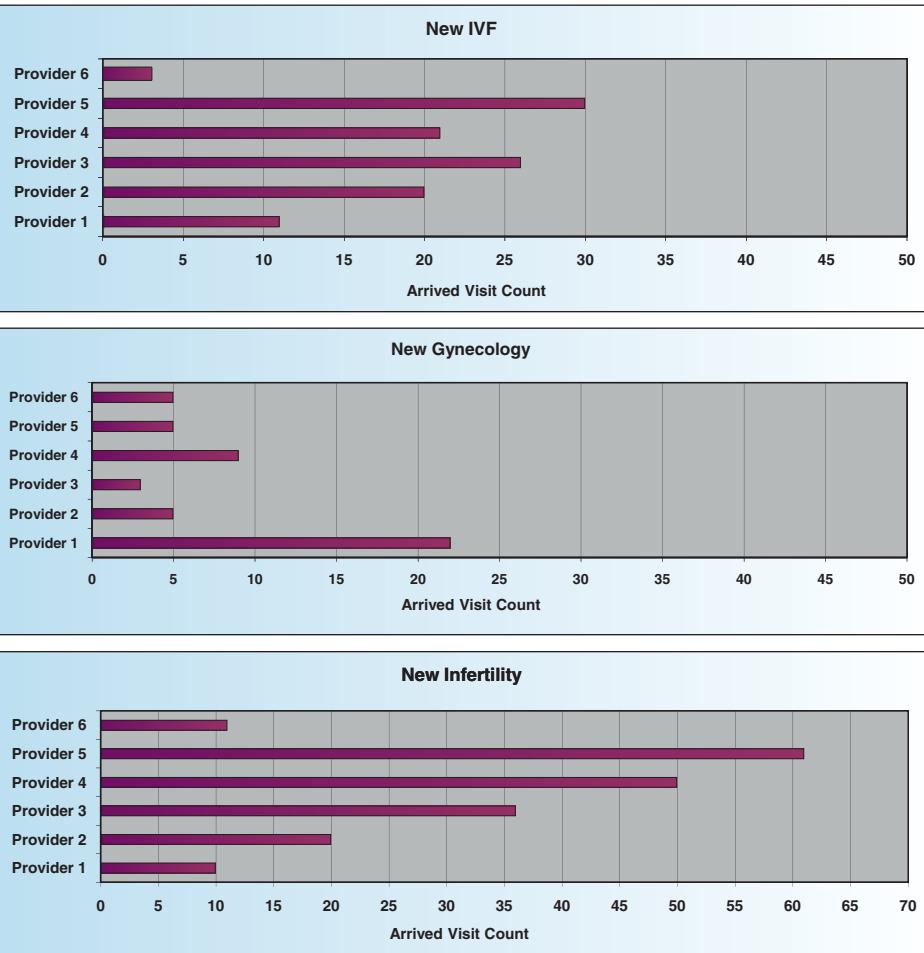


Fig. 2.4 Reproductive endocrinology ambulatory dashboard (for illustrative purposes only and does not represent actual operational data)

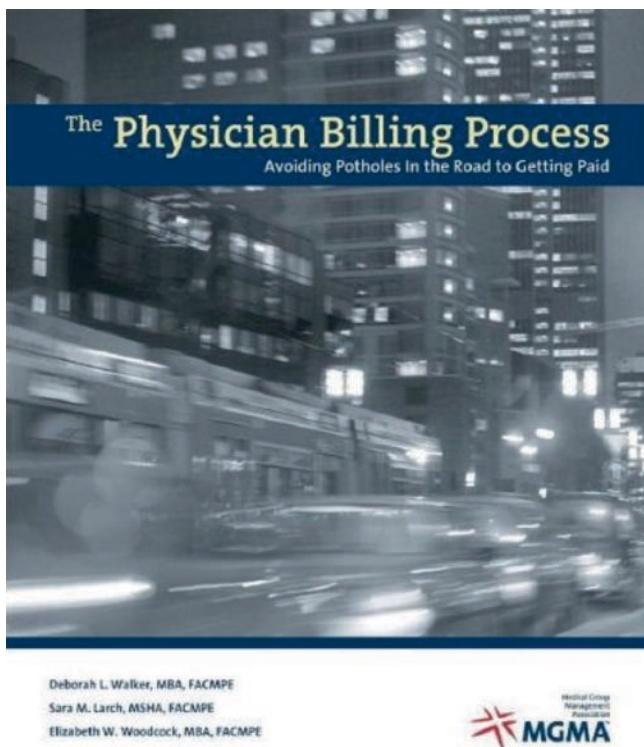


Fig. 2.5 The Physician Billing Process: Avoiding Potholes in the Road to Getting Paid by Deborah L. Walker, MBA, FACMPE; Sara M. Larch, MSHA, FACMPE; Elizabeth W. Woodcock, MBA, FACMPE, CPC (ISBN 1-56829-230-9)

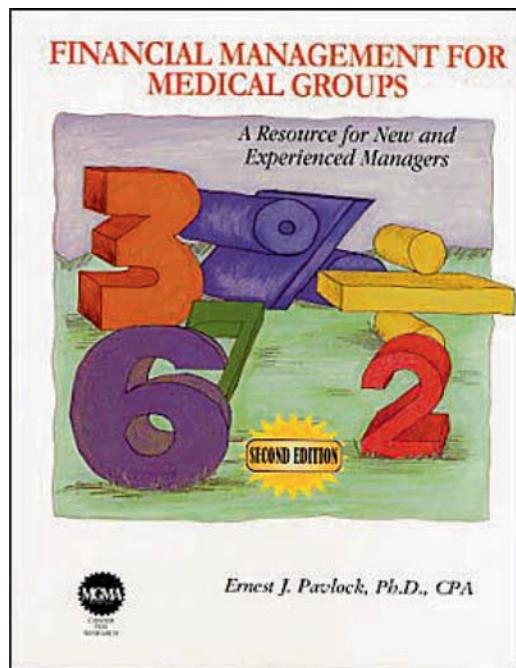


Fig. 2.6 Financial Management for Medical Groups by Ernest J. Pavlock, PhD, CPA. (ISBN 1568290217)

Table 2.1 Key components of the employment application

An employment application has a signed and dated certification that:
The applicant was truthful in completing the application
No information that would affect the application was withheld
The employer may terminate the applicant (if hired) if the employer later discovers that the applicant was not truthful or withheld material information
The applicant agrees to abide by all of the rules and policies of the employer, or be subject to termination
The applicant agrees to the employer's ability to check references and/or verify information
Acknowledges the employer may change the applicant's hours at will
Contains an Employment-At-Will statement (if applicable): "You should understand that you will be employed at-will, if hired, which means that either you or the company can terminate your employment at any time"

minimum wage for all hours worked and one-and-one-half times their regular rate of pay for all hours worked over 40 h in a single work week (state laws may differ). Employees in this category include medical assistants, receptionists and financial representatives. Pay practices, withholdings, and allowed deductions are best handled by professionals conversant with the Fair Labor Standards Act (FLSA) and regulations of the Wage and Hour Division of the Department of Labor (DOL).

Employee files should contain personal information (name, address, Social Security number, date of birth and education); job application and resume; licenses or certifications required for the job; a signed employee handbook receipt or employment contract; attendance and leave records; payroll records; performance appraisals, commendation letters, merit awards; disciplinary records; and, job description, title, location and schedule. Employees can examine this file once per year in the presence of a designated representative. The employee has the right to request a correction or a deletion or write a statement of disagreement with any item in the file in the presence of a designated representative. The employee may not remove any item from the file. Employers can require a written request to view the file. Exempted information regarding personnel files include potential job assignment information, and the prediction of any future salary or career path information. It is recommended that personnel file be kept for 4–7 years after an employee leaves the practice.

Employee discipline should provide, where possible, advance notice of the consequences of misconduct; written documentation; and actions that are timely, consistent and impartial. In the articulation of a disciplinary policy, reserve the right to choose the level of discipline, up to and including termination without resorting to less severe

Table 2.2 Illegal employment questions and their legal workarounds

Category	Illegal questions	Legal questions
National origin/ citizenship	Are you a U.S. citizen? Where were you/your parents born? What is your native tongue?	Are you authorized to work in the United States? What languages do you read, speak, or write fluently? (This question is okay, as long as this ability is relevant to the performance of the job)
Age	How old are you? When is your birth date? When did you graduate from high school?	Are you over the age of 18?
Marital/family status	What's your marital status? With whom do you live? Do you plan to have a family? When? How many kids do you have? What are your child care arrangements?	Would you be willing to relocate if necessary? Travel is an important part of the job. Would you be able and willing to travel as needed by the job? (This question is okay, as long as all applicants for the job are asked it) This job requires overtime occasionally. Would you be willing and able to work overtime as necessary? (Again, as long as all applicants for the job are asked it)
Affiliations	What clubs or social organizations do you belong to?	List any professional or trade groups or other organizations that you belong to that you consider relevant to your ability to perform this job
Personal	How tall are you? How much do you weigh?	Are you able to lift a 50-pound weight and carry it 100 yards, as this is part of the job? (Questions about height and weight are not acceptable unless minimum standards are essential to the safe performance of the job)
Disabilities	Do you have any disabilities? Please complete the following medical history Have you had any recent or past illnesses or operations? If yes, list and give dates What was the date of your last physical exam? How's your family health? When did you lose your eyesight? How? Do you need an accommodation to perform the job? (Can be asked only after a job offer is made)	Based on the job description, are you able to perform the essential functions of this job? Can you demonstrate how you would perform the following job-related functions? Are you willing to complete a medical exam after we've made you a job offer? (The results of the exam must be kept strictly confidential, except medical/safety personnel may be informed if emergency medical treatment is required, and supervisors/managers may be informed about necessary accommodations to the job, based on the results of the exam) Do you understand that any offer of employment is conditional based on the results of a medical exam?
Arrest record	Have you ever been arrested?	Have you ever been convicted of _____? (The crime named should be reasonably related to the performance of the job in question)
Military	If you've been in the military, were you honorably discharged?	In what branch of the armed forces did you serve? What type of training or education did you receive in the military?

Illegal questions are problematic and information gained in such questions may be used to discriminate against members of protected classes. In order to avoid illegal questions ask objective questions that determine if an applicant can fulfill the legitimate job requirements. Human Resource personnel should frequently assess federal and state employment laws regarding legal and illegal questions

Table 2.3 Critical components of the employee handbook

Employment At-Will Disclaimer Statement (if applicable)
Handbook Acknowledgement Statement
Employee Confidentiality Agreement
Equal Employment Opportunity (EEO) Statement
Sexual Harassment and Other Harassment Guidelines
Summary of Benefits
COBRA
Family Medical Leave Act (FMLA), if applicable
Patient Confidentiality/Substance Abuse Statement
Electronic Communications and Internet Use Policy

measures. There should be a nonexhaustive list of the types of infractions that will result in immediate termination. If your policy includes progressive discipline, it is mandatory that it

is followed to avoid a breach of contract or discrimination action. Disciplinary actions including warnings and counseling should be documented in the personnel file. Future expectations should be written and state clearly, "we expect that you will..."

Federal employment laws have compliance thresholds based on the number of employees outlined in Table 2.4, and these laws are briefly described in Table 2.5. Successful ART Programs create a level of professionalism that is expected in the practice by conducting the employment cycle and employee relations with the same level of attention required in the practice of ART. HIPAA is a standard all employees must clearly understand as the standard of patient confidentiality required in the practice. A brief summary of its core elements are outlined in Table 2.6.

Table 2.4 US Federal Employment Law Compliance thresholds by number of employees

Discrimination laws and application of the statute	
The respective state Department of Labor and attorney should be consulted regarding application	
Federal statutes	Minimum employees
Americans with Disabilities Act of 1990	15
Age Discrimination in Employment Act of 1967	20
Civil Rights Act of 1964 Title VII-Equal Employment Opportunities	15
Consolidated Omnibus Benefits Reconciliation Act (COBRA)	20
Fair Labor Standards Act of 1938 (FLSA)	1
Family and Medical Leave Act of 1993 (FMLA)	50
Health Insurance Portability and Accountability Act of 1996 (HIPAA)	1
Immigration Reform and Control Act of 1986 (IRCA)	1
Occupational Safety and Health Act of 1970 (OSHA)	1
Pregnancy Discrimination Act (PDA)	2

Table 2.5 US Federal Employment Laws Summary

US Federal Employment Laws Summary	Requires employers to pay covered employees who are not otherwise exempt at least the federal minimum wage (\$5.15/h) and overtime pay of one-and-one-half-times the regular rate of pay
Please check with your state DOL, and / or attorney.	
<i>Americans with Disabilities Act</i>	
Prohibition of discrimination based on disabilities	
Requires “Reasonable Accommodations” for disabled individuals	
Provide equal opportunity in application process	
Enable performance of “Essential functions” of position	
Enable equal benefits and privileges	
Avoid undue hardship in the workplace	
<i>Age Discrimination Act of 1967</i>	
Prohibits discrimination with respect to any term, condition, or privilege of employment, including hiring, firing, promotion, layoff, compensation, benefits, job assignments, and training	
Protects employees and job applicants 40 years of age or older from employment discrimination	
Prohibits retaliation against an individual for opposing employment practices that discriminate based on age or for filing an age discrimination charge, testifying, or participating in any way in an investigation, proceeding, or litigation under the ADEA	
<i>Title VII of the Civil Rights Act of 1964</i>	
Prohibits race, color, gender, national origin, and religious discrimination	
Applies to hiring, discharge, compensation, promotion and other terms and conditions of employment	
Gender discrimination includes pregnancy discrimination and sexual harassment	
<i>Comprehensive Omnibus Budget Reconciliation Act of 1985 (COBRA)</i>	
If an employer provides health coverage, it is required to comply with COBRA unless it falls within the following exceptions:	
Small businesses that employ fewer than 20 employees on at least 50% of its working days during the preceding calendar year	
<i>Note:</i> Employers must provide COBRA-type coverage to employees on uniformed service leave, pursuant to the Uniformed Services Employment and Reemployment Rights Act of 1994 (USERRA), regardless of the number of employees they have	
<i>Fair Labor Standards Act (FLSA)</i>	
The Fair labor Standards Act (FLSA) prescribes standards for wages and overtime pay	
The act is administered by the Wage and Hour Division of the Employment Standards Administration	
<i>The Family and Medical Leave Act (FMLA)</i>	
<i>Federal Eligibility Requirements</i>	
To be eligible for Federal FMLA leave, an employee must be employed by a covered employer:	
For at least 12 months	
For a minimum of 1,250 h in the 12 months immediately preceding the commencement of the leave	
At a worksite employing 50 or more employees within a 75-mile radius of the worksite	
FMLA (1993) gives eligible employees the right to take up to 12 weeks of unpaid leave, or paid leave if it has been earned, in any 12-month period:	
For the birth of a child or the placement of a child with the employee by adoption or foster care	
If the employee is needed to assist in care for a family member with a serious health condition	
If the employee’s own serious health condition renders the employee unable to do his/her job	
FMLA entitles employees to be restored to the same or an equivalent position with equivalent pay, benefits, and working conditions upon their return from FMLA leave	
In determining whether a company’s workforce falls under the FMLA, are part-time employees included in the 50-employee count? Yes, every employee on the payroll must be counted. Employers also must also include workers on paid or unpaid leave and who are reasonably expected to return to active employment	
When calculating the 1,250 h, should time spent on vacation, suspensions, etc., be included? No. Time spent on vacations or holidays, disciplinary suspension, medical leaves, etc., are not considered time worked in calculating the 1,250 h	
<i>Health Insurance Portability and Accountability Act of 1996 (HIPAA)</i>	
Ensures that all medical records, medical billing, and patient accounts meet certain consistent standards with regard to documentation, handling and privacy	
Requires that all patients be able to access their own medical records, correct errors or omissions, and be informed how their personal information will be shared and used	
<i>Immigration Reform Control Act (IRCA)</i>	

(continued)

Table 2.5 (continued)

US Federal Employment Laws Summary

Please check with your state DOL, and / or attorney.

IRCA prohibits employers from knowingly hiring, recruiting, referring, or continuing the employment of aliens who are not authorized to work in the United States due to entering the country illegally or because of their immigration status

All public-and private-sector employers, regardless of size or number of employees, must verify the citizenship or employment status of new hires

Employers with more than three but fewer than 15 employees may not discriminate according to citizenship status or national origin

Verification requirements

When an applicant is hired, the employer must sign a Form I-9 attesting that it has examined appropriate documents, provided by the applicant, which verify the applicant's identity and authorization to work in the United States

The applicant must also attest on the form that he/she qualifies for employment

Verification must be done within 3 days of hire, but it could be extended to 90 days if the employee presents a receipt proving that an application for replacement of the authorization document has been filed

If employees are hired for fewer than 3 days, the I-9 form must be completed at the time of hire

Occupational Safety and Health Act (OSHA)

Employers have a duty under the OSHA to provide their employees with work and a workplace free from recognized, serious hazards

OSHA enforcement occurs through workplace inspections and investigations which can be prompted by employee complaints

Pregnancy Discrimination Act

An amendment to Title VII of the Civil Rights Act of 1964

Discrimination on the basis of pregnancy, childbirth or related medical conditions constitutes unlawful sex discrimination under Title VII

Women affected by pregnancy or related conditions must be treated in the same manner as other applicants or employees with similar abilities or limitations

Table 2.6 Health Information Privacy Act Requirements and Authorizations (HIPAA) for Release of Information

Requirements of the Privacy Rule

1. Notifying patients of the office privacy policy
2. Making a good faith effort to receive acknowledgement that the patient has received the office privacy policy
3. Training employees in the privacy procedures adopted by the office
4. Designating a privacy officer to oversee the implementation and progress of the privacy procedures
5. Securing patient information so that they are not readily available to unauthorized persons

Elements required in Authorization for Release of Information under HIPAA

1. A description of the information to be used or disclosed
2. Identification of the person (or class of persons) authorized to use or disclose the personal health information
3. Identification of the person (or class of persons) authorized to whom the covered entity may make the authorized disclosure of the personal health information
4. A description of each purpose of the use or disclosure
5. An expiration date or event
6. The patient's signature and date

Additional notifications required in the authorization

1. A statement that the patient may revoke the authorization in writing and instructions on how to exercise that right
2. A statement regarding the conditioning of the treatment on first obtaining authorization, and the consequence of not providing authorization
3. A statement regarding the potential for the personal health information to be re-disclosed by the recipient

An authorization is not valid if it contains any of the following defects

1. The expiration date has passed, or the expiration event has occurred, and the health care provider is aware of that fact
2. Any of the core elements or required notification statements are not present in the authorization
3. The authorization violates specifications in the Privacy Rule regarding authorizations or
4. The health care provider knows that the information in the authorization is not true

2.4 Site of Service Designation

Site of service considerations in the practice of reproductive endocrinology and infertility are multilayered. A recent study suggests that IVF is underutilized in the United States (<250 cycles /100,000 women) and this is primarily due to the lack of insurance coverage [4]. Comparing states with mandated insurance coverage to nonmandated states shows a significant increase in available providers, and higher utilization rates. The same study shows a positive correlation between the number of physicians in a fertility center and the number of cycles performed by each physician, encouraging a group model for physicians desiring a robust REI practice.

Over the last 30 years, there has been a shift from academic REI practices to private practice. Soules pointed out that the resources of an academic medical center should provide

a competitive advantage to an academic ART program. However, a number of impediments found in the academic model must be addressed in order to create a successful marriage between academics and REI [5]. One of the first issues is to determine the site of service designation and hence management model. In order to compete effectively, many would argue that the academic ART program must designate the practice as a free-standing clinic also known as a site of service 11 designation, or function as such within a provider/hospital-based, site of service 22 clinical designation.

Recent developments in federal reimbursements for provider-based ambulatory services within academic medical centers (AMC) have prompted a reevaluation of outpatient reimbursements on the basis of site of service designation. Although Medicare is not a supplier of fertility services,