Case Studies in Clinical Practice Development

Romi Chopra, M.D.,¹ John Lipman, M.D.,²
and Timothy P. Murphy, M.D., F.S.I.R., F.A.H.A., F.S.V.M.B.³

ABSTRACT

By asking identical questions of several successful practitioners of clinical interventional radiology, a snapshot of the current and future status of interventional radiology as a clinical discipline is presented.

KEYWORDS: Practice, consultation, referral, marketing

- *What is your practice setup (who do you work for, single specialty, academic, private practice, etc.)?*

I work for the Midwest Institute for Minimally Invasive Therapies (MIMIT), a private practice that includes an interventional radiologist and a surgeon (who works part time), and the physicians have academic appointments as well.

- *What do you call your practice or business and yourself (e.g., interventional radiologist, interventionalist, endovascular surgeon)?*

I present myself as an interventional radiologist and an endovascular specialist.

- *Nuts and bolts: Where do you see patients, who do you see them with (office support), how you keep records, how do you do communications, how do you bill for which office services, etc.? Do you use a shared office? Office space provided by the hospital?*

MIMIT physicians include two interventional radiologists, one nurse practitioner (NP), and one part-time senior general/vascular surgeon. Patients are seen at multiple hospitals, a surgery center, and an outpatient office. We are in the process of setting up two other outpatient offices at each of the hospitals. The medical doctors also have academic appointments and we are involved in clinical trials.

We perform outpatient procedures in the office (vein ablations, phlebectomy, sclerotherapy, and other minor procedures). We also have a full-time noninvasive vascular laboratory.

We share one of our offices with a plastic surgeon, which has been a boon for the vein practice.

- *How do you determine whether a patient needs a consultation prior to an intervention?*

We see all patients for consultation prior to any intervention {the logic being, does a surgeon perform a surgery without a consultation?}.

- *How about prior to a diagnostic test referral, rather than a referral for an intervention?*

To comply with federal payor rules, we do not perform consultations on tests that are ordered based on the decision of another physician.

- *What follow-up routines do you do for various services, including frequency and types of examinations you order at various intervals?*

All patients are seen in the office postintervention. They become part of our practice and we manage their disease process, along with their primary physicians. All patients are placed on a follow-up regimen.

Clinical Practice Development; Editors in Chief, Brian Funaki, M.D., Peter R. Mueller, M.D.; Guest Editors, Timothy P. Murphy, M.D., F.S.I.R., F.A.H.A., F.S.V.M.B., Gregory M. Soares, M.D. *Seminars in Interventional Radiology*, volume 22, number 1, 2005. Address for correspondence and reprint requests: Timothy P. Murphy, M.D., F.S.I.R., F.A.H.A., F.S.V.M.B., Associate Professor of Diagnostic Imaging, Brown Medical School, Rhode Island Hospital, 593 Eddy Street, Providence, RI 02903. ¹Oak Park, Illinois; ²Atlanta Interventional Institute, Windy Hill Hospital, Atlanta, Georgia; ³Brown Medical School, Rhode Island Hospital, Providence, Rhode Island. Copyright © 2005 by Thieme Medical Publishers, Inc., 333 Seventh Avenue, New York, NY 10001, USA. Tel: +1(212) 584-4662. 0739-9529,p;2005,22,01,056,060,ftx,en;sir00291x.

- *Describe your local competition and in which service lines they compete.*

Vascular surgeons—peripheral vascular disease, venous disease, and vein care. We have started treating superficial femoral artery disease with endografts and have been a very intense competition for the surgeons.

- *What motivated you in establishing clinical practice?*

I got extremely frustrated with the academic hospital system. I could not practice good medicine and I spent more time dealing with political issues than with real clinical practice. I also felt very undercompensated compared with the effort I put in and the leadership I provided to those organizations.

- *How and why does your group support your clinical practice (resources and politically)?*

My group is an all interventional radiology group with very little diagnostic radiology.

- *What is your clinical office practice: procedure case mix (what percent of consults require procedures, what service lines do you concentrate in)?*

Service lines include:

1. General interventional radiology (biopsies, drainages, diagnostic angios, etc.)
2. Vascular disease: arterial and venous
3. Vascular access
4. Cancer therapy
5. Uterine fibroid embolization (UFE) and other typical interventional radiology procedures

- *Do you have a business plan, or return on investment (ROI), however simple, that you used to justify any aspect of your clinical practice?*

I had a very detailed plan and I set this up as any business would be. Initially, I started this as an individual and expanded the enterprise and grew every aspect of the business, managing the cash flow and assuring profitability. Every aspect of the practice had to succeed as I had bet a lot on the practice.

- *How do you manage your overhead costs (office space/staffing/support, records, transcription, etc.) efficiently?*

All of these are managed by a practice management company called CQS Inc. It specializes in interventional radiology and endovascular practices. The company leases us a full-time manager and an information technology professional, and they manage all the processes. Coding and billing is outsourced to a billing company. CQS provides transcription services.

All records are scanned and all documents and records are kept online.

We track every aspect and process of the business. Case volume, physician productivity by location, current procedural terminology code, cash flow, revenue, all expenses, referring patterns, etc.

Romi Chopra, M.D.
Oak Park, IL

- *What is your practice setup (who do you work for, single specialty, academic, private practice, etc.)?*

I am one of seven interventional radiologists in a private-practice radiology group of 26. We provide “exclusive” radiology services for two community hospitals. The first is a 500-bed, not-for-profit acute care tertiary facility located in a wealthy suburban community of a large metropolitan area. The other is a 7-year-old, 100-bed, not-for-profit general rural community hospital that is an owned subsidiary of the main hospital.

- *What do you call your practice or business and yourself (e.g., interventional radiologist, interventionalist, endovascular surgeon)?*

The interventional radiology identity is one of our biggest challenges. Since I started working for my current practice 13 years ago, I wanted to establish a separate identity for interventional radiology. I felt that it was important for all of our customers (patients, physicians, administrators, etc.) to know the differences between general diagnostic radiology and interventional radiology. The difference for each of the varied customers is important for different reasons and there is value derived for each. I trademarked the term “MICRO.” It stands for “Minimally Invasive Care through Radiologically directed Outpatient therapy.” Although this is clearly very wordy, it was an initial step at establishing “our brand of interventional radiology.” The MICRO logo was used on all communications with patients and physicians. It also helped develop a team concept, particularly with the interventional radiology technologists and nurses who also wanted to show subspecialty expertise to their more general colleagues. The techs and nurses went so far as to put the logo on all their lead aprons. For the present, we still refer to ourselves as interventional radiologists.

- *Nuts and bolts: Where do you see patients, who do you see them with (office support), how you keep records, how do you do communications, how do you bill for which office services, etc.? Do you use a shared office? Office space provided by the hospital?*

We rent an office in a medical office building immediately adjacent to the main hospital. It is roughly 1100 square feet and has a waiting room, receptionist area, bathroom, two patient examination/procedure rooms, and a doctor’s room for consultation. Medical records

for up to 6 months are kept in the radiology practice business office at the main hospital next door. Older records are kept offsite at a medical storage facility. The office is not currently shared, but we have looked into renting 2 days of the week to a dermatologist to enhance the varicose vein portion of our practice. Our staff includes two clerical staff, a practice administrator, and two nurses (one primarily clinical and the other primarily research). All new patients are seen by the physician requested. If a particular physician is not requested, the patient is assigned a physician by availability. One of the nurses will see the follow-up patients, with the doctor brought in as necessary. MICRO has a separate tax ID number and contracts separately. For UFE patients, we collect a copay at the time of service and submit an itemized statement to insurance carrier for the balance. For varicose vein patients, we collect payment at the time of service and provide an itemized superbill of charges to the patients so that they can file for reimbursement with their insurance carrier.

- *How do you determine whether a patient needs a consultation prior to an intervention?*

All patients being considered for an elective intervention are seen in the office for consultation. Office consultations are 30 minutes, while procedural time slots are 30 minutes or 1 hour.

- *How about prior to a diagnostic test referral, rather than a referral for an intervention?*

I have not seen patients prior to a diagnostic referral.

- *What follow-up routines do you do for various services, including frequency and types of examinations you order at various intervals?*

Follow-up routines vary with the intervention. For UFE, our nurse calls the patient at home the morning after the procedure and an appointment is made for the office the following week. I image the patient with magnetic resonance imaging at 3 months and see her in the office at the same time. Depending on the clinical and imaging findings, I might see the patient back in 3 months or at 1 year. For varicose vein patients, there is again telephone follow-up the next day, office visit at 1 week, and follow-up office visit at 6 weeks.

- *Describe your local competition and in which service lines they compete. What motivated you in establishing clinical practice?*

For vascular intervention, the local competition is interventional cardiology and to a lesser degree vascular surgery. For hemodialysis work, we compete with an interventional nephrologist who was trained at the

local academic institution in our city under the direction of their interventional radiology section.

- *How and why does your group support your clinical practice (resources and politically)?*

The motivation for establishing a clinical practice comes from my background and training. I was very fortunate to have spent time with Barry Katzen and Arina Van Breda at Alexandria Hospital when I was a second-year medical student. I also did fellowship training with Robert White and Don Denny at Yale. Both of these centers strongly emphasize the importance of a clinical practice. Establishing clinic time in a private-practice radiology group is challenging but essential for interventional radiologists who want to continue to perform interventional radiology procedures outside of a "line service."

- *What is your clinical office practice: procedure case mix (what percent of consults require procedures, what service lines do you concentrate in)?*

My group supports the clinical practice by allowing me to be in the office 1 entire day each week. They have hired clerical and clinical staff to allow the office to function.

The most common patients that I see in the office are fibroid embolization candidates, varicose vein patients, and oncological interventional patients.

- *Do you have a business plan, or ROI, however simple, that you used to justify any aspect of your clinical practice?*

Prior to the opening of the office, the group paid for a pro forma from a local consultant.

- *How do you manage your overhead costs (office space/staffing/support, records, transcription, etc.) efficiently?*

Our group spent a lot of money renovating and decorating the current office space. We wanted to appeal to cosmetic patients who live in this affluent area. Although I have received numerous compliments on the decor, in retrospect we could have spent the money more wisely.

- *What marketing efforts can you recommend?*

If you were to ask 100 people what an interventional radiologist does, you would be hard pressed to get a single correct response. It is a significant challenge for our survival. Therefore I talk to anyone who will listen. I give numerous lectures to both lay and medical groups. I often spend my lunch educating referring physicians. It is important to get to know the hospital marketing group. We perform procedures that are desirable to patients and that are exciting to talk about, which are the perfect ingredients for marketing. The hospital marketing group can help you. The Society of Interventional Radiology has

numerous brochures and press kits that members can use to help as well. Having a web presence is important. Provide patients with information about your practice and the types of procedures that you can perform. In summary, to be successful, you need two basic components: the skill and the will.

John Lipman, M.D.
Atlanta Interventional Institute
Windy Hill Hospital
2480 Windy Hill Road
Atlanta, GA 30067

- *What is your practice setup (who do you work for, single specialty, academic, private practice, etc.)?*

I work for a private general radiology groups with ~45 physicians. Eight of the 45 perform fluoroscopic interventions regularly. Of those eight, four spend the majority of their time in that role. We are the academic radiology department of Brown Medical School. The group covers two hospitals and roughly six or seven radiology offices.

- *What do you call your practice or business and yourself (e.g., interventional radiologist, interventionalist, endovascular surgeon)?*

The name of the group is Rhode Island Medical Imaging. We have filed with the secretary of state of Rhode Island to “do business as” Rhode Island Interventional Radiology. We have also filed to “do business as” the Rhode Island Vascular Institute.

- *Nuts and bolts: Where do you see patients, who do you see them with (office support), how do you keep records, how do you do communications, how do you bill for which office services, etc.? Do you use a shared office? Office space provided by the hospital?*

We have three ambulatory offices. This is not ideal and we are currently looking at sites to consolidate them. One of the offices is in a physician office building across the street from our main hospital. This office is ~1100 square feet of space subleased from a large internal medicine group. It includes a large waiting area, a reception area, a consult office, and two examining rooms. We lease 1 day per week there. On that day, we have a doctor staffed there in the morning, plus usually a fellow, with an NP and office manager that we employ. We see new patients in the morning and acute follow-ups. In the afternoon the NP sees well, long-term follow-ups. He has algorithms for various diseases and checks the same items consistently to ensure that the patients continue to do well. The space works out well but the disadvantage of that site is that it is in a very large suite of internal medicine offices and we get little street traffic recognition. Our names and our practice name are on

the rosters on the floor and in the lobby, but are not listed as prominently as they would be if the space were not subleased. The other is in a physician office building across the street from our second hospital about 4 miles away. The setup there is similar, and this office meets a half to a full day per week. The third is a combined office and vein clinic in the middle of the two sites. We see patients there and perform vein ablations and sclerosis. This space is ~1100 square feet and is similar to the first space, but we have ultrasound in that office and other supplies for vein procedures. That office meets 3 days a week. The staff in general move from site to site. This works out well but the disadvantage of it is that all the records that are not accessible on computer must be transported to the site from a central location (our group business office) as needed. Because we are up to a full-time, 40 hour/week need for a medical office space, we are looking for a consolidated space, perhaps with a little more space (1600 to 2500 square feet) for future growth, that we can use daily, at which we can keep all our records, and where our staff can consistently report. We can also promote the office practice a little more easily when that set up is in place.

- *How do you determine whether a patient needs a consultation prior to an intervention?*

We don't perform any therapeutic interventions without performing a consultation and assuming responsibility for patient care, except for emergencies.

- *How about prior to a diagnostic test referral, rather than a referral for an intervention?*

It depends. Some diagnostic tests are truly diagnostic and I don't have any potential therapeutic options to offer the patient—for example, wrist arthrography. These are scheduled by the referring doctor's office staff calling the hospital interventional radiology scheduler directly. Any “diagnostic” procedure that has a reasonable likelihood of providing information on which interventional therapy might be possible is seen as a consult and care assumed by the interventionalist. This includes all patients with lower extremity ischemia. To be clear on that the percentage of patients with lower extremity ischemia that we can treat percutaneously is so high that we don't accept referrals for diagnostic arteriograms of the lower extremities. We accept them as clinical referrals and see them in the office.

- *What follow-up routines do you do for various services, including frequency and types of examinations you order at various intervals?*

Usually, inpatients who undergo interventions are discharged the following day from the hospital with discharge instructions that include our contact

numbers day or night. They are advised what to look for and to contact us or come to the emergency room for those problems, or any others that come up. In the periprocedure period, we see patients for any complaint and do not try to assess them over the telephone. The routine then would be that we would see them usually within a week of the procedure in the office. A doctor will see them at that visit, but not always the doctor who did the original consult and treatment. For most patients, we then see them 6 months later and at 18 months postprocedure. If they are doing well at that time we give them our business card and ask them to call us if they ever have symptoms again.

- *Describe your local competition and in which service lines they compete.*

Interventional cardiologists and vascular surgeons at our smaller hospital perform interventions and that has reduced particularly peripheral vascular business at that site. That is improving, however. At our main hospital the cardiologists and vascular surgeons have done a couple of interventional procedures but have not established themselves as peripheral vascular interventionalists. Our competition for referrals from primary care is primarily from the vascular surgeons, who have led the primary care doctors to believe that they are the only legitimate vascular specialists. That is also improving as we continue our outreach to that community.

- *What motivated you in establishing clinical practice?*

The primary motivation was that procedures were becoming more complex and it was necessary for patient care. We felt that it was unconscionable to perform a therapeutic intervention and not see whether it worked. We also felt many years ago that if patients were admitted to another service for our procedures that they would not receive optimal care.

- *How and why does your group support your clinical practice (resources and politically)?*

They are happy to be able to offer state-of-the-art interventional radiology services and have always been enlightened about the benefits to the group with interventional radiology, including financial as well as status and goodwill. Ultimately we presented a business plan that showed how a clinical practice would support itself and in practice it has equaled or exceeded that plan.

- *What is your clinical office practice: procedure case mix (what percent of consults require procedures, what service lines do you concentrate in)?*

We seek patient referrals to our office practices based on diseases for which we have treatments. We perform interventions on ~80% of new patient consults that we see. Imaging tests are also indicated on a significant percentage of them.

- *Do you have a business plan, or ROI, however simple, that you used to justify any aspect of your clinical practice?*

Yes.

- *How do you manage your overhead costs (office space/staffing/support, records, transcription, etc.) efficiently?*

We use employees of our practice who rotate through the offices as needed—they are only staffed where there is work to do. We use subleased office space at present. That was very useful as we started the practice because we didn't have to buy or commit to a long-term lease. However, it doesn't serve our purposes because we can't showcase our practice. We perform interventions on most patients and don't recruit referrals for general noninterventional disease management. We have an NP who does most of the long-term, well-patient follow-ups.

- *What marketing efforts can you recommend?*

In the past we have participated in "Legs for Life" but got few referrals from it and little change in referring doctors practices. In the future we will call and mail the large primary care practices and invite them to send patients. Attending and running booths at local family practice and podiatry meetings has established good contacts for us. Telephone calls to primary care doctors and their office managers are very helpful. Many primary care offices are so busy that referrals to vascular specialists are done by the office staff. Visits by practice marketing people to those staff can be helpful. Grand rounds and dinner lectures are also useful.

Timothy P. Murphy, M.D., F.S.I.R., F.A.H.A.,
F.S.V.M.B.

Associate Professor of Diagnostic Imaging
Brown Medical School
Rhode Island Hospital
593 Eddy Street
Providence, RI 02903