29. Gauden SJ, Tripcony L: The curative treatment by radiation therapy alone of Stage I non-small cell lung cancer in a geriatric population. *Lung Cancer* 32:71-79, 2001
30. Quon H, Shepherd FA, Payne DG, et al: The influence of age on the delivery, tolerance, and efficacy of thoracic irradiation in the combined modality treatment of limited stage small cell lung cancer. *Int J Radiat Oncol Biol Phys* 43:39-45, 1999
31. Tombolini V, Bonanni A, Donato V, et al: Radiotherapy alone in elderly patients with medically inoperable stage IIIA and IIIB non-small cell lung cancer. *Anticancer Res* 20:4829-4833, 2000
32. Hickish TF, Smith IE, O'Brien ME, et al: Clinical benefit from palliative chemotherapy in non-small-cell lung cancer extends to the elderly and those with poor prognostic factors. *Br J Cancer* 78:28-33, 1998

33. Helbekkmo N, Aasebø U, Sundstrøm SH, et al: Treatment outcome in performance status 2 advanced NSCLC patients administered platinum-based combination chemotherapy. *Lung Cancer* 62:253-260, 2008
34. Langer C, Li S, Schiller J, Tester W, et al: Randomized phase II trial of paclitaxel plus carboplatin or gemcitabine plus cisplatin in Eastern Cooperative Oncology Group performance status 2 non-small-cell lung cancer patients: ECOG 1599. *J Clin Oncol* 25:418-423, 2007
35. Goss G, Ferry D, Wierzbicki R, et al: Randomized phase II study of gefitinib compared with placebo in chemotherapy-naïve patients with advanced non-small-cell lung cancer and poor performance status. *J Clin Oncol* 27:2253-2260, 2009

Multidisciplinary Cancer Care in a Community Hospital Setting: Challenges and Rewards

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Introduction

Cancer care is multidisciplinary by its very nature. To care for our patients, we need the input of radiologists, pathologists, a psychosocial support team, and many others. That is to say nothing of the care that must be coordinated among surgeons, radiation oncologists, medical oncologists, pharmacists, radiation physicists, and the list goes on.

Still, the patient who is confronted with the terrifying diagnosis of cancer frequently gets only a glimpse of the people who are making life-and-death decisions for him or her. Adding to this sense of not having control of one's life is the fact that the patient usually has little or no relationship with many of these caregivers.

In an attempt to ameliorate these problems and improve patient care, physicians have tried to bring many of the members of this care team together in the form of multidisciplinary clinics. In my own practice, I have experienced both success and failure in this effort.

I am a member of a 10-person adult medical oncology practice in southern and central New Hampshire. We care for patients in a variety of practice settings. These include independent physician-owned and operated offices as well as hospital-owned clinics where we provide professional services only.

Many years ago, we attempted to start a multidisciplinary breast cancer clinic in one of the communities in which we have a physician-owned practice. This is a two-hospital community, and unfortunately, the political rivalries and conflicting economic needs thwarted the effort. The project never got off the ground.

Some years later, I was practicing in one of our hospital-based clinics. The hospital brought in two new surgeons who were enthusiastic about initiating a multidisciplinary breast clinic. Because of my previous experience, I was skeptical that such a clinic could succeed. I was wrong. The breast surgeons rallied institutional support. The institution provided financial and logistical support, and the clinic has grown in stature over the ensuing years.

Barriers to Multidisciplinary Care

Physicians are generally busy, with the average physician working in excess of 50 hours per week.¹ It is no small task to find the time for another obligation, such as participating in a multidisciplinary clinic. The process of presenting and reviewing a patient's case in the context of the multidisciplinary clinic may be redundant. The physician may have already reviewed the case for a tumor board or for a previous consultation or procedure. Coordinating the time spent in the clinic so that all the members of the team can see the patient and discuss his or her case efficiently is usually difficult. Frequently, there is the sense that time is being wasted on the process.

Multidisciplinary clinics not only use time inefficiently, but the time spent may not be well reimbursed. Unfortunately, the resource-based relative value system generally reimburses time spent on procedures more generously than time spent in cognitive activities. Additionally, if the patient has already been seen in consultation before his or her visit to the multidisciplinary clinic, the physician cannot bill for an initial consultation again, even if the amount of time spent would be nearly equivalent to an initial consultation. Besides time and money, there is the barrier of distance. Different providers may practice at locations that are somewhat separated from each other, and time spent traveling to a central location may be difficult to manage and is certainly not going to be reimbursed.

Political rivalries can further complicate the ability to bring together a multidisciplinary care team. If a community has more than one group providing similar services, there may be competition for patients that hinders the collegial participation of all the members of the care team. Additionally, it may be awkward for a surgeon to decide which of several competing groups of medical or radiation oncologists should receive the referral for a given patient.

Complicating matters still more is the decision about which disciplines should be involved in the process. Should social services see every patient? What about physical therapy or occupational

therapy? Should nutritional services be involved? If there are house staff members at the hospital, should they participate? If these valuable services are to be used on a case-by-case basis, who makes this decision? Will the institution sponsoring the multidisciplinary clinic be willing to support the regular participation of this extensive network of ancillary services?

Deciding on the format of the clinic may also present a myriad of challenges. Who decides which patients are to be presented? Will there be a limit to the number of patients who can participate on a given day? Will there be an administrator for the clinic or a nurse coordinator? If so, who should that be? To whom does this individual report? Is this an opportunity to involve a nurse navigator?

Another structural question that needs to be answered is how should the patient be involved? Should he or she see each of the providers sequentially or in a group? Should the house staff see the patient first and present the case to the attending, or should house staff just accompany the attending in the clinic? Maybe house staff should not be involved at all. How should ancillary staff be involved?

What is the appropriate physical space for conducting this clinic? Should it be held in proximity to the operating room for the surgeons' convenience or elsewhere? Should the patient be required to go from one office to another in a sort of virtual clinic? Could teleconferencing have any role in the structure of the clinic?

Logistics such as time of day, day of the week, and duration of the clinic can also be prickly issues. If surgeons have an assigned operating room day, how should their schedules influence the scheduling of the clinic? Should the schedule be structured to meet the needs of some other provider or provider group?

Decisions need to be made about how to communicate information about the conclusions of the practitioners to the patients who have participated in the multidisciplinary clinic. Should one person summarize the conclusions of the group for the patient, or should there be some type of summary group meeting at the end of the visits? Is this information summarized for the patient in a written form? If so, who composes this document? Are the group's conclusions incorporated into the medical record, or does each attending dictate his or her own note? How is the information communicated back to the referring physician?

Champion

Although there can be a daunting number of decisions to be made in developing a multidisciplinary oncology clinic, there are some success factors that seem to be universal. First and foremost, there must be a champion or champions for the process. The political, economic, and physical impediments are so formidable that someone must rally support if the program is to succeed. All the important stakeholders need to be brought on board with the project. They need to understand why the process will benefit them as well as the people they serve. The champion must be able to articulate clearly why it is worth all the effort to bring such a clinic to fruition. The champion must have a clear idea of the minimum elements that will need to be brought together to make this process a success. He or she

should also have an idea about which elements on their wish list might be negotiable.

In thinking about starting a multidisciplinary clinic, the champion should consider who his or her allies are in the project. Is there a patient advocacy group that could lobby for the process? Might there be a philanthropic benefactor who would like to support the effort? Is there a neighboring health care system that has such a clinic? Possibly a provider group or the administration wants to compete with that institution. Is there an example of a successful multidisciplinary clinic that the champion's institution could emulate?

The champion should also consider what incentives can be structured into the clinic to bring reluctant participants on board. Holding part of the case conference at breakfast or lunch can be helpful in finding an efficient way to spend this time. Providing continuing medical education credits may be possible and can be a big incentive to participation. Possibly the sponsoring institution can pay for the providers' time through a contractual agreement.

In short, the champion will need to be a visionary, a politician, and a tireless advocate for advancing patient care.

Rewards

Although the barriers to this type of project may be daunting, the rewards of a successfully functioning multidisciplinary clinic are significant. In my experience, patient satisfaction with this type of experience seems to be high. It is reassuring to the patient to see so many providers working together on his or her behalf. Additionally, this structure may allow the patient and his or her family to have many of their questions about the disease and its treatment answered in a short time frame. Many patients complain that waiting for answers about their disease status, its prognosis, and treatment is the most difficult part of the cancer experience. How many times have we as oncologists heard our patients say, "I just want to get this problem treated and get on with my life?"

Additionally, the patient is more likely to receive a coherent message about his or her diagnosis, prognosis, and treatment plan in the setting of a multidisciplinary clinic. When the patient hears information about his or her disease from multiple providers at different times and in different locations, there are almost always subtle differences in the presentation of information between the providers about the gravity of the diagnosis or the desirability of various treatment choices. These disparities of information can lead to patient anxiety and erode the patient's confidence in the physicians caring for him or her. On the contrary, the information given in the context of the multidisciplinary clinic tends to engender confidence, because the providers give the patient one unified message.

For providers involved in a multidisciplinary clinic, the experience can also be rewarding. The case discussion component of the clinic offers an opportunity for a beneficial exchange of ideas and information about the patient's disease and treatment. Information shared among different disciplines frequently gives all the caregivers a richer view of the nature of a patient's disease and the risks and benefits of various treatment options. Additionally, if there is variance in the approaches that different providers would

recommend to the patient, these differences can be reconciled before the patient is presented with the information.

From an institutional point of view, the existence of such a clinic gives the cancer program at that hospital an easily identified and branded image of excellence. It is evident that the care of this type of cancer is of particular concern for the institution, because the institution has brought experts together to review each patient's situation individually. Additionally, there may be a halo effect in which the institution becomes known as providing a higher level of cancer care or medical care in general. In this way, the institution may achieve "brand loyalty" with the patient as well as with the patient's family and friends.

In summary, I came to the concept of the multidisciplinary cancer clinic as a skeptic. However, during the past few years as I have participated in this process, I have become a true believer in the advantages of this model of patient care. Although the barriers to forming multidisciplinary cancer clinics are formidable and the decisions to be made are numerous, there are significant rewards for the patient and providers that make this effort worthwhile.

Reference

1. Staiger DO, Auerbach DI, Buerhaus PJ: Trends in the work hours of physicians in the United States. *JAMA* 303:747-753, 2010

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Models of Multidisciplinary Cancer Care: Physician and Patient Perceptions in a Comprehensive Cancer Center

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Abstract

Purpose: Multidisciplinary clinics (MDCs) play a prominent role in coordinating complex cancer care delivered by multiple providers from different disciplines. The structure of such clinics and clinicians' perceptions of the advantages and disadvantages of practicing in MDCs have not been well characterized.

Methods: We surveyed and interviewed medical providers who participate in cancer MDCs at our comprehensive cancer center about the structure of the MDCs in which they work, their satisfaction working in these clinics, and the perceived benefits and disadvantages. Press-Ganey patient satisfaction scores were also examined.

Results: We identified two care models: one in which patients are seen sequentially by physicians from each discipline, and a second model in which patients are seen concurrently by physi-

cians from each discipline. Of the 141 survey respondents from surgical oncology, medical oncology and radiation oncology, more than 90% of providers enjoyed working in an MDC and more than 75% preferred to see new patients in an MDC. Additionally, 90% believed that patients perceived the clinics to be valuable for comprehensive, coordinated, and appropriate care. However, one third of the physicians thought the clinics were not an efficient use of their time. Participants who practice in the concurrent model of care and surgical oncologists were more likely to express frustration with the inefficiency of MDCs. Patients seen in each clinic model uniformly expressed high satisfaction with the coordination of care.

Conclusion: MDCs are valued by oncology patients and providers. Although they are personally and professionally satisfying for physicians, the use of this care model is perceived as inefficient by some caregivers.