

Expanding Multidisciplinary Care in Community Cancer Centers

An MDC assessment tool developed by the NCCCP

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In Brief

By 2009 “expansion of integrated multi-specialty cancer care through new or expanded approaches to improve coordination” was a program deliverable for all NCCCP sites. Accordingly, an NCCCP Quality of Care Subcommittee was established and tasked with identifying a means to evaluate and implement multidisciplinary cancer care (MDC) at each NCCCP site.

The end result was the creation of a MDC development assessment tool composed of seven key indicators—with five levels, ranging from “evolving MDC” to “achieving excellence”—to measure the level of MDC implementation at each site. NCCCP sites incorporated each of the key assessment areas into their programs; however, the levels for each area varied from site to site, depending on geographic factors and availability of resources. For example, an NCCCP site in an urban area may easily have a face-to-face MDC model, whereas a rural site may need to implement a virtual MDC model due to the distance between specialists and patients.

Three years into the MDC project, all NCCCP sites showed measured improvement in the level of multidisciplinary cancer care delivered at their community cancer centers. Sites agreed that the most important factor in the establishment of a MDC model is effective physician leadership throughout the process. A number of challenges to the implementation of MDC were identified, including limited support staff and insufficient amounts of time.

Community cancer centers may find this MDC assessment tool and the experience of the NCCCP sites helpful in their efforts to create and/or expand multidisciplinary care at their own centers.

Assessment Tool Development

A small working group was formed within the Quality of Care Subcommittee to establish a framework for a MDC model that allowed NCCCP sites to assess their current programs and/or further develop their capabilities to deliver comprehensive and integrated services. The working group agreed that a common definition of multidisciplinary cancer care includes:

- Prospective and/or concurrent review of patient care
- Multidisciplinary physician specialists
- Development and review of treatment plans based on evidence-based guidelines
- Efficient communication among physicians

- Written treatment plans that are updated as necessary and reviewed with the MDC team.

Based on the collective experience of the working group members (patient caregivers and hospital administrators), seven key assessment areas of MDC were identified. In no particular hierarchy, these areas were:

1. Case planning
2. Physician engagement
3. Coordination of care
4. Infrastructure
5. Financial
6. Clinical trials
7. Medical records.

These assessment areas were put into a matrix, each with five levels of increasing accomplishment (e.g., from Level 1 – “evolving MDC” to Level 5 – “achieving excellence”). After the NCCCP Executive Subcommittee (comprised of the Principal Investigators at each site) approved the completed tool, it was provided to the NCCCP sites to evaluate their existing capacity to deliver multidisciplinary cancer care.

Now, community cancer centers across the country can use the MDC assessment tool to evaluate their programs and guide growth opportunities in the delivery of MDC. This tool can be found on pages 34 and 35.

During their efforts to improve and expand the delivery of multidisciplinary care at their own cancer centers, NCCCP sites utilized the assessment tool, applied several MDC models to develop their MDC infrastructure, and shared lessons learned.

MDC Models

NCCCP sites used the tool to assess how best to deliver MDC to meet patient needs, while taking into consideration facility space, logistical realities, and the cancer center environment. The results showed multidisciplinary cancer care at each site was at different points along the assessment scale; the spectrum ranged from minimal collaboration to face-to-face multidisciplinary clinics. Some NCCCP sites were able to use the tool to assess their programs, yet were unable to advance to a higher level due to local contributing factors. Here are three of the MDC models used by the NCCCP sites:

Tumor Board. Several sites changed the format of their weekly retrospective disease-specific tumor boards from educational case presentations to evidence-based and guideline-driven prospective case reviews. In this restructured format, the MDC model presents a patient's case to the MDC team prior to the start of treatment. A treatment plan

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MDC Assessment Tool

Assessment Area	Evolving MDC (Level 1)	Developing MDC (Level 2)	MDC (Level 3)
Case Planning	Care planning is asynchronous with patient presenting to multiple physician offices without a shared medical record.	Care planning is asynchronous with patient presenting to multiple physician offices with a shared medical record.	Most care planning is asynchronous, but some patient care plans are discussed in multidisciplinary conferences, which occur on a weekly basis.
Physician Engagement	Diagnostic and treatment physician belong to multiple independent groups, with little interaction, and a representative from some groups is engaged with the cancer center.	Diagnostic and treatment physician belong to multiple independent groups, with little interaction, and at least one representative from each group is actively engaged with the cancer center.	The MDC has a physician agreement of participation, and physicians are actively engaged in developing treatment standards.
Coordination of Care	Patient care is episodic. Patient has to present to multiple locations on multiple days for treatment and or diagnostic modalities. Information is stored in multiple locations, and difficult to coalesce.	Patient care is episodic, but some treatment and diagnostic modalities are coordinated. Information is coordinated and is readily available to physicians and staff.	MDC has some dedicated diagnostic and treatment abilities to meet patient's care needs. Information is readily available to physician and staff.
Infrastructure	Limited physical infrastructure with limited information system support. Hospital, physician office model.	Limited physical infrastructure with integrated clinical and administrative information systems used by all.	Some dedicated physical facilities, which do not cover the full spectrum of care, with independent clinical and administrative information systems.
Financial	Billing is episodic, based on encounter with facility or physician. No facility fee is applied.	N/A	Physicians bill separately. Introduction of facility fee for MDC. Communication between MDC and physician offices.
Clinical Trials	Patient not reviewed for eligibility for clinical trials. No literature given to patient on clinical trials.	Some patients reviewed for eligibility. No formal process to review patients for clinical trials. Clinical trial literature given to patient.	2% of patients participating in clinical trials. There is a formal accrual and recruitment plan. Clinical trial literature given to all patients.
Medical Records	Paper chart plus some EMR with isolated pockets.	Mainly for documentation reasons only. Medical information is not integrated. Little to no sharing. Mixture of paper and electronic.	Mixture of paper and EMR. Starting to share labs, radiology, medical history, treatment plans, and medications.

Moving towards Excellence (Level 4)	Achieving Excellence (Level 5)
All patient care planning is done through a multidisciplinary conference, which occurs on at least a weekly basis.	All patient care planning is done through a multidisciplinary conference, which occurs while the patient encounters care.
Same as prior, with the addition of engagement in quality improvement initiatives and strategic direction.	Same as prior, with the addition of physicians have operational and financial authority for the MDC.
MDC is fully integrated with treatment and diagnostic modalities, and all information is available from a single source.	Same as prior, with the addition of ancillary services such as education, support groups, and wellness programs for patients and families.
Some dedicated physical facilities, which do not cover the full spectrum of care, with integrated clinical and administrative information systems.	Dedicated center with ability to provide full service to patients with integrated information systems.
N/A	Global bill for MDC billing, inclusive of facility fee.
4% of patients participating in clinical trials. There is a formal accrual and recruitment plan. Clinical trial literature given to all patients.	6% of patients participating in clinical trials. There is a formal accrual and recruitment plan. Clinical trial literature given to all patients.
75% of hospital system and physician offices is integrated electronically across the continuum.	Fully integrated electronic record across the continuum with access to information.

- Case Planning _____
- Physician Engagement _____
- Coordination of Care _____
- Infrastructure _____
- Financial _____
- Clinical _____
- Trials _____
- Medical Records _____
- Total Score _____

Level 1—Evolving MDC Program

This level describes organizations that meet regulatory requirements and Association of Community Cancer Centers (ACCC) guidelines. There are a few performance improvement initiatives underway, and some centers of excellence. The leadership vision for quality is unclear. The organization lacks sufficient personnel and financial resources to administer a fundamental program that supports conducting MDC initiatives designed to attain improvements in patient care, quality, safety, and efficiency.

Level 2—Moving Towards MDC Program

Organizations at this level have some of the fundamental structures and processes for achieving MDC initiatives. The leadership vision for quality is under development. Some personnel and financial resources are available to support the organization attain some improvements in patient care, quality, safety, and efficiency, but they are insufficient for a comprehensive program.

Level 3—MDC Program

Organizations at this level have many of the fundamental structures and processes for running MDC initiatives. Leadership’s vision for quality is known to many in the organization. Personnel and financial resources are available to support the organization in attaining a number of changes in the improvement of patient care quality, safety, and efficiency, and changes largely are driven by the cancer center staff.

Level 4—Moving Towards MDC Excellence

Organizations at this level have many significant structures and processes for deploying MDC initiatives. Personnel and financial resources are available to support the organization in attaining many important changes and improvements in patient care, quality, safety, and efficiency. Some staff outside the cancer center play lead roles in fostering initiatives.

Level 5—Achieving MDC Excellence

Organizations at this level have many best of class structures and processes deploying MDC initiatives. Personnel and financial resources are spread throughout the organization and available to support the attainment of many important, leading, and creative changes and improvements in patient care quality, safety, and efficiency. Many staff outside the cancer center play lead roles in fostering initiatives and achieving results. This level also provides organizations with stretch goals.

is developed and documented for future reference. A nurse navigator, present during the case review, coordinates the treatment plan and communicates it to the patient.

NCCCP sites found the most challenging issue to this MDC model was the time commitment needed from support staff to handle the bulk of the upfront work. Other challenges included:

- Obtaining physician buy-in
- Changing the physician mindset from the “status quo”
- Moving the tumor board lead from the pathologist to the disease-specific physician
- Providing resources or benefits to physicians to make MDC conference attendance possible.

Face-to-face MDC (aka MDC Clinic). In this model, all MDC team members meet with the cancer patient in one room to discuss treatment options. An important benefit of this model is that the patient is able to leave the MDC clinic with a completed treatment plan. The nurse navigator ensures that the patient understands the treatment plan and assists with the coordination of diagnostic tests, treatments, and follow-up visits.

Though multidisciplinary clinics are enhanced by having all team members available as needed rather than requiring patients to schedule more appointments at other locations, this model is often not feasible for many community cancer centers. Barriers to the implementation of this model include:

- Availability of adequate MDC clinic space
- Coordination of team member schedules to fit the clinic time
- Physician buy-in (clinic productivity and therefore revenue is decreased under this MDC model)
- Ability of support staff to assemble all necessary reports, test results, and imaging scans prior to the face-to-face MDC clinic meeting.

Virtual MDC. NCCCP sites that did not have the physical space to hold team meetings or that could not have face-to-face clinics due to distance between team members implemented virtual MDCs. In this model, members of the MDC team see the cancer patient at different times and places within a specified time frame. A treatment plan is developed, written, and sent to all team members, as well as the patient and primary care physician. A nurse navigator assists the patient through the process to ensure that all appointments are met and that all diagnostic and treatment information is communicated to the MDC team.

NCCCP sites found two major challenges to the virtual MDC model:

- How to identify the needs of MDC team members
- How to identify the gaps in communication and close those gaps to ensure timely and accurate communication of the treatment plan.

During the three-year pilot period, NCCCP sites initiated 27 new MDCs, increasing the total number from 47 to 83. At the end of the assessment period, 36 MDCs were functioning in the five most common disease-specific MDCs: breast, lung, colorectal/GI, prostate/GU, and head and neck. NCCCP sites that were able to implement particular disease-specific MDCs showed significant improvements in the level of MDC care as measured with metrics, such

as the number of physicians participating and the percent of patients prospectively presented. Though three of the NCCCP sites did not have functioning MDCs at the end of the initial three-year pilot, these sites were able to demonstrate steps taken toward establishing multidisciplinary care delivery levels.

Based on the outcomes of the MDC evaluation and implementation efforts, NCCCP sites identified two key roles as crucial to successful MDC development: an effective physician leader and an experienced nurse navigator.

Physician Leader

NCCCP sites found that effective physician leadership was essential to influence movement to higher levels of MDC development and was a major component of successful implementation and maintenance of MDC in a community cancer center. An effective physician leader has a scope of authority and accountability to:

- Oversee the development and implementation of the MDC program
- Provide leadership for the vision and strategic plan for the MDC program
- Have report relationships and authority within the organization that enable the physician leader to be accountable for the MDC program
- Be an active participant in the MDC program, as appropriate.

To be most effective, NCCCP sites believe that the physician leader should be an active oncology clinician who is skilled at developing peer relationships. An effective physician leader will help ensure continued physician participation in MDC. Why? A physician who serves as a champion for MDC will engage private practitioners in a process that respects their schedules, yet allows for participation in MDC, either in person or virtually. Interest and involvement by physicians in the community, as well as cancer-center-employed physicians, offers many benefits, including:

- Wider participation by physicians overall
- Broader overall knowledge base
- Wider range of physician perspectives and greater consensus.

Nurse Navigator

The second influential factor for successful MDC development and implementation is the engagement of an experienced nurse navigator. The standard role of the navigator is to:

- Help guide the patient and family through the health-care system
- Act as the central contact for patients and families
- Ensure that the patient and family understand the diagnosis and treatment plan
- Assist patients with scheduling tests and consultations.

An experienced nurse navigator can facilitate multidisciplinary care and provide open communication between all disciplines. A navigator has the process knowledge to coordinate patient schedules, will follow-up on care planning, and will communicate with the patient and the MDC team. When patients are not able to see all disciplines at the same time, on the same day, or at the same location, the navigator will help guide the patient through the process. Even community cancer centers that are able to offer face-to-face MDC

find the support of a nurse navigator important in addressing the needs of the patients beyond the MDC.

Other Stakeholders

In addition to the physician leader and nurse navigator, NCCCP sites found that expansion of MDC at a cancer center involved other key stakeholders including:

- Cancer patients
- Hospital or cancer center leadership
- Cancer program director
- Medical and radiation oncologists
- Pathologists
- Surgeons (both oncologic and other specialists)
- Primary care physicians
- Cancer registrar and staff
- Research and clinical trials staff
- Medical geneticists
- Legal departments
- Hospital staff
- Social workers
- Dietitians
- Community outreach staff.

Barriers to MDC Implementation

NCCCP sites found that the most common barrier across all types of MDC models was the inability to schedule private practice physician time, resulting in a lack of physician engagement. The community oncology physician's schedule is complicated by decreasing revenues. Today, these physicians have to see more patients to receive the same compensation, and this scenario results in tight schedules that do not accommodate time for MDC participation. Other potential barriers to MDC implementation identified included:

- Contract issues that may prevent physician groups from seeing patients in the MDC model
- Single-physician specialty practices where it may be difficult for the physician to allot time away from patients
- The ability to identify and engage a physician leader for each disease site
- The availability of space for multidisciplinary clinics and limited support staff
- The amount of time required to address billing agreements, conditions of participation, credentialing of physicians to practice within the MDC, and the ability to identify the billing process and auditing responses from insurance companies
- Prior failed attempts to launch MDC that would neces-

sitate additional, time-consuming planning efforts and require physician dialogue to gain buy-in.

Recommendations and Conclusion

In the end, NCCCP sites gained many valuable insights through the process of developing the MDC assessment tool and expanding multidisciplinary care at their cancer centers. As a group, they offer a stepwise approach with the following recommendations to other community cancer centers interested in establishing or enhancing MDC:

- Recognize that effective physician leadership is essential for MDC success
- Gain support of hospital or cancer center leadership to acknowledge the benefits of the physician leader role
- Utilize a MDC model that will succeed (e.g., implement MDC for a disease site that has a high volume and a willing physician leader)
- Develop a process that makes it easy for private practice physicians to participate (e.g., provide specific benefits to participating physicians, such as offering CME credits or allowing access to specialized equipment and technology at the clinic)
- Accept the need for flexibility as no one model will be suitable for all services
- Be willing to adapt or make changes to the process *immediately* in order to use MDC team members' time wisely and efficiently
- Recognize the importance of available support staff to address patient needs—beyond clinical care—that could be barriers to completing care
- Engage an effective nurse navigator with knowledge of the process to coordinate patient schedules
- Understand that not every community cancer center is meant to reach a level five for all key elements in the MDC assessment tool to measure success. 📌

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