A Multidisciplinary Prostate Cancer Clinic for Newly Diagnosed Patients: Developing the Role of the Advanced Practice Nurse

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Newly diagnosed patients with prostate cancer have various treatment options, and a multidisciplinary prostate cancer clinic (MPCC) can present all options in a single setting. An MPCC was started in 2004 at the University of Texas M.D. Anderson Cancer Center, and 258 patients with prostate cancer were evaluated in its first year. The clinic expanded in 2006 and an oncology advanced practice nurse (APN) was recruited to address specific objectives. The APN role was used to implement a quality-of-life protocol, provide detailed patient education (including a treatment summary and care plan), and serve as a single point of contact as patients move toward a treatment decision. Formal evaluation of the MPCC showed that patients were satisfied with this approach to the complex decision-making process in prostate cancer.

Prostate cancer is the most common cancer in men. The American Cancer Society (ACS), 2009 reported about 186,320 new cases of prostate cancer in the United States in 2008, and about 28,660 American men will die from this disease in 2009. Although one in six men will be diagnosed with prostate cancer, only one in 35 will die from this disease (ACS). When diagnosed with low-risk, early-stage disease, patients with prostate cancer often have several treatment options. The options may present a dilemma for the patient because each has a similar five-year biochemical disease-free survival rate as well as treatment-specific short- and long-term side effects. Standard treatments include external beam radiation therapy, radioactive seed implantation, or radical prostatectomy; proton therapy, cryotherapy, and active surveillance are additional options (Peschel & Colberg, 2003).

Much information about treatment options is available from the Internet, books, educational pamphlets, support programs, and word of mouth from other men with prostate cancer. However, patients often verbalize uncertainty and distress related to choosing from multiple treatment options (O’Rourke, 2007). Urologists, the physicians who routinely diagnose and counsel patients with prostate cancer, are well-versed in the various treatment options and routinely offer recommendations. However, surgical bias may be a concern for newly diagnosed patients when urologists provide counseling on appropriate treatment options (Hudak et al., 2007). As a result, patients may try to make treatment decisions based on incomplete or incorrect information. To address this deficiency, the University of Texas M.D. Anderson Cancer Center opened a multidisciplinary prostate cancer clinic (MPCC) in 2004. The primary objective was to provide patients with a setting in which all appropriate treatment choices could be presented, reviewed, and discussed in detail by the specific treatment specialists. The MPCC initially was an adjunct to the urologic oncoligists’ regular weekly clinic. Two patients who were undecided about treatment and desired information were scheduled in the MPCC twice weekly. Each patient was evaluated individually and consecutively by a urologic oncologist and a radiation oncologist. Both specialists then discussed the most appropriate recommendations for the patient’s stage and grade.

At a Glance

- Patients with organ-confined, newly diagnosed prostate cancer have multiple treatment options, with similar five-year biochemical disease-free survival rates and specific short- and long-term side effects.
- A multidisciplinary prostate cancer clinic can provide a setting in which all appropriate treatment choices are presented, reviewed, and discussed in detail by specialists.
- An oncology advanced practice nurse provides the necessary link between specialists and the patient.
of cancer, with individual consideration given to comorbidities. In addition, a medical oncologist was available to patients at high-risk and patients with T3 clinical disease or Gleason-9 pathology for same-day consultations. In the first year, 258 patients were evaluated by a radiation oncologist and urologic oncologist. Patient feedback on the MPCC clinic was positive, although no formal evaluation existed at that time.

In the second year of operation, the MPCC was expanded and specific guidelines for patient inclusion were developed. A specific appointment template of three new patients per clinic was used, and the genitourinary center's business staff identified the most appropriate patients. In addition, patients who expressed a strong preference for a specific therapy were scheduled as requested. As a result of the expansion, the MPCC had 345 new patient visits in 2005. Based on continued patient enthusiasm for evaluation in the clinic, the genitourinary center's business steering committee decided to enhance the multidisciplinary clinical model with the following objectives.

- Provide a coordinated experience for each patient that includes comprehensive assessment, diagnostic testing and ancillary services, summary of treatment recommendations, and follow-up during the decision-making process.
- Provide patient education regarding treatment choices and available clinical trials.
- Assess clinical performance by compiling appropriate treatment statistics and incorporating relevant survey instruments.
- Increase patient usage of the MPCC for information, decision making, and subsequent treatment.

The addition of an oncology APN was proposed to accomplish the objectives. The APN would serve as the primary contact for each patient in the MPCC and provide support, education, and coordination of care during the decision-making process without apparent treatment bias. A newly graduated oncology clinical nurse specialist (CNS) with experience in urologic oncology was transitioned into this role.

With the addition of an APN to the multidisciplinary team, the first goal was to provide a consistent experience for all patients. Standardized patient education was a priority because patients reported that their treatment preferences often were based on information retrieved from the Internet or from discussions with friends. Patients who come to the MPCC with a treatment preference that is not considered standard of care for a specific grade or stage of prostate cancer require additional education.

All readily available resources at the M.D. Anderson Cancer Center were collected and compiled into a standardized information packet given to patients at the start of their visit. The information summarizes treatment options, including active surveillance, surgery, all radiation-based therapies, androgen ablation, and chemotherapy. Written information provides a general overview and allows for detailed discussion on appropriate approaches to prostate cancer treatment. Subsequent interactions with each physician at the MPCC also provide clarification for patients about the appropriateness for each treatment. In addition to printed information, the APN provides a personal introduction and orientation at the beginning of each patient appointment. The overview includes a summary of the day's schedule, which consists of a review of the individual's medical history, a physical examination, a review of M.D. Anderson Cancer Center pathology, and an interpretation of outside medical records and diagnostic tests. Individualized treatment recommendations are given after a review of the information and consultation by the clinical specialty teams. Visits usually are completed in five hours or less.

At the completion of the visit, each patient is given a written summary of treatment recommendations, including a checklist of options that are appropriate for the individual patient. All significant comorbidities and age considerations are included in the comments section of the letter (see Figure 1). An alternate letter is provided if a treatment recommendation cannot be made without additional outside records or diagnostic testing.

Because patients receive a large volume of information at the multidisciplinary clinic session, the providers and APN acknowledge that patients frequently need additional time to process the information presented during the initial visit. Rather than calling the radiation or urology departments with questions and requests for additional information, patients contact the APN for all follow-up until a treatment decision has been made. The approach ensures consistency in patient information and education throughout the decision-making process. When a decision is made, the APN facilitates integration with the appropriate clinical team for patients who receive treatment at the M.D. Anderson Cancer Center; the APN provides summary information on request for patients who return to their home community.

A review of all available, appropriate clinical trials for each patient also is incorporated into patient education. During the initial visit, each physician discusses specific clinical trials for which a patient may be eligible. Clinical trial information also is included in the summary letter given at the conclusion of the visit. Patients in the MPCC appear to understand the clinical trial process based on high clinical trial enrollment. In 2007, 62.8% of patients with newly diagnosed prostate cancer seen at the MPCC consented to participate in at least one clinical trial. The statistic has not been collected or reported routinely in the genitourinary center, so the authors intend to conduct a detailed analysis of clinical trial enrollment in the future. The range of clinical trials includes quality of life, laboratory, and epidemiologic studies as well as treatment protocols.

An outside agency was used to evaluate patient satisfaction with the program. The quality improvement study aimed to provide strategic direction to the needs of the patients and identify the program's strengths and weaknesses. A small qualitative study was conducted by Gelb Consulting through the cancer center's marketing department from July 2006 to March 2007 (McKeever, 2006). The study used an experience mapping research technique and was conducted similar to a focus group. Permission was obtained from each patient to discuss their experiences with Gelb Consulting, but the study was considered marketing research so formal institutional review board approval was not obtained. In-depth interviews were conducted with 48 patients who had been evaluated in the MPCC. Family members also were included in the study. A consistent interview format was used to assist patients in the recall of specific episodes of their clinic and treatment experience. Patients treated with active surveillance, surgery, or external beam radiation were represented in the sample. Patients receiving treatment at the M.D. Anderson Cancer Center (n = 27), patients who
Thank you for choosing the multidisciplinary prostate cancer clinic (MPCC) for your treatment consultation and recommendations. You were seen as a patient today by the physician team of __________________________.

After thorough discussion of your medical history, pathology review of your biopsy, pertinent x-ray and laboratory tests available, and your physical examination, the team recommends (in no particular order) the following treatment options for your prostate cancer.

- **Surgery**
  - Open, retropubic radical prostatectomy (removal of the prostate)
  - Laparoscopic or robotic prostatectomy
  - With unilateral or bilateral nerve-sparing
  - With sural nerve graft
  - Recommended clinical trials: ___________________________________________

- **Radiation therapy**
  - External beam radiation therapy
  - Proton therapy
  - Brachytherapy (seed implantation)
  - With hormone therapy of _____ months’ duration
  - Recommended clinical trials: ___________________________________________

- **Active surveillance (watchful waiting)**
  - Recommended clinical trials: ___________________________________________

- **Cryotherapy**

- **Hormone therapy alone**

Clinical trials are research studies that involve people. The main purpose of a clinical trial is to find a better way to prevent, diagnose, or treat a disease. Clinical trials are part of a long, careful research process. Patients who participate in a clinical trial receive drugs, procedures, or therapies that have been researched in successful laboratory, animal, or human studies. All patients who participate in clinical trials are volunteers. Volunteers can choose to stop their participation in a clinical trial at any time.

Clinical trials are important to develop new treatments for cancer. Many of today’s standard cancer treatments are based on the results of previous clinical trials. M.D. Anderson Cancer Center is committed to improving the treatment outcome of every patient with cancer. If a clinical trial exists that would be applicable to your treatment recommendations, please discuss this with your multidisciplinary team.

Following your visit, a member of the multidisciplinary team will contact you to discuss any additional questions or concerns. As a result of the identified need for additional follow-up, the APN calls each patient three to five days after the treatment visit. All patients are told that they will receive a follow-up call but are encouraged to call or e-mail questions or requests for additional information during the interim. The patient evaluation process also was modified in response to the repetitive gathering of patient information. Previously, each service required the patient’s assigned fellow, resident, or APN to conduct a complete review of the medical history and perform a physical examination, including digital rectal examination. The approach was repetitive, time consuming, and gave the impression of an information disconnect between urology and radiation oncology. As a result, a template that contains all essential information required for both services was developed. A service assigned as the primary patient evaluator gathers all patient information and then provides the consultation, a completed copy, and a verbal summary report. The urologic and radiation oncologists subsequently confirm all pertinent information and portions of the physical examination.

Streamlining the evaluation process has decreased returned to their communities for treatment (n = 9), and patients who had not yet made a treatment decision (n = 12) were interviewed. Gelb Consulting removed identifying patient information from the complete semistructured interview transcripts and provided an overall analysis to the authors.

A major theme was a desire in patients and families to be given clear primary treatment recommendations as well as additional follow-up after the clinic visit. Patients frequently cited the repetitiveness of giving medical history and the lengthy clinic visit as weaknesses of the program. In addition, patients and their families expressed concern that the appointment scheduling process did not provide a thorough explanation of the MPCC’s intention and methods.

### Outcomes

In response to the findings of this evaluation, MPCC teams began to list their primary recommendation in the comments section of the exit letter. When a primary recommendation is not possible, the comment, “Patient has multiple treatment options that are considered by the team to have comparable outcomes,” is included. The approach has required adjustments to the teams’ process in making treatment recommendations. Prior to this evaluation, the menu of choices often was provided by each specialty team without significant discussion or interaction between specialties. The specialties now make an effort to discuss treatment recommendations together with patients and families to finalize each visit. The APN then reinforces the consensus statement and discusses any additional questions or concerns. As a result of the identified need for additional follow-up, the APN calls each patient three to five days after the treatment visit. All patients are told that they will receive a follow-up call but are encouraged to call or e-mail questions or requests for additional information during the interim. The patient evaluation process also was modified in response to the repetitive gathering of patient information. Previously, each service required the patient’s assigned fellow, resident, or APN to conduct a complete review of the medical history and perform a physical examination, including digital rectal examination. The approach was repetitive, time consuming, and gave the impression of an information disconnect between urology and radiation oncology. As a result, a template that contains all essential information required for both services was developed. A service assigned as the primary patient evaluator gathers all patient information and then provides the consultation, a completed copy, and a verbal summary report. The urologic and radiation oncologists subsequently confirm all pertinent information and portions of the physical examination.

Streamlining the evaluation process has decreased
the time each patient spends in the clinic by about one hour per visit. In addition, the clinic now has a more cohesive, organized, and multidisciplinary approach, with more frequent interaction and consultation between services.

In response to the concern that patients needed a more thorough explanation of the MPCC at the initial referral, the APN and clinical administrative director met with the patient access services staff to develop a consistent information script. The script provides information on the screening process for patients and a discussion of services provided, giving the staff a foundation of knowledge to use in the orientation of potential patients. An MPCC decision tree was also developed for use in the patient access services office and on the M.D. Anderson Cancer Center Web site (see Figure 2).

Conclusions

In 2007, 486 newly diagnosed patients with prostate cancer were evaluated in the MPCC, a 41% increase over 2006. The clinic process has been streamlined so that patients have a complete consultation with both specialties and leave with a comprehensive treatment recommendation tailored to their disease state in a four hour visit. Patients and their families take home a personalized letter outlining treatment options and, when possible, a treatment recommendation as well as a complete packet of patient education material. Unless a treatment plan is selected on the day of the MPCC visit, the APN calls each patient three to five days after completion of the visit to further explain options and answer any questions.

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**Figure 2. Visit Decision Map for Patients With a New Prostate Cancer Diagnosis**

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To date, the clinic is at capacity for the number of treatment teams and physical space. The MPCC usually has all appointment times filled three to four weeks in advance. A comprehensive database of all patients who visit the MPCC is maintained by the APN to document population characteristics; the database includes clinical and demographic data as well as treatments chosen and the location of treatment if given outside of the cancer center. The cancer center developed, obtained institutional review board approval, and opened a quality-of-life protocol in 2007. The research protocol is accruing patients treated with all modalities to compare the impact of various treatments. Future goals include a more complete assessment of the APN role. In particular, the authors plan to assess the APN’s impact on reduced time to form a treatment decision, decreased number of calls to individual physicians, and overall patient satisfaction with follow-up. Overall, the approach has been very successful in managing patients with prostate cancer. The implementation of the APN role provides the necessary link between specialties and the patient, solidifying the process and creating an informative and caring environment for this complex patient population.

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