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**REPORT TO
PHYSICIANS**

**JANUARY 1998
VOL. 43, NO. 1**

THE UNIVERSITY OF TEXAS
MD ANDERSON
CANCER CENTER

Making Cancer History™

4

Rectal Cancer
Combination
regimen affords
sphincter-preserving
surgery.

6

**Postoperative
Colorectal
Rehabilitation**
Therapists boost
recovery with educa-
tion and reassurance.

7

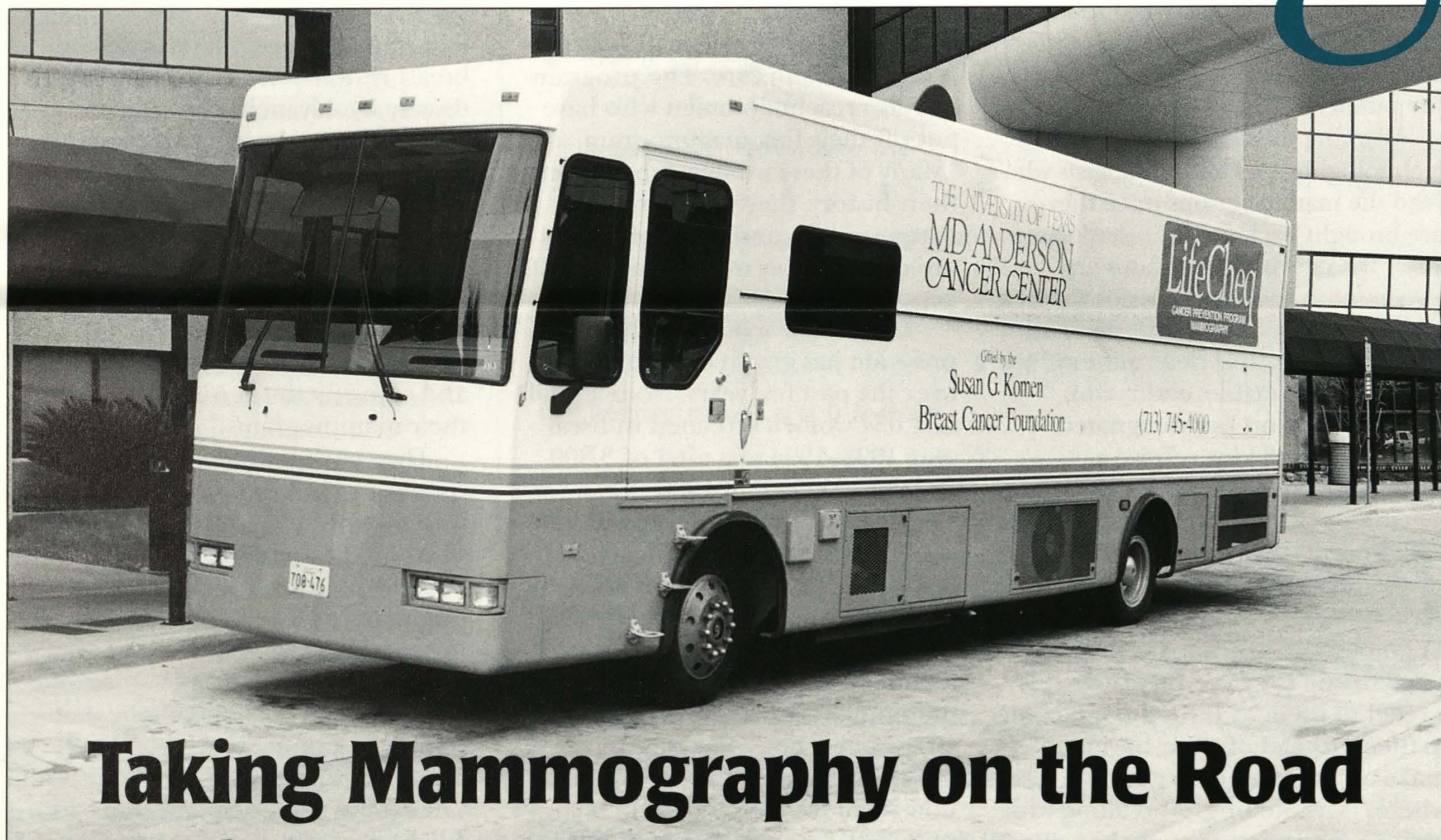
House Call
How do you spell
prevention? Each
letter provides a clue.

P R E

8

DiaLog
Physicians match
outreach with
“in-reach” to reduce
risk and promote
detection.

MD Anderson Oncology



Taking Mammography on the Road

by Stephanie Deming

Wheeling its way over the streets and freeways of metropolitan Houston, the M. D. Anderson Cancer Center mobile mammography unit helps women challenge the sharp turns of breast cancer, yielding to convenience but stopping at nothing to ensure the highest quality of cancer detection.

Serving the harried and the underserved, the mobile radiologic unit makes its own type of house call to businesses, clinics, and nonprofit organizations—making it more convenient than ever for women to have their annual screening mammograms and benefit from mammography’s early detection capabilities.

A cornerstone of breast cancer screening surveillance, mammography has as its chief virtue the ability to detect breast cancers at their most controllable stage. Yearly screening mammography is now strongly

(Continued on page 2)

Mobile Mammography

(Continued from page 1)

recommended for all women beginning at age 40.

The mobile mammography coach is on the road five or six days a week, traveling to area businesses, clinics, and nonprofit organizations. Two registered technologists go to each client site. "It's quite an undertaking," says Carol B. Stelling, M.D., chief of the Section of Breast Imaging at M. D. Anderson and director of the mobile mammography program. "The technologists are often out for 10 hours a day. They have to be able to drive the big coach on the highway, so they have to get a commercial driver's license. It takes a special kind of technologist to want to do that, but they like going different places and taking their skill to the public."

Working hand in hand with the technologists are the radiologists who read the mammograms once they are brought back to M. D. Anderson. After the new mammograms are processed, a radiologist reads the new films, compares them with previous mammograms, and determines which women need further evaluation. Each woman and her designated health care provider receive a radiologist's report.

Foremost among the advantages the mobile mammography program offers is convenience. "A lot of these women are working women, and they are very busy. It is a relief to them to have the van come to them instead of their having to make arrangements to go somewhere," says Stelling. And along with patient convenience come benefits for the employer in the form of reduced time away from work. With the mobile service, notes Stelling, women are only away from work "for maybe 30 minutes."

Another advantage of the program is its ability to reach women who might not otherwise have a mammogram. Through federally funded contracts with City of Houston and Harris County clinics and health departments, the program is bringing mammography to women



Debbie Steinway (left), a registered technologist who works on the mobile mammography van, uses educational pamphlets in the van's reception area to counsel women about breast screening.

who have traditionally had limited access to health care. The program has also reached women who have put off their first mammogram. "Many of these women, when I get their history, they've never had a mammogram, and some of them are considerably over the age of 50," reports Stelling.

The mobile mammography program has grown dramatically over the past few years, from a total of 1,034 women screened in fiscal year 1993-1994 to a total of 3,809 women screened in 1996-1997.

"One measure of success is how many women you reach in a year," says Stelling. "In 1997 we were screening about 20 women a day at most sites, but by adding more technologists, we think we can get the numbers up to around 35 or 40 women a day." The staff of the mobile mammography program now includes three full-time technologists, a half-time film librarian, a coordinator who schedules the site visits and arranges maintenance for the coach, and an administrative assistant.

Making much of the growth possible was a 1996 grant from the Houston chapter of the Susan G. Komen Breast Cancer Foundation to M. D. Anderson for purchasing the mammography coach.

"We're delighted and pleased to be partnering with M. D. Anderson in this program, which is right in

line with our mission: to eradicate breast cancer as a life-threatening disease by advancing research, education, screening, and treatment," said Beth Moore, foundation president. She, too, cites working women as a reason to take mammography on the road: "When women enter the workforce, they have less free time to themselves. The van is one more way to make it economical and convenient for women to have their mammograms."

The coach is divided into several rooms. In the front is a reception area with a computer, educational pamphlets and brochures, and a VCR for public education about breast self-examination. The middle section of the coach contains a dressing room and the mammography room itself, which has one mammography unit. In the back of the coach is a small darkroom where the technologists unload the mammography films into a light-tight suitcase so they can be brought back to M. D. Anderson for processing and reading. The coach is also equipped with a wheelchair lift.

The mobile mammography program began in the summer of 1992 with a transportable mammography unit. "You would take the truck to the work site, take the unit off, wheel it down the sidewalk into the building, and set it up in a private room with a changing area," explains Stelling.

Because mammograms are now performed on board the coach, the

technologists do not have to spend time at each client site unloading and loading the mammography unit. This means they can devote more time to performing mammograms. (For clients who prefer to set up the mammography unit inside their own facility, the smaller van with its transportable unit is still available on request.)

The main goal of the mobile mammography program is the same as that of any screening mammography program: early detection of breast cancer. By this measure, too, the program has been successful. "We know that we're detecting small cancers," says Stelling. "Results of screening through mobile mammography have mirrored results of screening through regular routes—between 2 and 10 cancers are detected per 1,000 women screened."

As it nears the halfway mark of its sixth year, the mobile mammography program is seeing an increase in repeat visits. This is an ideal situation because, according to Stelling, "the best way to find the smallest cancers is to have quality mammograms year after year and look for subtle changes." Consistency in mammographic technique and access to previous mammograms increase the chance that these subtle changes will be detectable. Therefore, Stelling asserts, "it's not to a woman's advantage to shop around and have a mammogram at a different place every year because then there's no consistency and often the old films are not available at the time of interpretation. A woman's better off going to the same program and having the same quality imaging done and having those films available when she comes the next year."

This trend of repeat visits from clients of the mobile mammography program encourages Stelling. "We're getting the ability now to look back at our own quality films for comparison," she said. "It's our vision that women will benefit from this cancer surveillance program year after year." ●

FOR MORE INFORMATION about the program, call Karen Spears, L.V.N., the program coordinator, at (713) 745-4056.

TALK BACK and Receive Cancer Prevention Road Map

Please take a few moments to fill out the survey below if you haven't before. Write in your name and address at the bottom. Return your survey to *OncoLog* Survey, Scientific Publications—234, M. D. Anderson Cancer Center, 1515 Holcombe Boulevard, Houston, Texas 77030. Or fax it to (713) 794-1370. In thanks, we'll send you a copy of the award-winning **M. D. Anderson's Road Map to Cancer Prevention**.

■ Indicate the degree of your interest in the following topics by circling the corresponding number.

NOT AT ALL VERY MUCH

1. Impact of cancer on your geographic region
1 2 3 4 5 6 7 8 9 10
2. Cancer prevention and detection
1 2 3 4 5 6 7 8 9 10
3. Interpretive articles about research covered by the mass media
1 2 3 4 5 6 7 8 9 10
4. One- or two-paragraph news stories about cancer treatment or research
1 2 3 4 5 6 7 8 9 10
5. Ethical issues related to cancer care
1 2 3 4 5 6 7 8 9 10
6. Case reports including workup, staging, and treatment selection
1 2 3 4 5 6 7 8 9 10
7. Patient education sheet that could be photocopied and passed to patients
1 2 3 4 5 6 7 8 9 10
8. Treatment protocols at M. D. Anderson
1 2 3 4 5 6 7 8 9 10

■ Rank the following within each column (1 = Most important).

<input type="checkbox"/> Brevity of articles	<input type="checkbox"/> Relevance to general practice	<input type="checkbox"/> Understanding oncology practice in general
<input type="checkbox"/> Timeliness of articles	<input type="checkbox"/> Relevance to patient	<input type="checkbox"/> Understanding Anderson's approach to treatment
<input type="checkbox"/> Depth of reporting	<input type="checkbox"/> Relevance to practice at Anderson	

■ Check one of the options to complete the following sentences.

- I do do not currently read *OncoLog*.
 I do do not think that pharmaceutical sponsorship diminishes a newsletter's authority.
 I would would not be willing to pay for a subscription to *OncoLog*.

■ Complete the following sentences by filling in the blank.

The cancer-related topic I am most interested in is _____

My favorite periodical for cancer information is _____

■ (Optional) Complete to receive your copy of **M. D. Anderson's Road Map to Cancer Prevention**.

Name _____

Address _____

Sphincter-Preserving Surgery Improves Outcome for Patients with Rectal Cancer

by Sunita Patterson

Attorney Gibson Gayle, Jr., 71, relies on humor to describe his colorectal cancer diagnosed at M. D. Anderson Cancer Center three years ago. “It was in the twilight zone,” he says of the rectal tumor physicians found.

Ten years ago, treatment would have automatically included a permanent colostomy, but not so today. Characteristics of Gayle’s stage T3 tumor made surgery preserving the anal sphincter—and thus bowel function—a possibility.

“Not having to deal with a [colostomy] bag every day is a great benefit,” said Gayle, who serves as president of the M. D. Anderson Foundation. “I’m back to normal now,” he said, “actually in better health than before.” Gayle said he missed only a few weeks of work during treatment.

Gayle’s surgeon, John M. Skibber, M. D. Anderson associate professor of surgical oncology, knows patients appreciate the operation. “Quality of life is an important issue for patients with rectal cancer,” he said.

Most patients with rectal cancer have T2 or T3 tumors when diagnosed by digital rectal examination or endorectal ultrasonography. For almost all of these patients, surgery is the treatment of choice. Dr. Skibber uses the sphincter-preserving treatment in patients in whom good local control and function can be achieved.

PROTOCOLS

Protocols focus on chemoprevention, improving preoperative

Colorectal cancer clinical trials in progress at M. D. Anderson Cancer Center include studies examining the extremes of the cancer spectrum—prevention and treatment of metastatic disease—and refining preoperative radiotherapy. Patients involved in these trials include at-risk patients, patients with metastatic colorectal cancer that has failed to respond to other therapies, and those slated for colorectal cancer surgery.

- A phase 2 chemoprevention study of aspirin in subjects with previously resected adenomatous polyps of the colon (DM93-129). *Physician: Gideon Steinbach, M.D., Ph.D.*

Professor of Medicine Michael Wargovich, Ph.D., and Dr. Steinbach,

both of the Department of Gastrointestinal Oncology and Digestive Diseases, are studying the effects of aspirin in patients who have had adenomatous polyps of the colon resected within the past five years. These patients are at risk of developing more polyps and carcinoma.

“By preventing polyps from forming in the first place, we could prevent colon cancer in some patients,” said research nurse Dory A. Sample, R.N., B.S.N. Research has suggested that aspirin can block some pathways by which adenomatous polyps form. The purpose of this phase II study is to determine the minimum effective dose of aspirin that can cause a beneficial change in colorectal tissue and to learn more

about the mechanism of these changes. Participants will be randomly assigned to receive one of three doses of aspirin or a placebo for four weeks. Rectal biopsies and blood tests will be performed at the beginning and end of the study.

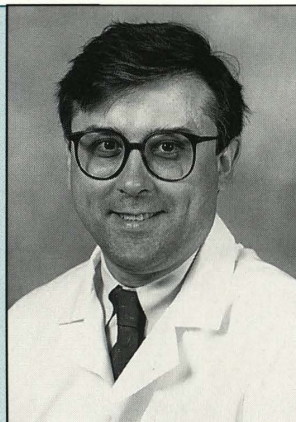
- Pilot study of graft-versus-tumor induction: High-dose chemotherapy with allogeneic peripheral blood stem cell transplantation for patients with metastatic colon cancer (DM95-106). *Physician: Richard E. Champlin, M.D.*

In this experimental treatment, patients with metastatic colon cancer may be eligible for a pilot study combining high-dose chemotherapy with allogeneic peripheral blood stem cell

Physicians combine radiotherapy and chemotherapy with operation. Before surgery, they use external-beam radiation therapy and chemotherapy with 5-fluorouracil, the agent considered most effective against colorectal cancer. This combination is used to shrink the tumor and to increase the likelihood of successful resection, with tumor-free margins. Research indicates that preoperative drug and radiation combination therapy is better than radiotherapy alone at reducing local recurrence. Surgeons operate about six weeks after patients complete the preoperative radiotherapy and chemotherapy, and more than 60% of these patients, even those with low rectal cancer, undergo the sphincter-preserving procedure.

“Quality of life is an important issue for patients with rectal cancer.”

—John M. Skibber, M.D.



If the tumor is confined to the middle or proximal third of the rectum (about 6–12 centimeters from the anal verge), a low anterior resection is performed. If the tumor is confined to the distal third of the rectum (within 6 centimeters of the anal verge) without sphincter and levator muscle involvement, a proctectomy with coloanal anastomosis is performed. Both procedures permit preservation of the sphincter.

For patients undergoing the sphincter-preserving procedure, surgeons create a temporary ileostomy for stool evacuation to allow the perianal area to recover from the surgery. About six weeks postoperatively, the ileostomy is closed and the colon reanastomosed to the anus. Then nurses and enterostomal therapists initiate bowel retraining

with the patient to ease the transition to postoperative changes in bowel habits.

Gayle found that after 41 centimeters of his colon had been removed, his capability to store food had changed. “There are a few foods I avoid as a result,” he said.

Sphincter preservation is not possible when the tumor encroaches on the sphincter or levator muscles

(Continued on **page 6**)

PROTOCOLS

Radiotherapy, and treating advanced-stage colorectal cancer

transplantation. This study is for patients age 18–55 years who have metastatic colon cancer that has not responded to 5-fluorouracil. Participants must have a human leukocyte antigen-compatible relative who is willing to donate peripheral blood stem cells. The donor receives the growth factor Neupogen to boost stem cell production, and the stem cells are collected and cryopreserved. Afterward, on two consecutive days, the patient receives high doses of the chemotherapeutic agents carmustine and melphalan. Then, after two days of rest, the patient receives the donated stem cells.

“The high dose of chemotherapy has two purposes,” said Dr. Champlin, “to treat the tumors and to immunosup-

press the patient to prevent rejection of the infused stem cells.” The study investigators hope that the stem cells will not only help the patient’s immune system to recover from the chemotherapy but also induce a graft-versus-tumor effect, in which the grafted stem cells recognize the colorectal cancer cells as different and then act to eliminate them.

- Phase II trial of preoperative concomitant boost radiotherapy and continuous infusion chemotherapy for resectable rectal cancers (ID97-178). *Physician: Nora Janjan, M.D.*

Collaborating with chemotherapists and surgeons treating colorectal cancer, Dr. Janjan is investigating whether

increasing the preoperative dosage of radiation improves tumor regression. A professor in the Department of Radiation Oncology, Dr. Janjan is using the concomitant boost technique, in which five additional doses of radiation are administered in the last week of preoperative radiation therapy.

—Sunita Patterson

FOR MORE INFORMATION about these clinical trials, physicians or patients should call the M. D. Anderson Information Line. Those within the United States, call (800) 392-1611; those in Houston or outside the United States, call (713) 792-6161.

Visit the M. D. Anderson Cancer Center clinical trials Web site at <http://www.clinicaltrials.org> for a more complete listing of treatment research protocols.

Reassurance and Education Foster Rehabilitation After Colorectal Surgery

A professor wondered whether he would ever be able to get through a whole lecture again. A trucker feared long stretches of road between rest stops. Both patients resumed their jobs after undergoing sphincter-preserving rectal cancer surgery and following a bowel management program developed by nurses and physicians at M. D. Anderson Cancer Center.

"The patient needs a lot of reassurance and education," said Rosalie K. Johnson, R.N., C.E.T.N., an enterostomal therapist who, along with other enterostomal therapy nurses, helps surgeon John Skibber's patients adjust to their temporary ileostomy and new bowel habit changes. "We try to help them over the hump," she said. "It may take a little time, but patients do reach a level of control that allows them to resume normal activities."

Patients undergoing the procedure must learn to compensate for postoperative changes in bowel movement frequency, consistency, and control.

Integral to their success is a bowel management program developed by Annette K. Bisanz, B.S.N., M.P.H., R.N., of the Department of Practice Outcomes, that helps them understand bowel

function and how to regulate it postoperatively.

"First I teach patients how the bowel works," Bisanz said. "If they understand the concepts behind the recommendations, they're much more successful in learning to compensate for the changes."

She developed the program by trial and error, she said, while helping patients with rectal cancer who had undergone combination chemotherapy and radiotherapy.

The program has a few basic steps. During the recovery period after the sphincter-preservation surgery but while patients have a temporary ileostomy, Bisanz encourages them to strengthen their anal sphincter muscles to reduce the chance of incontinence after the ileostomy is closed. After the reanastomosis procedure, patients often have frequent stools, but barrier ointment helps keep the perianal area from becoming painfully excoriated.

Antidiarrheal medicine is used at first to help patients get comfortable. With progress, the medicine is decreased and dietary fiber is increased. Bisanz, Johnson, and other staff help patients learn to "titrate" their intake of four components—fluid, food, fiber, and medicine—to manage their bowel function. Once stools have

"We do a lot of problem solving with the patient."

**—Annette K. Bisanz,
B.S.N., M.P.H., R.N.**



a formed consistency, bowel training is initiated. A simple regimen (prune juice, a big meal, and then a hot drink) encourages full evacuation of the bowel at a specific time daily.

"We work with each patient to come up with an individualized program. We do a lot of problem solving with the patient," Bisanz said. Each person responds differently to the same amount of fiber and fluid, according to Bisanz.

Copies of Bisanz's patient education handouts on bowel management, bowel training, diarrhea, constipation, and related topics and a video entitled *How Your Bowel Works* are available by calling the M. D. Anderson Cancer Center Patient Education Office at (713) 792-7375.

—Sunita Patterson

FOR MORE INFORMATION, contact Bisanz at (713) 792-2394.

Rectal Cancer

(Continued from page 5)

or when preserving the sphincter would prevent the surgeon from ensuring that surgical margins are free of disease. In these cases, abdominoperineal resection is performed and a permanent colostomy is established.

Postoperatively, patients generally undergo four months of chemotherapy to reduce the chance of recurrence. This part of the treat-

ment can usually be done in the patient's hometown if he or she is not from Houston.

The multimodality sphincter-preserving treatment has been used at M. D. Anderson for about eight years. "The mortality rate is about 1%," said Dr. Skibber, "and local recurrence rates have been very low. The major risk is distant recurrence, for example, in the liver or the lungs, but the rate is no higher than that for patients who have abdominoperineal resection."

Recommended follow-up, which can be performed in the patient's hometown, requires physical examination, updating the medical history, and a rigid proctoscopy every three months for two years. Recommendations also include having chest X-ray examinations and computed tomography scans once a year. ●

FOR MORE INFORMATION, contact Dr. Skibber at (713) 792-5165 or call the M. D. Anderson Information Line at (800) 392-1611 or (713) 792-6161.



Stopping Cancer Before It Occurs: Spell *P-r-e-v-e-n-t-i-o-n*

We all wish for a cure for cancer. We want a cure for it *after* it occurs, but few of us realize there is a “cure” for cancer *before* it occurs. But spell this *cure* with 10 letters—*p-r-e-v-e-n-t-i-o-n*.

How you take care of yourself—what you eat, whether you use tobacco, and what exposures you endure (for example, sunlight, X-rays, and industrial

chemicals)—may make up as much as 70% of your cancer risk.

Encouraged? Learn to spell *prevention* as lettered out below, and you will be putting to work some of the best advice doctors give to reduce cancer risk. And this isn't hoarding for a rainy day. Some of these actions will pay dividends in better health right away.

Protect yourself and your family from the sun.

The most common form of skin cancer is caused by overexposure to sunlight. Stay indoors between 11 A.M. and 4 P.M.; if you must be outside, protect your skin with clothing, your eyes with sunglasses, and your exposed skin with sunscreen of at least SPF 15.

Reduce your risk at work.

Follow safety rules and procedures, especially when working with chemicals. Wear required safety equipment, get information about risks, and make sure safety standards are met.

Eat a healthful diet.

Eat less fat, more fiber, and at least five fruits or vegetables every day. Keep fat intake to no more than 30% of total calories, and increase whole grains, beans, and other sources of fiber. Fruits and vegetables provide other nutrients as well as fiber.

Voice your concerns.

If you are a woman concerned about cancer risks associated with estrogen-replacement therapy, ask your doctor about its safety. If you are a smoker, ask your doctor to assist you in quitting or to recommend a program or counselor who can. If you want to exercise, but are wary of risks, consult your physician.

Exercise.

Regular physical activity can make a difference in your physical and mental health. Adding exercise to your efforts to improve your diet can make it easier to reach and maintain a healthy weight.

Normalize exposure to X rays.

Radiation in large doses does increase the likelihood of cancer. X-rays physicians require for diagnosis rarely pose a threat, and they may be essential to ensuring proper treatment. Make sure shields are in place before X-rays are taken, and ask your health provider for advice about overexposure.

Toss out tobacco.

Tobacco is linked with a third of all cancer deaths and is the most preventable of all cancer causes. Using any tobacco product is dangerous to your health. If stopping completely seems unthinkable, steadily reduce consumption and seek support and advice for quitting.

Initiate a plan for quitting.

If you are ready to try to quit using tobacco, choose a day to quit. Ask your doctor to write a prescription for quitting if you think it will help. Ask your family and fellow workers for support. Anticipate temptations and identify ways to avoid them or respond.

Override overdrinking.

Limit alcohol intake to no more than two drinks per day. Don't drink every day, and eliminate drinking if possible. Combining drinking with smoking increases your risks of cancer of the mouth, throat, esophagus, and larynx (voice box).

Nurture knowledge about cancer.

Follow recommendations for regular cancer prevention examinations and perform self-examinations periodically. Watch for such warning signs of cancer as a lump that doesn't go away, a skin eruption that doesn't heal, or an unexplained weight loss of 10% or more of total body weight.

For more information, contact your physician or contact the M. D. Anderson Information Line:

(800) 392-1611 within the United States, or

(713) 792-6161 outside the United States.

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Reaching Out and In

by **Therese Bevers, M.D.**
Cancer Prevention Center Director

In a series of television commercials, a prominent bank once emphasized its willingness to reach out to small businesses by featuring bank officers, hard hat on head and architectural drawings in hand, at remote work sites. The message was that the bank was responsive, concerned, and willing to meet customers on their own turf.



Physicians working in cancer prevention are no less responsive, concerned, and willing, and programs like the mobile mammography effort reported in this issue demonstrate it. Like other on-the-road outreach programs, the van overcomes two barriers to screening—distance and time away from work. In addition, by partnering with public health agencies, the program overcomes some other persistent socioeconomic barriers that might otherwise block screening access—low educational attainment, low income, and recent immigration.

To broaden outreach, some prevention programs are utilizing community organizations as venues for cancer prevention and detection messages. Public health agencies, academic hospitals, community groups, religious organizations, and health maintenance organizations (HMOs) are linking for strength.

HMOs are in some cases removing copayment requirements to encourage participation.

Institutional early detection outreach is being matched in private practice by what some are calling “in-reach,” that is, efforts to encourage screening within a practice. Computer cueing, flow charts, checklists, postcards, and chart reminder slips and stickers are just a few of the methods put to work.

As a physician, you may already be using the simplest and perhaps strongest of all methods to encourage preventive practices and regular screening: the face-to-face endorsement by physician to patient. In “Put Prevention into Practice,” a program designed by the Public Health Service, physicians are encouraged to expand that influence by training all staff—receptionists through nurses—to work as a team creating and maintaining a prevention system, tracking examinations and interventions, and offering to schedule them. Every contact between a patient and a staff member with access to the health record is an opportunity to promote screening.

Another way to increase impact is to take the same concern and message to a broader audience outside the office—a patient group, an auxiliary, a congregation, or a conference. Wear and tear on tires and shoe leather may be expected, but no hard hat required.

The University of Texas
M. D. Anderson Cancer Center

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