

Central Maine Medical Center

Physician Update



A2

CENTRAL MAINE MEDICAL CENTER JOINS I-ELCAP STUDY:
OFFERING CT SCAN FOR HIGH RISK PARTICIPANTS IN AN
INTERNATIONAL LUNG CANCER SCREENING STUDY.

A3

A PERIPHERAL ARTERY DISEASE PRIMER

A4

LIFELIGHT OF MAINE HAS BECOME NATIONAL MODEL
FOR AIR MEDICINE SAFETY

A6

HEALTHCARE REFORM DEBATE DEMANDS
PHYSICIAN INPUT

CENTRAL MAINE MEDICAL CENTER JOINS I-ELCAP STUDY: *Offering CT Scan for High Risk Participants in an International Lung Cancer Screening Study.*

BY CARMINE FRUMENTO, M.D.

Director, Division of Thoracic Surgery



.....
**Lung cancer results in more deaths per year
in the United States than any other cancer.
In fact it accounts for more cancer deaths
than breast, cervix, colon, and prostate cancer
deaths combined.**
.....

Of about 173,000 new patients with lung cancer diagnosed each year in the United States, 95 percent or about 164,000 patients will die from it yearly. In 2006, new diagnoses of lung cancer surpassed the number of new diagnoses of breast cancer for the first time in the history of Central Maine Medical Center's (CMMC) Comprehensive Cancer Program. As with most cancers early diagnosis and treatment is key to increasing likelihood of cure and with an overall mortality of 95% this is even more true with lung cancer. Unfortunately, patients with early stage lung cancers usually show no symptoms so most lung cancer are diagnosed at more advanced stages which makes cure difficult. While survival rates for most other cancers have improved over the past several decades, those for lung cancer have not.

In 1992 researchers from Cornell University Medical Center (now Weill Medical College of Cornell) began looking at the use of CT scans in an attempt at screening for lung cancer and this was the inception of the Early Lung Cancer Action Program (ELCAP). This research quickly attracted other institutions and now includes 48 institutions in nine countries (International-ELCAP) dedicated to studying the benefits and best practices of early detection of lung cancer by CT screening. Early research from the group published in the Lancet in 1999(354:99-105) revealed that 85 %

of lung cancers found by screening CT scan were small and in a more curable early stage. In addition chest X-rays done at the same time missed 85% of these early cancers. The researchers were also able to refine their protocol as technology continued to improve and more data was acquired so as to more accurately measure tumor growth rates and obtain biopsies of suspicious lesions less invasively, thus reducing the chances of participants undergoing unnecessary tests or procedures. This resulted in a landmark article being published in the New England Journal of Medicine in 2006(355:1763-1771) reporting 10 year results in over 31,000 participants considered to be at high risk for lung cancer. They demonstrated an overall cure rate for all participants diagnosed by screening of 80%, and for those participants who were stage I at time of diagnosis the cure rate was 92%. 85 % of the participants who were screened and diagnosed with lung cancer were Stage I at the time of diagnosis. This compares to an overall 95 % mortality in participants diagnosed after symptoms arise (i.e. not being screened). Based on this data and our own anecdotal experience that our patients that have the best outcomes from lung cancer treatment have been those in whom the cancer was found incidental in imaging work up for other unrelated ailments, we became very interested in this research.

Through close collaboration and a common vision amongst the various pertinent departments and administration at CMMC including Dr. John Bennett from the Dept of Medical Imaging, Dr. Evan Ramser from the Dept of Pulmonary Medicine, and Dr. Michael Eng from the Dept of Pathology as well as myself, we applied for inclusion within this ongoing study group and were selected as now the only institution in Northern New England participating. Adults age 40 years and older with a moderate to heavy smoking history (greater than 10 pack years) and who have no obvious symptoms of lung disease are eligible to be included. Participants will receive an initial non-contrast CT scan of the chest at no cost. The scan takes just a few minutes and no injections or oral medications are involved. Results will be sent to the participant as well as to his or her physician. If abnormalities are found, further diagnostic workup would be recommended which would be coordinated through the dept of pulmonary medicine and the patient's primary physician would be kept closely informed. If no abnormalities are found on initial CT scan, then each participant would receive per protocol a follow-up CT scan of the chest in about 12 months at no cost. If this were negative no further scanning would be required.

We are very excited to have been selected a study center for I-ELCAP and to provide Maine and Northern New England residents an opportunity to intervene in one of our most deadly diseases at a potentially curable state. For more information or enrollment please call our Early Lung Cancer Screening staff at (207) 795-5654.

A PERIPHERAL ARTERY DISEASE PRIMER



BY STEVEN LEVIN, M.D.



Peripheral artery disease (PAD) is a condition similar to coronary artery disease and carotid artery disease.

In PAD, fatty deposits build up in the artery walls causing blockages that restrict blood flow. When the blockages involve arteries leading to the legs and feet, it can lead to symptoms of cramping or fatigue in the legs and buttocks during activity. Such cramping subsides when the person stands still. This is called "intermittent claudication." People with PAD often have fatty buildup in the arteries of the heart and brain. Because of this association, most people with PAD have a higher risk of death from heart attack and stroke.

HOW IS PERIPHERAL ARTERY DISEASE DIAGNOSED AND TREATED?

Techniques used to diagnose PAD include a medical history, physical exam, ultrasound, X-ray angiography, CAT scan and magnetic resonance imaging angiography (MRA).

Most people with PAD can be treated with lifestyle changes, medications or both. Lifestyle changes to lower your risk include:

- Stop smoking (smokers have a particularly strong risk of PAD).
- Control diabetes.
- Control blood pressure.
- Be physically active (including a supervised exercise program).

- Eat a low-saturated-fat, low-cholesterol diet.

PAD may require drug treatment, too. Drugs include:

- medicines to help improve walking distance (cilostazol and pentoxifylline).
- antiplatelet agents (aspirin and plavix).
- cholesterol-lowering agents (statins).

In a minority of patients, lifestyle modifications alone aren't sufficient. In these cases, angioplasty or surgery may be necessary.

WHAT IS ANGIOPLASTY AND STENTING?

Angioplasty is a non-surgical procedure that can be used to dilate (widen) narrowed or blocked peripheral arteries. A thin tube called a catheter with a deflated balloon on its tip is passed into the narrowed artery segment. The balloon is then inflated, compressing the plaque and dilating the narrowed artery so that blood can flow more easily. Then the balloon is deflated and the catheter is withdrawn.

Often a stent – a cylindrical, wire mesh tube – is placed in the narrowed artery with a catheter. There the stent expands and keeps the vessel open.

If the narrowing involves a long portion of an artery, surgery may be necessary. A vein from another part of the body or a synthetic tube is used. It's attached above and below the blocked area to detour blood around the blocked spot.

Your physician will know which procedure is appropriate to suit your specific problem. It is important to check on the stents or bypasses at regular intervals with ultrasound examinations that are performed in an accredited vascular laboratory.

WHAT IS A "HYBRID" OPERATING ROOM?

At Central Maine Medical Center, we are building a state of the art "hybrid" operating room where we can perform minimally invasive procedures, such as angioplasty and stenting, as well as open surgical procedures in a safe, sterile environment. This combines the imaging features of a catheterization lab with the size and sterile environment of an operating room.

Other procedures that we can perform in this hybrid operating room include repairing abdominal aortic aneurysms (AAA) and thoracic aortic aneurysms. These aneurysms are dilated areas of the large arteries in the abdomen and chest that can rupture when they become much enlarged. Large stent grafts are placed inside the artery through small incisions in the groin. This minimally invasive procedure enables patients to leave the hospital after one or two days and back to normal activities much quicker as compared to the open surgical method. There are also fewer risks associated with this type of repair.

LIFEFLIGHT OF MAINE HAS BECOME NATIONAL MODEL FOR AIR MEDICINE SAFETY

BY TOM JUDGE

Helicopter Emergency Medical Services (HEMS) are an essential component of a contemporary integrated emergency care system.

While the media portrayal is a specialized flying ambulance, more than 70 percent of flights are actually inter-hospital, high acuity transfers. For a referring physician an HEMS system is a means to bring the additional resources of a specialized critical care team and maintain hospital level care during transfer.

A founding principal for LifeFlight is to never compromise safety in operations or the delivery of patient care. Overseen by specialist and emergency physicians from across the state, LifeFlight of Maine's helicopters are equipped with a suite of ICU-level medical equipment including ventilators, invasive monitoring, multiple infusion pumps, bedside lab analyzers, blood, a wide medication formulary, and staffed with critical care specialist nurses and paramedics. Balloon pumps

and transport isolettes can be added to on-board equipment. LifeFlight's careful integration into the EMS and hospital emergency care system and judicious use is a cost effective means of "gluing" community hospitals to tertiary care.

Complimenting clinical care is the latest in aviation safety technology with constant upgrades. LifeFlight is among the few HEMS programs in the country that operate a full instrument flight system – the gold standard in aviation safety – coupled with full night vision technology.

Transport incurs risk and there has been significant national concern regarding HEMS safety. Over the last month, the Washington Post published a major investigative report on HEMS safety problems and the National Transportation Safety Board (NTSB) issued 21 major new recommendations along with reissuing five previous recommendations to improve HEMS safety. Most significantly, the NTSB for the first time addressed systemic risks in the organization of HEMS with





multiple recommendations to CMS and the Federal Interagency Committee on EMS based on testimony provided by LifeFlight. Almost anticipating the NTSB report, a special section in the Washington Post series highlighted LifeFlight's and Maine's commitment to safety, quality, and appropriate use, as a national model.

LifeFlight and its colleague services in northern New England are considered national examples of exemplary safety and quality practices. NTSB

recommended safety practices such as a full Safety Management Systems (SMS) and the latest safety technology, including night vision systems, auto-pilots, weather radars, radar altimeters, and IFR operations, are the norms rather than the exceptions more typical in other parts of the country. Planned upgrades include terrain avoidance and flight data monitoring systems as the technology matures. The FAA has also invited LifeFlight to be a national model pilot program looking at safety culture in SMS.

The low level instrument flight infrastructure public private initiative in Maine, which has constructed hospital helipads at nearly every hospital in the state, developed over the road fuel capability for refueling at hospitals in

Aroostook County, and installed new automated weather reporting stations and helicopter GPS approaches throughout the state, is being used as a national model by the NTSB and a new national demonstration project by the Federal Aviation Administration.

LifeFlight is fully accredited by the Commission for the Accreditation of Medical Transport Systems and is a member of the international Aviation Safety Network with bi-annual audits of best practice risk management standards.

Thomas P. Judge, CCT-P, is executive director of LifeFlight of Maine.



HEALTHCARE REFORM DEBATE DEMANDS PHYSICIAN INPUT



BY GLENN FOCHT, M.D.



.....
The attention of many political leaders is focused on the delivery of healthcare. Mainstream media is awash with reports of Presidential initiatives to "fix healthcare" as well as a dizzying array of opinions about how to move forward.
.....

Pharmaceutical companies and health insurers say they are working to save billions of dollars in health spending over the next 10 years. Adding to the din are voices extolling the virtues of "new" models of patient care with descriptors such as "patient centered" or "medical homes."

Physicians are being asked to improve healthcare ... make it faster, more reliable, safer, more satisfying, less costly. Busy primary care providers need a common sense approach to understand, navigate and participate in these changes.

As a practicing physician, how should you respond to these calls for change? Each practicing primary care provider needs to be engaged in a strategy that addresses four realities:

1. Look for ways that practice staff can work smarter not harder.

A core failure of healthcare redesign is "piling on" new tasks to already over-capacity doctors. Avoid doing this to yourself. Explore better roles for your staff.

Explore new ways to deliver care. Who else can do tasks other than the doctor? Can patients play a greater role in care delivery? What tasks can happen outside traditional office visits?

Use your practice management team, physician-hospital organization, or on-line resources to facilitate your work.

2. Redefine your patient panel: Physicians work hard to manage the care of their patients. Traditionally, this is limited to patients who come to regular visits. Often unseen and in need of care are patients who "belong" to your practice but are not receiving regular care.

If you don't have a software-based practice management system, work with your staff to identify patients "missing in action." Get your staff to reconnect with these people.

If your practice has an electronic health record, use it to see who is not getting routine care. Reconnect with these patients.

3. Adopt evolving best practices relative to patient care delivery practice. Change is inevitable, resistance is optional – create an expectation that change is a part of clinical practice.

Participate in a group practice or PHO-sponsored performance improvement plan relevant to your practices.

Commit your organization to a yearly project that will improve one component of your practice. This avoids introducing too much change at once.

4. Lend your voice to payment reform discussions: The basis for healthcare reimbursement is under intensive review. There is consensus that there will be change. Proposals range from incremental tweaking to transformational change.

Stay informed: Ask your local PHO or practice managers to update you monthly.

Participate in your local PHO or other contracting mechanisms.

Speak Up: Call or email legislators to support reasonable solutions or discuss concerns.

Glenn Focht, M.D., is the president of Central Maine Medical Group. A veteran primary care internist, Dr. Focht has worked extensively in physician performance improvement and care redesign across the continuum of care as a physician leader. He can be reached at fochtgl@cmhc.org

Central Maine Medical Center *Connect*

REGIONAL REFERRAL AND SCHEDULING CENTER



Eliminate the uncertainties of transferring patients for specialty care ... call CMMC Connect.

- CMMC Connect, a single point of access to the physicians and services available at Central Maine Medical Center
- One-call access to specialty physicians and services
- Eliminate multiple calls and uncertainties
- Improve continuity of service for patients
- Timely feedback and discharge information
- 24-hour service, every day
- Toll-free

Talk with a CMMC Connect regional referral specialist at any time. No answering machines, no call forwarding, no delays.



877-366-7700

www.cmmconnect.org

Skilled professionals. Technical excellence. Compassionate care.