<u>2005</u>

ORATOR: Dr. B. Dale Magee

ORATION: Old Dog, New Tricks

Dale Magee has practiced in our community for his entire career. A board certified Obstetrician-gynecologist, he is an assistant professor of clinical Obstetrics and Gynecology at the University of the Massachusetts Medical School. Dr. Magee is Vice President of the Massachusetts Medical Society and a past president of the Worcester District Medical Society

There has never been a better time to be practicing medicine.

Our ability to make a diagnosis has never been better. Imaging and testing have never been more accurate. Our ability to treat patients has never been more effective. Our medications work better. Procedures are safer and more effective.

I am going to illustrate for you how much medicine has changed in just one generation by telling you about two of my uncles.

Uncle Eli was born in 1910. In his 40's he was found to have high blood pressure. He may have been given medication for this, but I would be surprised if he took it. He was very active and played handball several times per week. One day, when he was 59- in 1969- he finished a game of hand ball and he did not feel too well. He thought that he would lie down and have a massage to feel better. He never got up.

He had died from his first heart attack. Those of you who recall medicine in the 60's know that whether he lived or died was more up to nature than medicine. What disabilities he may have been left with were more up to chance than good care.

Yet, even today, doctors refer to medicine in the 60's as the "Golden Era". Most patients only had one doctor and went there with a problem that was usually addressed in one visit. If they were really sick they would be admitted to the hospital where an "ad hoc" group practice would gather around them and communicate through a single medical record. When they were well they went home and returned to their normal life.

Uncle Biff was born in 1922. When he was in his forties he was found to have high blood pressure and was put on medication. He did not like the way that it made him feel and, besides, when he went to his doctor his blood pressure was no lower. So he stopped taking it. One day, when he was 59- in 1981- he did not feel very well. He went to his doctor and was examined, had an EKG and was told to go immediately to the hospital. There he was stabilized, underwent a coronary angiogram and then coronary artery bypass surgery. And he survived.

He now had a cardiologist and a few more medications. A few years later he was diagnosed with diabetes and added a dietician, a podiatrist and an ophthalmologist to his group. A few years later, trouble with his prostate and he met a urologist. A few years after that, problems with his kidneys and he added a nephrologist. Then, peripheral vascular disease and a vascular surgeon. He eventually died at age 82 of complications of congestive heart failure. By this time he never stopped being a patient.

Good medicine bought him 23 years of life that his brother did not get. But it was not 23 years of good health. It was 23 years of chronic and increasingly complex illness. Health care today is complex, it is dispersed and it deals with chronic illness.

There has never been a better time to be practicing medicine. But, if I were to ask a doctor today what he thought, I doubt that that would be the first thing to be said. Doctors are overworked and dispirited. They have their doubts. We all know why: there are more patients to see, less time in which to see them. The content of visits is going way up and all this time, the day is holding steady at 24 hours and we are passing the breaking point.

I am going to go over some numbers with you to give more perspective to our world of health care delivery so that we can understand the needs better.

Patients are being seen more often- three times per year if they are young and healthy, over six if they are older. The time allotted for visits is 12-18 minutes. One third of visits involve chronic care and by the time we get to 45 over half of the visits are. One study looked at how long it would take the average doctor to deliver all of the recommended preventive medicine to her patients and essentially it was all day. There would be no time left for taking care of problems. So, it comes as no surprise that study after study has shown that the complete content of recommended care is only delivered about one half of the time to patients.

Health care is more complex. We use powerful drugs and we use them often. About two thirds of visits result in at least one prescription. Yet, when researchers looked at patients at a dialysis clinic they found that there were disparities between the medical record and the medications that patients were actually taking three fifths of the time. And, one out of four primary care patients has experienced an adverse drug reaction. The more medications a patient is taking the more likely they are to have a new medication inappropriately prescribed.

Care is also more dispersed. Forty percent of conditions involve more than one doctor. When a primary care physician refers a patient, two thirds of the time the specialist does not receive enough information to know what question is that is supposed to be answered. One quarter of the time primary care doctors say that they do not hear back from specialists about a referral. In one out of seven visits important information is missing- lab results, referral letters, etc- and either tests are repeated, time is lost or patients are cared for without all of the data that is needed.

One of the more risky times is when a patient is transferred- either to the care of another doctor or from inpatient to outpatient. One out of five patients discharged from the hospital experience an adverse event- usually drug related.

Part of the reason for this poor communication is that we try to communicate using largely illegible notes.

More and more care takes place as outpatients and outreach has never been more important. Four out of five doctors have noted significant delays within the past few months in getting results to patients. One out of three patients asked to have a repeat mammogram within six months did not. One out of three patients with an abnormal Pap smear was lost to follow up.

Yet, in spite of this, I said that uncle Biff received exemplary care. The reason is not only that he had fine doctors, but that they had the tools that enabled them to do their best. You see, he was a proud veteran and insisted on getting his care at the Veterans' Hospital. I would often call his doctors and inquire about his condition. Starting in the 1990's I noticed a distinct change in what I was being told. The answers were clear and informed. The reason is that any doctor near a computer could call up his chart and view a summary page that listed his problems, procedures, labs, recent visits, needed care and more. Everyone, literally, was on the same page.

The electronic medical record is the most important advance in health care delivery in the last one hundred years. It is legible, accessible, organized, contains drug checkers, structured notes and the ability to track orders to completion so that things do not get lost. These systems can prevent up to 80% of the inappropriate drug prescribing that occurs. Lab work can be downloaded directly and reviewed by the doctor. Letters can be sent to the patient with little effort and their responses tracked. Internal e-mail takes the current burden of responding to phone calls and cuts the work in less than half.

But the value of this technology goes beyond doing what we currently can do, better. It also enables us to improve care in ways that are not now possible. A small electronic device, which can be attached to a keychain, can carry a compact medical record with the patient and be given to anyone with a medical records program. A website can welcome a patient to their own webpage that is customized to address their specific health problems, list their medications, and provide e-mail to their doctor. Finally, reporting that now would take hours or days to complete, for example a report on patients who are overdue for components of diabetes care, can be run in less than one minute by simply pressing a few buttons.

All of our sick patients are not in the hospital or office. Most are at home. These reports enable us to make rounds on those who are at home and see to it that nothing is overlooked.

There are both opportunities and risks to adopting this technology at this time. Small practices are capable of changing quickly- if they want to. Larger organizations have experts in information technology that can provide needed support. All can see the benefits of information moving with patients throughout the system.

But, at this time, there are substantial risks. Perhaps the most significant barrier is the fear of workflow change. We are working in the flow mode, with layers of routines carrying us through the day. We fear the repercussions of slowing down to learn something new when we already cannot finish our work. We fear making a mistake when our routines are disrupted. Even if the doctor feels that it is worth a try, valued staff members may not.

The vendor pool is unstable. Companies are small (there are currently over 300 medical record companies). Databases that make up these programs cannot talk to each other. That means that if a patient changes doctors, the information cannot flow electronically. If a doctor changes practices and the new office has a different electronic medical record, she may not be able to take her records with her. Finally, if the vendor goes out of business the practice may have to hire a database expert to pry the information out of the defunct program and put it into another.

Should we expect everyone to change now? No.

A researcher named Rogers described over forty years ago an "adoption curve" that illustrates how people change. There are those who are innovators. These folks take pride in understanding and adopting something new. Those near the top of the curve need the security of seeing others succeed with a new approach. The good news for us

"old dogs" is that age does not play a role in where we are on this curve. Older practitioners are as likely as young to be early on the curve. What does seem to matter is familiarity with the problem, familiarity with the solution, and the time and the means to undertake the change.

There has never been a better time to be practicing medicine. But, this success has lead to changes that have left doctors doubting. I have tried to show you not only the new needs but also the solutions that are available.

I am going to close with a quote from Franklin Roosevelt in the last speech that he wrote. He said that the only limits to what we can achieve tomorrow are the doubts that we have today.

I hope that I have removed some of these doubts.

Tomorrow medicine will be even better. And each of us will be part of it.