

# Nebraska Medicine

Fall 2014 | Volume 13, Number 3

## **Choosing Wisely<sup>®</sup>**

*An initiative of the ABIM Foundation*

How patient/  
physician  
communication  
can reduce  
unnecessary tests



Nebraska  
Medical  
Association

*Advocating for Physicians and the Health of all Nebraskans*

233 South 13th Street  
Ste. 1200  
Lincoln, NE 68508

PSRT STD  
US POSTAGE  
PAID  
LINCOLN, NE  
PERMIT NO. 27

ADDRESS SERVICE REQUESTED

Nebraska Medicine is published  
quarterly by the



Advocating for Physicians and the Health of all Nebraskans

233 South 13th Street, Ste. 1200  
Lincoln, NE 68508  
Phone (402) 474-4472  
Fax (402) 474-2198

[www.nebmed.org](http://www.nebmed.org)

## Nebraska Medical Association 2013-2014 Board of Directors

### President

Kevin Nohner, MD, Omaha

### President-Elect

Richard Blatny, Sr., MD, Fairbury

### Secretary-Treasurer

Todd Pankratz, MD, Hastings

### Immediate Past President

Dan Noble, MD, North Platte

## Board Members

Jane Bailey, MD, Omaha

Kaitlyn Brittan, Omaha

Cason Christensen, Omaha

Robert Dunlay, MD, Omaha

Deb Esser, MD, Omaha

Jose Friesen, MD, Grand Island

Jim Gigantelli, MD, Omaha

Jason Kruger, MD, Lincoln

James Kult, Omaha

Caitlin Loeth, Omaha

Gerald Luckey, MD, David City

Arthur Molnar, MD, Lincoln

Michelle Sell, MD, Central City

Les Spry, MD, Lincoln

Britt Thedinger, MD, Omaha

Jordan Warchol, MD, Omaha

Michael Zaruba, MD, Auburn

## Ex-Officio Board Member

Jan Bausch, Lincoln

*The Nebraska Medical Association in no way  
endorses any opinions or statements in this  
publication except those accurately reflecting  
official association actions.*

# Nebraska Medicine

Fall 2014 | Volume 13, Number 3

Choosing Wisely – a tool for change .....	2
Choosing Wisely suggestions for Sinusitis .....	3
The evaluation of abdominal pain: is CT a wise choice? ...	4
Choosing Wisely to reduce radiation risks in children with minor head injury or simple febrile seizure .....	5
Non-medically indicated (elective) induction of labor or cesarean delivery: does gestational age matter? .....	7
Imaging in acute low back pain .....	9
Current recommendations for asymptomatic carotid screening .....	10
Advanced Directives Planning with POLST .....	11



## Choosing Wisely – a tool for change

by Kevin Nohner, MD  
President, NMA

As we encounter the next decade, it is time for physicians to decide. Do we remain passive and hope that “this too will pass?” Or, will we be proactive and become engaged as leaders of change? Do we let insurers or politicians dictate the path health care will take? Or, will we use our knowledge, experience, and patient relationships to improve the value of patient care we provide and make health care affordable for all?

As your president, I have stressed the need for Nebraska’s physicians to meet this challenge as leaders and the NMA board has selected the Choosing Wisely program as a tool which can both educate and engage our physicians to achieve this goal.

Currently, our medical practices are faced with a true C-change, a condition previously believed to occur “once in a century.” However, the world we live in is much different than it was only a few decades ago. In a current JAMA article, an analysis of data concluded that “1 in 5 U.S. households will struggle with

medical bills this year, 1.7 million individuals live in a household that will file for bankruptcy related to medical costs, and more than 25 million adults between the ages of 19 and 64 will not take medicines as directed because of costs”<sup>1</sup>. In addition to increased patient need, technologic advances and the rapid exchange of information have greatly increased the slope of the change curve—creating an adaptive tension for us to transform our practice of medicine. Today’s standards of treatment may be quickly replaced as they become outmoded or exposed as being less effective (or actually cause unintentional harm). Performance outcomes, cost efficiencies, redundancies/wasteful practices, and ineffective treatments will all undergo increased scrutiny. For many years the government and insurers have amassed claims-based data which they have used to assess and influence our practices. Going forward, we can expect that the number of parties monitoring health care will further proliferate to include consumer advocacy and special interest groups.

The best way to counter the encroachment of governmental and

third parties is to combine the efforts of our healthcare teams and our patients, continually assess what we do, and communicate this in a transparent fashion.

Promotion of programs such as the ABIM Foundation’s Choosing Wisely, the AMA’s Less is More campaign, and the American College of Physicians’ High Value Care

Initiative will raise awareness as to which treatments and tests are effective versus those that are less likely to be successful (or, even worse, actually add risk to the patient’s health).

Choosing Wisely has grown since its inception and now includes 60+ major medical organizations nationwide. Consumer Reports, known for being a non-biased influencer of consumer behavior, is a major partner in the campaign, acting as the ‘consumer communicator.’ They also partner with well-known organizations such as AARP and Wikipedia to disseminate their patient-friendly materials that help patients and their physicians engage in conversation about which tests and treatments are



(continued on Page 13)



# Choosing Wisely suggestions for Sinusitis

by Lou Kleager, MD  
Past President, NMA

For several decades infectious disease specialists and public health experts have strongly promoted using antibiotics for treating infections in humans with restraint and discretion, in part, to attempt to limit the development of bacterial resistance to antibiotics. (The usage of antibiotics by the meat production industry has, more or less, been just the opposite.) Virtually all health care providers and much of the public understand that treatment of the uncomplicated acute common cold does not include antibiotics as they do not affect the course of viral illness. The vast majority of the time that patients ask for help with treating a “cold” is when the over-the-counter remedies have failed, and it seems to the patient that the infection is progressing with time, not improving.

The semantics of the disease process of sinusitis are important. The public tends to be “lumpers” whereas the providers tend to be “splitters.” A wide variety of symptoms may be called sinusitis by the public. To some it may be only facial pain with no signs or symptoms of infection at all. To others it may be the symptoms of a typical URI with no associated focal facial pain. However, providers would say that acute sinusitis would be a bacterial infection of one or more paranasal sinus chambers. The fact that URIs are one of the most common respiratory illnesses and that they are many times the

precursor of true acute bacterial sinusitis further muddles the diagnostic decision making.

Let us digress to the normal physiology of the paranasal sinuses and the pathophysiology of paranasal sinusitis because the goal of therapy for sinusitis is to restore normal function. The paranasal sinuses are hollow chambers in the facial bones and cranium which are completely enclosed by bone except for a narrow outlet called the ostium. (This is also a somewhat similar functional description of the middle ear and Eustachian tube.) The chambers are lined with respiratory epithelium which secretes mucous and have very fine cilia on the surface. The cilia beat in a seemingly coordinated fashion to move the mucous toward the ostia. As long as air can pass into the sinus through the ostia and mucous can be cleared out of the sinus chamber, it is functioning normally.

Acute and chronic sinusitis develop when the ostium is blocked and the mucous blanket cannot be cleared from the chamber with the subsequent stasis leading to infection. This commonly occurs when the mucous membrane lining the outflow tract become swollen from URIs, allergy, or barotrauma. Physical obstruction of the opening from nasal polyps or facial bone trauma will have the same result. (Osteitis, osteomyelitis, dental infections, cilia dysmotility, and radiation effects are beyond the scope of primary care and not included in this discussion.)

Therefore, the conceptual goal of acute bacterial sinusitis therapy is to reestablish the patency of the sinus ostia and thus normal function. We agree

with the recommendations for over-the-counter treatment remedies for acute sinusitis (which also apply for simple URIs) in the Choosing Wisely recommendations on treating sinusitis.

The most important measures are saline nasal lavage and vasoconstriction. We would also add the use of OTC guaifenesin as a mucolytic.

If the co-morbidity of inhalant allergy is suspected by symptom history then OTC entry level allergy treatment is also recommended with avoidance of known allergens, non-sedating oral antihistamines, and topical OTC sodium cromolyn nasal spray. A topical nasal steroid spray has just become available over-the-counter as well. Oral or parenteral steroids are not indicated for initial treatment of acute sinusitis.

Nasal vault cultures are generally considered to be expensive and not useful. Many times the nasopharyngeal flora and the intra-sinus flora are different. In research settings only cultures obtained by sinus cavity invasion are considered to be accurate.

Imaging studies are not necessary for the initial treatment of acute, uncomplicated (not chronic) sinusitis and should be obtained only after failure of multiple treatment courses.

The main conundrum for the primary health provider when dealing with a patient with a URI or acute sinusitis or both is: if to use antibiotic therapy and when. Several protocols give suggestions about when to start antibiotics, such as this one. But, we would suggest that this is one disease complex that cannot be simply reduced to a protocol or predetermined procedural approach. This is one practice situation where the

(continued on Page 14)



# The evaluation of abdominal pain: is CT a wise choice?

by Steve Lazortiz, MD  
Network Medical Director  
for Arbor Health Plan  
Chairman, NMA Commission on  
Medical Education

*"You must choose. But choose wisely,  
for as the true Grail will bring you life,  
the false Grail will take it from you."  
- Grail knight to Indiana Jones*

One need only to look at the local newspapers to see that the issue of quality medical care - and the cost and impact of this care on the health of Nebraskans - is being publicly debated. These issues affect not only patients and the physicians who care for them, but also the entities who pay for the care. Clearly physicians, patients, and payers must have an open dialogue when choosing diagnostic tests, treatment modalities, and levels of care.

For this reason the American Board of Internal Medicine (ABIM) Foundation, working with 60 specialty societies, has developed the Choosing Wisely initiative with the goal of promoting dialogue between physicians and patients to choose the most appropriate care based on evidence-based recommendations. Each of the 60 specialty societies has developed a list of things physicians and patients should question. The ultimate goal is to help patients choose care that is evidence based, safe, not duplicative, and truly necessary.

One common clinical problem which is included in the lists of two of the specialty societies deals with the use of computerized tomography (CT) in

the diagnosis of acute abdominal pain in children. Almost all children experience abdominal pain at one time or another, and this diagnostic dilemma is addressed by both the American Academy of Pediatrics and the American College of Radiology.

The American College of Radiology recommends that a CT for the evaluation of suspected appendicitis is not done until after ultrasound has been considered as an option. They point out that while CT is very accurate in the evaluation of suspected appendicitis, in children, ultrasound is nearly as good in experienced hands. Doing a CT only when the results of the ultrasound are equivocal is a cost effective and accurate approach with a reported sensitivity and specificity of 94 percent.

The American Academy of Pediatrics (AAP) states simply that "Computerized tomography (CT) scans are not necessary in the routine evaluation of abdominal pain." They point out that utilization of CT imaging in the emergency department evaluation of children with acute abdominal pain is increasing, and the AAP has voiced special concern regarding the sensitivity of children's organs to ionizing radiation.

It is of great interest that of the 10 items on the AAP's list, three of them dealt with the use of CT scans. The other two were "Neuroimaging (CT, MRI) is not necessary in a child with simple febrile seizure" and "Computed tomography (CT) scans are not necessary in the immediate evaluation of minor head injuries."

Due to excess radiation exposure and the acute sensitivity of children's organs, both the American College of Radiology and the American Academy of Pediatrics acknowledge the increased lifetime risk for cancer as a major reason to consider alternatives to CT scans. While there is no dose threshold for inducing cancer in children, the National Cancer Institute points to the fact that there is no dose of radiation that could be considered absolutely safe. It has been shown that there is a clear dose-response relationship. While the absolute cancer risks associated with CT scans are small, it is important to acknowledge the possible cumulative effect of ionizing radiation over the lifetime of children.

Despite these risks, one recent study found that during the period from 1996 to 2005 the use of CT scanning in children has doubled for children under the age of 5 and tripled for children 5-14. The authors estimated that 4870 future cancers could be caused by the 4 million CT scans performed each year. These concerns have led to the formation of the Alliance for Radiation Safety in Pediatric Imaging that advises parents to ask their doctor the following questions regarding how CT would benefit their child:

- Are there other tests (such as MRI or ultrasound) or actions (such as watching the child for several hours) that could be safely substituted for the CT scan?
- Will my child receive a "kid-sized"



(continued on Page 16)

# Choosing Wisely to reduce radiation risks in children with minor head injury or simple febrile seizure

by Kim Coleman, MD  
Pediatric Radiologist  
Radiology Associates, PC

Clinicians can safely forego imaging in children with minor head trauma or simple febrile seizure by following evidence-based guidelines. This limits radiation or sedation risks and reduces expense.

Computed tomography (CT) can be obtained rapidly, without sedation, but utilizes ionizing radiation. CT use has increased dramatically over the past few decades. This increases the risk of cancer according to data extrapolated from large population radiation exposure. Since children are especially radiosensitive, special attention is warranted prior to obtaining a CT scan. Magnetic Resonance Imaging (MRI), though radiation-free, is expensive and requires sedation for most young children.

Several evidence-based decision-making tools have been generated to assist in determining the need for imaging for minor head trauma. In comparative studies thus far, the most useful and accurate tool is the Pediatric Emergency Care Applied Research Network (PECARN) criteria.

By incorporating the PECARN prediction rule, a clinician can identify children at very low risk for clinically-important traumatic brain injury and safely bypass imaging. Note, the researchers are not claiming an absence of findings on CT – only that there will

not be a clinically significant brain injury. For example, imaging may show a non-depressed skull fracture when none of the criteria are present, but this isn't considered clinically significant as an isolated finding.

## The criteria for “clinically-important” traumatic brain injury (TBI):

1. TBI resulting in death
2. TBI requiring neurosurgery
3. TBI requiring intubation for > 24 hours or
4. TBI requiring hospitalization ≥ 2 nights

In the PECARN study, more than 42,000 children with minor head injury were evaluated. Criteria were established for two groups, (1) children

younger than two years and (2) children two years and older which was based on the language ability of children to communicate symptoms such as headache and the challenge of assessing neurological status in pre-language children.

When assessing the child, certain criteria place the patient into a high-risk, intermediate- or low-risk category. CT is recommended for the high-risk children. CT may be reasonably utilized when the intermediate risk criteria are present. However, CT should be avoided and is NOT recommended in the setting of children with low-risk criteria. When the PECARN rules are followed there is a negative predictive value of 99.95-100.0 percent.

This is a powerful tool to reassure

## PECARN Rules

### Guidelines for children less than two years old:

Those with altered mental status or signs of skull fracture should be imaged with CT scan. In the absence of mental status changes, or signs of skull fracture, there are four additional criteria that can aid in determining the need for imaging. CT can be safely avoided when the following additional criteria are met:

- No scalp hematoma, except frontal
- No loss of consciousness (LOC) or LOC for less than five seconds
- Non-severe mechanism of injury\*
- Acting normally according to parents

### Guidelines for children two years and older:

The most critical two features are altered mental status and signs of a basilar skull fracture. In children with these findings CT is recommended. In the absence of these findings, CT can be safely avoided when the four additional criteria are met:

- No loss of consciousness
- No history of vomiting
- Non-severe mechanism of injury\*
- Non-severe headache

### \* Definition of “severe mechanism” of injury:

1. Motor vehicle crash with patient ejection, death of another passenger, or rollover
2. Pedestrian or bicyclist without a helmet struck by a motorized vehicle
3. Falls of more than three feet in children younger than two years, or more than five feet in children two years and older
4. Head struck by high impact object

(continued on Page 6)



parents whose children fall into the low-risk category. In the absence of these specific criteria, it is considered safe to forego CT and advised that CT not be obtained as the risk of radiation exposure surpasses the proven benefit of scanning.

Of note, the PECARN data was gathered from 25 emergency departments in a Pediatric Research Network. The application of this diagnostic tool would have avoided 25 percent of head CTs in patients younger than two years and 20 percent of head CTs in children two years and older in these pediatric hospitals. The researchers speculate the impact of applying this tool may be even greater in general emergency departments.

Simple febrile seizure occurs in 2-5 percent of children and is defined as a primary, generalized seizure lasting 15 minutes or less, accompanied by a temperature of  $\geq 100.4^{\circ}\text{F}$  or  $38^{\circ}\text{C}$  without recurrence in 24 hours. In the absence of focal seizure or predisposing condition such as ventriculoperitoneal shunt, focal neurological deficit, evidence of increased intracranial pressure or altered mental status, imaging has shown little benefit.

According to the American Academy of Pediatrics Subcommittee on Febrile Seizures “neuroimaging should not be performed in the routine evaluation of the child with simple febrile seizures.” The subcommittee based the recommendation on a comprehensive review of evidence-based literature from 1996 to 2009.

CT can be a life-saving tool when indicated. Discussion of radiation risks is best held in the context of

risk-benefit assessment. Dialogue with parents can be similar to discussion regarding antibiotic use: CT is a resource which is essential when indicated, but carries inherent risks if overused so the decision should be based on the best available evidence.

Since radiation risks are felt to be cumulative, the Society for Pediatric Radiology suggests parents maintain a CT record for their child just as they keep immunization records. A record-keeping tool is provided on the Image Gently web site ([www.imagegently.org](http://www.imagegently.org)), which can be printed in pocket size. This reemphasizes the need to use radiation sparingly. The American Academy of Radiology White Paper on Radiation Dose in Medicine specifically recommends “educating stakeholders in radiation safety principles and appropriately utilizing imaging to minimize any associated radiation risk.”

ALARA (as low as reasonably achievable), the principal of using the least amount of radiation, is best accomplished when we eliminate the lowest yield scans altogether. The available evidence confirms that imaging is NOT necessary in children with simple febrile seizures and in children with very low risk of clinically important brain injury after trauma. Implementation of the evidence-based recommendations can significantly diminish radiation exposure for the pediatric emergency room patients.

Find more information on the Choosing Wisely pediatric imaging guidelines at: <http://www.choosingwisely.org/doctor-patient-lists/american-academy-of-pediatrics/>

## BIBLIOGRAPHY

- Lumba AK, Schnadower D, Joseph MM. *Pediatric Emergency Medicine Practice*: “Evidence-Based Assessment and Management of Pediatric Mild Traumatic Brain Injury” November 2011
- Subcommittee on Febrile Seizures. *Pediatrics* 2011; 127;389. “Febrile Seizures: Guideline for the Neurodiagnostic Evaluation of the Child With a Simple Febrile Seizure”
- Berg CD, Schumann H. *Pediatric Emergency Medicine Practice*: “An Evidence-Based Approach to Pediatric Seizures in the Emergency Department” Feb 2009
- Bressan S et al. *Academic Emergency Medicine* 2012 Jul; 19 (7): 801-7 “Implementation of adapted PECARN decision rule for children with minor head injury in the pediatric emergency department”
- Linscott LL et al. *American Journal of Neuroradiology* 2013 Jun-Jul; 34(6):1252-6. “CT for pediatric, acute, minor head trauma: clinician conformity to published guidelines”
- Miglioretti DL et al. *Journal of American Medical Association* Pediatric 2013 Aug 1; 167(8):700-7 “The use of computed tomography in pediatrics and the associated radiation exposure and estimated cancer risk”
- Paolicchi F et al. *American Journal of Roentgenology* 2014 Jun; 202(6): 1309-15 “Optimizing the balance between radiation dose and image quality in pediatric head CT: findings before and after intensive radiologic staff training”
- Babl FE et al. *Biomedcentral Pediatrics* 2014, 14:148. A prospective observational study to assess the diagnostic accuracy of clinical decision rules for children presenting to emergency departments after head injuries (protocol): the Australasian Paediatric Head Injury Rules Study (APHIRST)
- Lyttle MD et al. *Emergency Medicine Journal* 2012 Oct; 29(10): 785-94 “Comparing CATCH, CHALICE and PECARN clinical decision rules for paediatric head injuries”
- Rohacek M et al. *Injury* 2012 Sep; 43(9): 1415-8 “Reasons for ordering computed tomography scans of the head in patients with minor head injury”
- Centers for Disease Control and Prevention, Percent Distributions of TBI-related Emergency Department Visits by Age Group and Injury Mechanism — United States, 2006–2010
- Kuppermann N et al. *Lancet* 2009; 374: 1160-70 “Identification of children at very low risk of clinically-important brain injuries after head trauma: a prospective cohort study”
- Easter JS et al. *Annals of Emergency Medicine* Aug 2014; 64 (2) 145-52 “Comparison of PECARN, CATCH, and CHALICE Rules for Children With Minor Head Injury: A Prospective Cohort Study”
- Amis Jr ES, Butler PF, ACR White Paper on Radiation Dose in Medicine: Three Years Later 2010
- Colang JE, Killion JB, Vano E. *Radiologic Technology* Sep/Oct 2007 vol 79/no 1 “Patient Dose from CT: A Literature Review” □



# Non-medically indicated (elective) induction of labor or cesarean delivery: does gestational age matter?

by Joshua D. Dahlke, MD, FACOG and Robert G. Bonebrake, MD, FACOG  
Nebraska Methodist Women's Hospital and Perinatal Center



Joshua D. Dahlke, MD



Robert G. Bonebrake, MD

In February 2013 the Choosing Wisely campaign, in collaboration with the American College of Obstetrician and Gynecologists (ACOG) and the American Academy of Family Physicians (AAFP), developed a list of specific, evidence-based recommendations in an effort to improve care and avoid unnecessary procedures. ([http://www.choosingwisely.org/wp-content/uploads/2013/02/ACOG-5things-List\\_Web.pdf](http://www.choosingwisely.org/wp-content/uploads/2013/02/ACOG-5things-List_Web.pdf)) Notably, two of the five recommendations involved obstetrical decision making with regard to timing of delivery in cases of scheduled delivery without a medical indication. Specifically, the campaign discouraged non-medically indicated (elective) inductions of labor or Cesarean deliveries prior to 39 0/7 weeks gestational age or inductions of labor between 39 0/7 and 41 0/7 in the setting of an unfavorable cervix. The goal of this communication is to address common questions

that may arise when discussing timing of delivery with patients, as well as review the rationale and available evidence on optimal timing of delivery that maximizes maternal and neonatal outcomes.

What conditions in pregnancy are considered medically indicated and what are considered non-medically indicated (elective)?

In February 2011 the Eunice Kennedy Shriver National Institute of Child Health and Human Development and Society of Maternal-Fetal Medicine sponsored a workshop to provide evidence-based guidance on maternal and fetal conditions in which late-preterm (34 0/7 to 36 6/7 weeks) or early-term (37 0/7 to 38 6/7) delivery may be indicated.<sup>1</sup> In general, these indications can be classified as placental/uterine (e.g. placenta previa, suspected placenta accreta, increta, percreta, prior classical cesarean, prior myomectomy), fetal (e.g. growth restriction, congenital malformations, oligohydramnios) or maternal (e.g. hypertensive disorders, pre-existing or gestational diabetes mellitus) in origin. Common indications that would be considered non-medically indicated include presumed fetal macrosomia, patient desire or discomfort, or logistic concerns (e.g. travel distance, provider or hospital scheduling conflicts).

One way providers can clarify these important distinctions for patients may be to remove the term 'elective' from the lexicon used to describe timing of

delivery. As noted by Berghella et al., this term is often used in relation to surgical (e.g. Cesarean delivery) and medical (e.g. labor induction) interventions whose decisions are presumed to be chosen without consideration of medical risks or benefits.<sup>2</sup> As these authors note, very few decisions, if any, are made in this manner. If there is a medical indication, it should be clearly stated as such. In cases where there is not a medical indication, yet a clinical decision is made, a clear rationale should be documented on the chart (e.g. 'maternal request for logistic indications').

Is there evidence that avoiding non-medically indicated inductions or labor or Cesarean deliveries prior to 39 0/7 weeks improve maternal and neonatal outcomes?

Yes. The Consortium on Safe Labor analyzed data of over 115,500 deliveries from 12 institutions to determine maternal and neonatal outcomes by labor onset type (spontaneous or induced) and gestational age.<sup>3</sup> Their findings suggested that neonatal outcomes such as neonatal intensive care unit (NICU) admission, ventilator use, and sepsis were significantly decreased when delivery occurred at or after 39 0/7 weeks gestational age, regardless of whether labor onset was spontaneous or induced. Furthermore, a 3-fold increased risk of hysterectomy was noted in women who underwent non-medically indicated induction compared to a medically indicated one.

(continued on Page 8)



Despite clear evidence that non-medically indicated induction of labor or Cesarean delivery prior to 39 0/7 weeks increases maternal and neonatal adverse outcomes, this practice pattern persists, by some estimates up to 15 percent of all deliveries in the United States. For example, in a prospective observational trial of over 37,000 Cesarean deliveries at 19 institutions, the Maternal-Fetal Medicine Unit (MFMU) Network noted that 36 percent of scheduled repeat Cesarean deliveries occurred prior to 39 0/7.<sup>4</sup> Due to its prevalence and impact on maternal and neonatal outcomes, the National Quality Forum and the Joint Commission has included it as a national perinatal quality benchmark.

Are there examples of successful implementation of institutional or state-wide programs that have reduced non-medically indicated induction of labor or Cesarean delivery prior to 39 0/7 weeks and improved maternal or neonatal outcomes?

Yes. In an analysis of >17,000 deliveries in 14 states, Clark et al noted an overall reduction of non-medically indicated delivery prior to 39 0/7 weeks from 9.6 percent to 4.3 percent and a 16 percent reduction in NICU admissions (and no difference in stillbirth) after implementation of a hospital policy was instituted. Notably, of the three possible programs (hospital implemented 'hard stop,' provider peer-reviewed 'soft stop,' or provider education only), the 'hard stop' policy was most effective in reducing this outcome of interest.<sup>5</sup>

State-wide efforts to reduce non-medically indicated inductions of labor and Cesarean delivery reported in both Utah and Ohio demonstrate similar improvements.<sup>6,7</sup> After the Ohio Perinatal Quality Consortium

## "Best Practice" Recommendations

(Adopted from Donovan et al.<sup>7</sup>)

Recommendations to Reduce Non-Medically Indicated Scheduled Delivery Prior to 39 weeks
1) Promote ultrasound confirmation of gestational age prior to 20 weeks among providers, hospital personnel, and pregnant women
2) Adopt ACOG scheduled birth criteria: <ul style="list-style-type: none"> <li>a) Confirm gestational age with excellent dating criteria</li> <li>b) Avoid scheduling induction of labor or Cesarean delivery prior to 39 weeks without clear medical indication</li> <li>c) Adopt Scheduled Birth Form               <ul style="list-style-type: none"> <li>i) Note whether dating criteria is optimal (confirmed or set by &lt;20 week ultrasound) or not optimal (all others)</li> <li>ii) Document specific indication for scheduled birth</li> <li>iii) Document discussion of risks and benefits of scheduled birth</li> </ul> </li> </ul>
3) Improve Obstetric-Pediatric communication <ul style="list-style-type: none"> <li>a) Monthly statistics reports to physician, nurses, and administrators</li> </ul>
4) Promote culture of safety <ul style="list-style-type: none"> <li>a) Discussions at department and quality meetings.</li> </ul>

Examples of Medical and Non-medical (Elective) Indications for scheduled delivery (induction or Cesarean delivery) prior to 39 weeks.	
<i>Medical Indications for scheduled delivery prior to 39 weeks</i>	<i>Non-medical indications not recommended for scheduled delivery prior to 39 weeks</i>
Placenta/Uterine reasons: <ul style="list-style-type: none"> <li>- Placenta previa</li> <li>- Suspected placenta accreta, increta, or percreta</li> <li>- Prior classical cesarean</li> <li>- Prior myomectomy</li> </ul> Fetal reasons: <ul style="list-style-type: none"> <li>- Growth restriction</li> <li>- Congenital malformations</li> <li>- Oligohydramnios</li> <li>- Multiple gestation</li> <li>- Prior stillbirth</li> </ul> Maternal reasons: <ul style="list-style-type: none"> <li>- Hypertensive disorders</li> <li>- Pre-existing or gestational diabetes mellitus</li> <li>- HIV positive</li> <li>- Underlying cardiothoracic, pulmonary, or renal disease</li> </ul>	Presumed Fetal Macrosomia e.g. >5000 grams in nondiabetic or >4500gm in diabetic Maternal discomfort Logistic concerns e.g. Provider or hospital scheduling conflicts, Long-distance travel

(continued on Page 16)

# Imaging in acute low back pain

by Michael Longley, MD  
Nebraska Spine Center

Advanced medical imaging has improved our diagnostic ability in low back problems; however, there is a need to balance the benefits of medical



imaging against the potential risks and costs. Medical costs are being shifted to patients who are increasingly finding that they have large deductibles and thus are personally paying for their own imaging. In addition, as physicians and medical providers we are increasingly being asked to share in the cost controls both professionally and financially. In this environment the need for wisdom in choosing how to further evaluate low back pain is becoming ever more critical. Mere symptom management in the absence of a diagnosis poses potential risks including excessive narcotic prescription.

Acute low back pain is generally considered an episode of pain of duration less than six weeks. However, in many instances this definition is blurred by the presence of pre-existing episodes or symptoms. There are recommendations in the literature that use the concept of “red flags” that are often proposed to be useful to define the need for further imaging. Unfortunately these “red flags,” while potentially simple recommendations, are often assuming ideal conditions which are seldom reality in a busy clinical practice. The published red flags also have very limited clinical data to support their routine use and in themselves are subjective in

the patient reporting and physical exam findings.

Thus an episode of symptoms apparently presenting as acute low back pain must be evaluated with several underlying questions running through a clinician’s mind as follows:

1. Does the back pain represent referred pain from other organs?
  - a. E.g. Aortic aneurysm, pancreatic tumor, gynecological problems, renal infection
2. Is the pain caused by primary or metastatic tumor?
3. Is the pain caused by infection or other local or systemic condition?
4. Is the pain caused by fracture due to significant trauma or possibly pathological fracture from osteoporosis or other metabolic bone disease?
5. Is the low back pain accompanied by significant or progressive neurological deficit?

With this underlying suspicion in a clinician’s mind, the decision to proceed to further imaging can be triaged more effectively. A careful history and physical examination not only answers the question of a possible need for further imaging but also leads to a clinical differential diagnosis. This is more useful in my mind than following a table of “red flags.” It should be noted that 80 percent of patients presenting with acute low back pain have at least one red flag present on history or exam. For example, a significant proportion of patients will be out of the “normal” age for mechanical low back pain of 18 to 50 years. In addition, the list of red flags published varies widely depending on the author, is subjective (severe pain), and is a moving target (failure to

respond to therapy). There is a great need to evaluate the patient as a whole, fostered by a well documented and detailed past medical record. There is also a need to continue to objectively reevaluate the patient’s response to treatment. For example, a diabetic patient with a leg ulcer and nocturnal back pain clearly presents risk factors for discitis and osteomyelitis.

The comprehensive and directed history obtained from the patient must be supplemented by a careful, thorough, and efficient examination. General examination should include vital signs (temperature/signs of sickness including anemia), weight (weight loss), body habitus and affect (level of pain with movement), and cutaneous abnormalities (jaundice and cutaneous infection). General examination can identify incongruities in examination such as variability in movement patterns that may provide clues to anxiety or functional overlay. More focused spinal examination should note spinal posture including deformity or apparent muscle spasm. Functional exam should enable evaluation of gait including limp, ability to heal and toe walk and squat; palpation of the spine may also be useful in identifying tenderness or deformity such as spondylolisthesis. Neurological examination needs to document reflex asymmetry indicative of neurological deficit along with manual motor testing and sensory testing. Range of motion of the hips can be quickly performed to assess alternative causes of leg pain or gait disturbance. Perianal sensation and sphincter tone may be critical in assessing the need for urgent referral for

*(continued on Page 15)*

# Current recommendations for asymptomatic carotid screening

by Andi Barker, MD  
Nebraska Heart Institute

Stroke is the fourth leading cause of death in the United States, behind heart disease, cancer, and respiratory disease. It still remains the leading cause of disability in the U.S. and Europe. Strokes can be ischemic or hemorrhagic. The majority of strokes in the U.S., about 87 percent, are ischemic in etiology. In regard to the vascular surgical management of strokes, the prevention of ischemic stroke is the main area of consideration. A major preventable cause of ischemic stroke is atherosclerotic occlusive disease of the extracranial carotid artery.

Common symptoms of carotid territory transient ischemic attack (TIA) are transient monocular blindness or field cuts, dysarthria, dysphasia, aphasia, mono/hemiparesis, hemisensory deficit, bright-light amaurosis, or lightheadedness/presyncope. Unfortunately, only 15 percent of stroke victims have a warning TIA before stroke and waiting until symptoms occur is not ideal. The purpose of carotid bifurcation imaging is to detect “stroke-prone” carotid bifurcation plaque and identify a high-risk patient likely to benefit from therapy designed to reduce stroke risk. The most appropriate screening test for the condition is duplex ultrasonography.

How prevalent is carotid artery disease in the general population? Several large population studies have been performed to answer this question. The actual prevalence of clinically significant carotid artery stenosis (60-99 percent) in the general population is one percent

or less. The prevalence of stenosis has been shown to increase with age, total cholesterol, systolic blood pressure, and cigarette use. The finding of internal carotid artery (ICA) stenosis was more frequent than that of new hypertension or new atrial fibrillation; therefore, making it the most frequently detected treatable cause of ischemic stroke. Patients with known hypertension were significantly more likely to have ICA stenosis (12.7 percent vs. 7.8 percent), as were patients with heart disease (18.2 percent vs. 8 percent). If patients had both risk factors, they were significantly more likely to have ICA stenosis than patients without either risk factor (22.1 percent vs. 8.5 percent).

Raising public awareness about vascular disease and screening becomes critical with the number of Americans 60 years and older expected to reach nearly 76 million by the year 2020. The American Society of Neuroimaging concluded that the effectiveness of screening would be related to the prevalence of the disease in the screened populations. When the prevalence of stenosis is greater than 20 percent, screening reduced risk of stroke in a cost-effective manner. With a prevalence of less than five percent, screening has not been shown to be beneficial and may actually be harmful due to false-positive results. Given these assumptions, screening of the general population for carotid stenosis is NOT indicated. This position is supported by multiple professional organizations, including the National Stroke Association, the Canadian Stroke Consortium, the Society of Vascular Surgery, and the

U.S. Preventive Services Task Force. The American Stroke Association/AHA Stroke Council concluded that highly selected patient populations may benefit, but screening of the general population for asymptomatic carotid stenosis was unlikely to be cost-effective and might have the potential adverse effect of false-negative or false-positive results. There is also no evidence that auscultation of the neck to detect carotid bruits provides any benefit. Screening should only be pursued if a carotid bruit is associated with other risk factors for stroke in low operative risk patients.

There are potential high risk groups who might benefit from screening. These groups, compared to the general population, have a higher prevalence of carotid stenosis that may be greater than 30 percent. Jacobowitz et al developed a model to identify patients at high risk for >50 percent asymptomatic carotid stenosis. The screened patients were aged >60 years and had one or more of the following risk factors: history of hypertension, coronary artery disease, current smoking, and a first-degree family relative with a history of stroke. The prevalence of carotid artery stenosis was only two percent if no risk factor was present, six percent with one risk factor, 14 percent for two risk factors, 16 percent for three risk factors, and 67 percent for four risk factors. Patients undergoing coronary revascularization are another group with an increased prevalence of carotid stenosis.

(continued on Page 14)





# Advanced Directives Planning with POLST

by Bob Rauner, MD, MPH, and  
Deone Anderson, CSW



Bob Rauner, MD,  
MPH



Deone Anderson,  
CSW

Most of the Choosing Wisely campaign initiatives discussed in this issue of Nebraska Medicine are written with a “don’t do this” approach, so we decided we would instead talk about some things you should do. There are several Choosing Wisely “don’ts” listed for hospice care, but many of these, along with problems and awkward discussions that come at the end of life, could be avoided with a systematic approach to advanced care planning. One of the most widely used approaches across the United States is POLST ([www.polst.org](http://www.polst.org)) which stands for Physician Orders for Life Sustaining Treatment. We have used POLST ourselves and would highly recommend it.

One of my (Dr. Rauner’s) patient stories that made me a believer came a year after I started using POLST. One of the elderly couples I took care of (we’ll use the names Cliff & Mary, not their real names) were perfect candidates for POLST: both were in their 70s with COPD and multiple chronic problems. I discussed POLST with them at an office visit and then sent the information home with them so they could discuss it with their daughter before

their next visit. At the return visit Cliff was very firm about what he did and didn’t want. He wanted to be hospitalized if necessary and kept comfortable, he wanted IV fluids and antibiotics, and wanted artificial nutrition for a limited time if there was potential for improvement. However, he was emphatic that he did not want to be placed on a ventilator. If it was his time he wanted to die a natural death, not hooked up to a machine.

About six months later Cliff was hospitalized for an illness that rapidly deteriorated and a day later rushed to the ICU with multisystem organ failure. His COPD had worsened to the point that he would need to be placed on a ventilator. Cliff was delirious, but fighting the mask and BiPap the respiratory therapist was trying to use. I arrived at the ICU to find his granddaughter panicking and uncertain what they should do. Cliff was fighting treatment, but she felt we needed to “do everything” for her grandfather. I knew Cliff well and knew this was not what Cliff wanted. Luckily, I was able to fax Cliff’s completed POLST from our clinic EHR to the ICU nurse’s station. Seeing Cliff’s wishes noted on the form with both Cliff’s and Mary’s signatures made the granddaughter’s decision much easier. We kept Cliff comfortable and he died peacefully about an hour later, the way he wanted.

POLST is a one-page document outlining preferences for treatments and written in language that is clear to both patients and medical providers. The intent is for the form to follow patients from setting to setting (e.g., home, nursing home, hospital, ambulance, etc.)

and qualifies as physician orders across each of them. The communities that do it well take an organized and systematic approach in their community, making sure that all settings are familiar with and abide by the form. Ideally, a copy is saved by the primary care physician, the patient (possibly placed in a refrigerator magnet holder in case of an emergency), and local hospital. Someday, when our health IT infrastructure is adequate, it could be accessible anywhere via Internet.

One of the gold standard communities in the country is La Crosse, Wisconsin. After rolling out their Respecting Choices initiative which utilizes POLST in their city they were able to reach most of the residents in their community. Out of 400 deaths in a seven month period of 2009 all but 16 had a care plan in place. A study of Medicare beneficiaries in LaCrosse shows they spend 10 fewer days than the national average in a hospital bed during the last two years of life, possibly as a result of their POLST efforts. La Crosse Intensivist Greg Thompson, MD, said it best – “advance care planning gives people the opportunity to live and die on their own terms rather than somebody else’s.”

This approach has been used in several communities in Nebraska with varying degrees of success, but still does not have a significant state presence in Nebraska. However, there is growing interest from the state and county medical societies. Hopefully, in the coming years we will be able to launch a Nebraska initiative like the one in place in La Crosse, Wisconsin. □



An initiative of the ABIM Foundation

ConsumerReportsHealth



Nebraska  
Medical  
Association

Advocating for Physicians and the Health of all Nebraskans

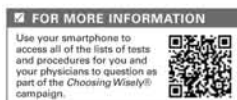
## 5 QUESTIONS to Ask Your Doctor Before You Get Any Test, Treatment, or Procedure

- 1 Do I really need this test or procedure?** Medical tests help you and your doctor or other health care provider decide how to treat a problem. And medical procedures help to actually treat it.
- 2 What are the risks?** Will there be side effects? What are the chances of getting results that aren't accurate? Could that lead to more testing or another procedure?
- 3 Are there simpler, safer options?** Sometimes all you need to do is make lifestyle changes, such as eating healthier foods or exercising more.
- 4 What happens if I don't do anything?** Ask if your condition might get worse — or better — if you don't have the test or procedure right away.
- 5 How much does it cost?** Ask if there are less-expensive tests, treatments or procedures, what your insurance may cover, and about generic drugs instead of brand-name drugs.

**Use the 5 questions to talk to your doctor about which tests, treatments, and procedures you need — and which you don't need.**

Some medical tests, treatments, and procedures provide little benefit. And in some cases, they may even cause harm.

Talk to your doctor to make sure you end up with the right amount of care — not too much and not too little.



<http://consumerhealthchoices.org/campaigns/choosing-wisely/>



## Choosing Wisely – a tool for change *(continued)*

appropriate for them, and which are not. This widespread approach and participation will go a long way to improve the public health of Nebraskans. The following and future articles are simply the tip of the iceberg as to what we can do to achieve better health care outcomes and contain the cost of care. I challenge you to become a leader for change.

There are a multitude of factors that lead to change and no one is solely responsible for our current status. Patients and their families want and demand medications or the latest technology, regardless of effectiveness. Entrepreneurs and alternative health providers market unproven treatments or tests based on anecdotal testimony and patient fears. Physicians, allied health professionals, and hospitals are not immune. Overutilization driven by supply sensitive care has repeatedly been shown to consume more resources yet yield poorer outcomes. It should not be a surprise to anyone that this path is unsustainable.

How, then, will this C-change occur? What will the new direction be?

I would propose that the process is not the sole responsibility of any single constituent. If we can keep in mind that our ultimate goal is to meet the patient's needs first and foremost, we are likely to be successful. Going forward, strategies

for active participation and collaboration by all will be essential:

- Consumer Reports has created publicly available patient-facing materials on many Choosing Wisely topics: [ConsumerHealthChoices.org/Choosing](http://ConsumerHealthChoices.org/Choosing).
- Patients will need to take more ownership in their health. Diet, exercise, and healthy lifestyles are hard to prescribe and, if not embraced by the patient, will be a set-up for failure. We need the development of a mindset that promotes wellness and preventive care to replace our current model based on reacting to illness and health crises.
- Physicians and staff need to provide more education and engage the patient in the decision process. Patient and physician goals may not coincide and alignment is essential for progress to occur. The addition of care coordinators and implementation of the Patient Centered Medical Home Concept provide a new and unique resource to develop and integrate patient care.
- We need education of providers regarding the cost of services we provide beginning at the student level and continuing throughout the provider's career. Patients, corpora-

tions, insurers, and the government will demand cost-efficiencies, and we will need to know how to manage these with the best interest of the patient in mind.

- Physicians and payers will need to collaborate for this to be successful. Sharing data should be a two way street; results of quality metrics and claims-based data, if analyzed correctly, will have more impact together than separately.
- Development of Accountable Care Organizations (ACOs) can facilitate the process of incorporating data into the workflow to increase the value of the services—improving both outcomes and patient satisfaction while containing costs. Utilization of electronic records at the clinic level and inclusion of patient satisfaction as a key measure in value are important differentiators from the prior HMO model.

Improving health care for our patients will be a team effort, but physician input is essential for the transformation to occur. Our role as stewards to protect and provide care to our patients is ingrained as to who we are and why we chose this profession. Our patients need us now more than ever. Let's stop the leak and preserve health care for future generations. □



## Choosing Wisely suggestions for Sinusitis *(continued)*

clinical judgment of the provider, based on thoughtful consideration of all of each patient's signs, symptoms, severity, and duration of the disease and the provider's clinical experience, supersedes any protocol recommendation for best individualized care.

It is recommended that Amoxicillin be the initial antibiotic of choice. Considering that the causal agent of most acute sinusitis is a Gram positive bacteria, this is reasonable. As otolaryngologists, we rarely see untreated acute sinusitis, so our patient population is preselected to include the Amoxicillin failures. We have had more success with inexpensive generic cephalosporins, macrolides, sulfa/trimethoprim, and

doxycycline. If maxillary sinusitis is suspected of being of dental origin, then coverage for anaerobic bacteria should be considered.

In summary, the first step in treating patients with acute "sinus" complaints is to attempt to sort out the probable cause of their facial discomfort. Secondly, the supportive over-the-counter measures recommended by Choosing Wisely are excellent. They will assist in re-establishing sinus cavity drainage and are an important part of the care of a patient with true sinusitis and/or an URI. We would strongly recommend adding an OTC mucolytic to this list. Third, imaging studies and nasal cultures are not necessary for

entry level treatment of suspected acute sinusitis. Fourth, guidelines notwithstanding, the primary care provider's individualized assessment of each patient and her or his clinical judgment should supersede any protocol recommendation for best patient care. Fifth, our experience as specialists suggests that inexpensive, generic cephalosporins, macrolides, sulfa/trimethoprim, and doxycycline are more effective than Amoxicillin for treatment of acute bacterial paranasal sinusitis.

Find more information on the Choosing Wisely sinusitis guidelines at: <http://www.choosingwisely.org/doctor-patient-lists/treating-sinusitis/> ☐

## Current recommendations for asymptomatic carotid screening *(continued)*

The ACC/AHA guidelines note that carotid screening before CABG is probably indicated in the following subset of patients: age > 65 years, left main coronary stenosis, history of smoking, history of TIA/stroke or carotid bruit, and peripheral arterial disease. Several studies have shown that patients with symptomatic peripheral arterial disease have an increased prevalence of carotid stenosis and would benefit from screening regardless of age.

In summary, routine carotid screen-

ing is not recommended in the general population who are asymptomatic. Screening is also not recommended for patients who have a neck bruit without other risk factors. It should, however, be performed in certain groups of patients with multiple risk factors, as long as the patients are fit and willing to consider any surgical intervention if needed. These groups include: patients with significant peripheral arterial disease, and patients ≥ 65 years with a history of CAD, smoking, or hypercholes-

terolemia. Carotid screening should also be considered in patients before CABG especially if they have the risk factors listed previously. For a full list of current recommendations, visit [www.uspreventiveservicestaskforce.org](http://www.uspreventiveservicestaskforce.org).

Find more information on the Choosing Wisely asymptomatic carotid screening guidelines at: <http://www.choosingwisely.org/doctor-patient-lists/american-academy-of-family-physicians/> ☐

## Imaging in acute low back pain *(continued)*

cauda equine syndrome. Finally, an abdominal exam and vascular status may be important to identify non-spinal causes of back pain and should not be omitted.

The efficient history and examination thus provides the practitioner with a differential diagnosis as well as an estimate of the urgency of further workup. The patient who has no ominous features on history and exam and apparent musculoskeletal symptoms without neurological deficit can be treated appropriately with reassurance and a goal of functional restoration in this situation.

The patient who presents with a sufficient level of complicating features may need further diagnostic evaluation. In my experience the most frequent missed items on history include nocturnal pain with associated infection and occasionally tumor. Another commonly missed scenario is apparently minor trauma in the presence of occult osteoporosis. Back pain without any leg pain is often present with spinal stenosis (tired back with standing) or with disc herniation, but the latter presentations do not often require urgent imaging and

often present in a more chronic fashion.

Plain film radiology can be extremely useful, especially when digitally performed upright with flexion and extension views, in fact in many instances it is complementary to a static supine MRI. However, the variability of imaging quality and also in the reporting by the attending radiologist often severely limits lumbar X-ray value for routine use.

MRI scans also vary in quality and open MRI scans of low field strength can be of poor quality. Patient claustrophobia or motion can often be ameliorated by a simple Xanax protocol and result in high quality studies that can guide patient management. However, many insurance companies require detailed documentation before approving such imaging, and I suspect this requirement will grow as the imaging becomes more integral to disease and patient management algorithms. CT scans involve greater patient radiation, but are of value in a patient where implants prohibit MRI scans and can also be complementary to MRI scans in clarifying patient pathology and treat-

ment pathways. Unfortunately, in some patient groups such as adolescent pars injuries, CT scans, though of significant radiation dose, may be critical in determining appropriate return to sporting activity.

In summary, the practitioner evaluating low back pain needs to maintain an index of suspicion to identify significant concerns in history and exam to differentiate potentially benign mechanical low back pain from occult, more serious conditions. The awareness of patient background status and medical condition is important in this. Documenting the presence of any neurological deficits is important to identify a level of urgency for surgical referral. Continued reevaluation of patient response to treatment is necessary, and these fundamentals will guide the practitioner as to the value of further imaging.

Find more information on the Choosing Wisely low back pain imaging guidelines at: <http://www.choosingwisely.org/doctor-patient-lists/american-academy-of-family-physicians/> ☐

## Non-medically indicated (elective) induction of labor or cesarean delivery: does gestational age matter? *(continued)*

implemented a program at 20 regional hospitals, the rate of scheduled births between 36 0/7 and 38 6/7 weeks without a medical indication decreased from 25 percent to <5 percent within one year. Recommended practices attributed to this improvement included; 1) Promotion of ultrasound confirmation of gestational age <20 weeks, 2) Adoption of a Scheduled Birth Form documenting dating criteria, specific indication for the scheduled birth, and documentation of discussion of risks and benefits of scheduled birth, 3) Improved obstetric-pediatric communication including monthly statistics reports to physicians, nurses and administrators, and 4) Promotion of a culture of safety.

Undoubtedly, reducing adverse maternal and neonatal outcomes in Nebraska is the goal of every provider who serves pregnant women in our state. While the benefits of reducing non-medically indicated inductions of

labor and Cesarean delivery prior to 39 0/7 is clear, active participation among patients, providers, and administrators at the local and state level will continue to be required in future endeavors to improve outcomes.

Find more information on the Choosing Wisely Caesarean guidelines at: <http://www.choosingwisely.org/doctor-patient-lists/american-college-of-obstetricians-and-gynecologists/>. Choosing Wisely's new safe pregnancy guidelines for patient education are available at [ConsumerHealthChoices.org/pregnancy](http://ConsumerHealthChoices.org/pregnancy).

### REFERENCES

1. Spong CY, Mercer BM, D'Alton M, Kilpatrick S, Blackwell S, Saade G. Timing of indicated late-preterm and early-term birth. *Obstet Gynecol*. 2011 Aug;118(2 Pt1):323-33.
2. Berghella V, Blackwell SC, Ramin SM, Sibai BM, Saade GR. Use and misuse of the term "elective" in obstetrics. *Obstet Gynecol*. 2011 Feb;117(2 Pt 1):372-6.
3. Bailit JL, Gregory KD, Reddy UM, Gonzalez-Quintero VH, Hibbard JU, Ramirez MM, Branch

DW, Burkman R, Haberman S, Hatjis CG, Hoffman MK, Kominiarek M, Landy HJ, Learman LA, Troendle J, Van Veldhuisen P, Wilkins I, Sun L, Zhang J. Maternal and neonatal outcomes by labor onset type and gestational age. *Am J Obstet Gynecol*. 2010 Mar;202(3):245.e1-245.e12.

4. Tita AT, Landon MB, Spong CY, Lai Y, Leveno KJ, Varner MW, Moawad AH, Caritis SN, Meis PJ, Wapner RJ, Sorokin Y, Miodovnik M, Carpenter M, Peaceman AM, O'Sullivan MJ, Sibai BM, Langer O, Thorp JM, Ramin SM, Mercer BM; Eunice Kennedy Shriver NICHD Maternal-Fetal Medicine Units Network. Timing of elective repeat cesarean delivery at term and neonatal outcomes. *N Engl J Med*. 2009 Jan 8;360(2):111-20.

5. Clark SL, Frye DR, Meyers JA, Belfort MA, Dildy GA, Kofford S, Englebright J, Perlin JA. Reduction in elective delivery at <39 weeks of gestation: comparative effectiveness of 3 approaches to change and the impact on neonatal intensive care admission and stillbirth. *Am J Obstet Gynecol*. 2010 Nov;203(5):449.e1-6.

6. Oshiro BT, Henry E, Wilson J, Branch DW, Varner MW; Women and Newborn Clinical Integration Program. Decreasing elective deliveries before 39 weeks of gestation in an integrated health care system. *Obstet Gynecol*. 2009 Apr;113(4):804-11.

7. Donovan EF, Lannon C, Bailit J, Rose B, Iams JD, Byczkowski T; Ohio Perinatal Quality Collaborative Writing Committee. A statewide initiative to reduce inappropriate scheduled births at 36(0/7)-38(6/7) weeks' gestation. *Am J Obstet Gynecol*. 2010 Mar;202(3):243.e1-8. ☐

## The evaluation of abdominal pain: is CT a wise choice? *(continued)*

radiation dose?

- Have the facility and radiology professionals done all they can to lower the radiation dose as much as possible while finding out what's wrong with my child?

Again, we see the approach of encouraging a dialogue between the patient and the physician to choose the most appropriate care.

Evaluating a child with acute

abdominal pain can be a challenging endeavor. There is an urgent need to rule out potentially life threatening conditions quickly and accurately, and there is no question that imaging is frequently an essential part of this evaluation. While CT scanning is both sensitive and specific, the question should be asked whether another imaging technique could be used which would provide the needed

information at a lower radiation dose. Clearly, in the evaluation of acute abdominal pain in children, one must "choose wisely."

Find more information on the Choosing Wisely pediatric CT scan guidelines at: <http://www.choosingwisely.org/doctor-patient-lists/american-academy-of-pediatrics/> ☐



Working with  
you for a  
**healthy  
Nebraska**



**nebraskablue.com**

Blue Cross and Blue Shield of Nebraska is an Independent Licensee of the Blue Cross and Blue Shield Association.



**Our finger is on the pulse of  
the insurance industry!**

*Employee Benefits • Workers' Compensation  
Physicians' Professional Liability • Property  
Retirement Plans • Life Insurance & Disability*

**The Harry A. Koch Co.**  
Insurance & Financial Consultants  
Member of First Insurance Group, LLC

Scott Morris  
402.861.7059  
[www.hakco.com](http://www.hakco.com)

Receive the Highest Level of Cancer Care for your Patients.

## NEBRASKA CANCER SPECIALISTS IS NOW QOPI® CERTIFIED!

Nebraska Cancer Specialists was recently awarded QOPI® Certification for our outpatient oncology-hematology practice by ASCO, the largest oncology society in the U.S.

Based on careful analysis and on-site inspections, we met core standards in all areas of treatment, including:

- Treatment planning
- Staff training and education
- Chemotherapy orders and drug preparation
- Patient consent and education
- Safe chemotherapy administration
- Monitoring and assessment of patient well-being

This certification is an honor, a testament to our high standard of care — and a reminder that we must always strive to exceed our own expectations in order to better care for our patients.

**Give your patients the opportunity to benefit** from everything we can offer as the largest independent QOPI-certified cancer practice in Nebraska.

**Refer them to Nebraska Cancer Specialists today.**

Alegent Creighton Health Cancer Center - Bergan (402) 393-3110  
Methodist Eastbrook Cancer Center (402) 354-8124

Midwest Cancer Center Papillion (402) 593-3141  
Midwest Cancer Center Legacy (402) 334-4773

Fremont (FAMC) (402) 941-7030



Margaret Block, M.D.  
M. Salman Haroon, M.D.  
Ralph J. Hauke, M.D.  
Timothy K. Huyck, M.D.  
Robert M. Langdon, Jr., M.D.  
Kirsten M. Leu, M.D.  
John M. Longo, M.D.  
Patrick J. McKenna, M.D.  
Geetha Palaniappan, M.D.  
David A. Silverberg, M.D.  
Gamini S. Soori, M.D.  
Yungpo Bernard Su, M.D.  
Stefano R. Tarantolo, M.D.



the Physicians of Oncology Hematology West  
[nebraskacancer.com](http://nebraskacancer.com)

When you need it.



*Medical professional liability insurance specialists  
providing a single-source solution* | [ProAssurance.com](http://ProAssurance.com)

 **PROASSURANCE.**  
Treated Fairly

# The Popular vs Important Question

by Ross Polking

Provided by the Foster Group

A question we hear frequently from physicians concerns the details around what are commonly known as “alternative” investments. Derivatives, options, hedge funds, gold, master limited partnerships, junk bonds, and the list goes on. Investors are intrigued by the potential reward they believe these investments offer. The marketing stories for these vehicles seem strong and often suggest “can’t-miss” type opportunities; they play on our greed.

Another question that ranks near the top of the list asks about the latest hot stock to purchase or the next “dog” that should be sold. Someone in a break room conversation suggests that as corn prices continue to fall, China will provoke North and South Korea to go to war with one another so the U.S. has to send additional resources to the Pacific; commodity prices will then rise over the fear of a pending stock market crash. I know – makes no sense – but on close inspection, neither do most theories that cause investors to act irrationally. Uncertainties tempt us to consider pursuits that are neither in our best interest nor align with our long-term goals.

While most folks don’t find a question answered with other questions satisfying, here are some important questions that should precede entertaining such investment moves:

- Do you have a financial plan that outlines a clear path toward achiev-

ing life-long goals for you and your family?

- How would this investment fit within your plan and increase the probability of you achieving your goals?
- Do you actually need the return potential (not guarantee) suggested by the investment in order to achieve your goals?
- Can you afford the inherent risk of the investment (remember, risk and reward are inextricably linked), and the potential loss if things go badly?

Think about it this way...say you have \$1 million invested today, comprised of your employer’s qualified retirement plan, IRAs, brokerage accounts, and maybe even an ownership interest in a medical practice. Further, let’s assume you’ve done the math (or in the context of a planning relationship with a trusted advisor) and determined that in order to retire in 15 years with \$6 million available for living expenses, you need to invest \$100,000 annually with an overall return of near 8%. Again, based upon your own dynamic circumstances and goals, the annual **required** rate of return is 8%. Over the last 10 years, a globally diversified portfolio, passively managed to merely capture market return has earned over 9.5% annualized. Past performance is absolutely never a guarantee of future results. Heard that before? But why open yourself to significantly greater risk of loss in the hope of doubling your return if that’s not what your goals require... with the potential of significant loss?

According to the Journal of Financial Planning’s July, 2014 issue, 23% of millionaire investors say their biggest investing mistake was failing to adequately diversify their portfolio. In other words, they didn’t believe their mistake was not finding the biggest fish in the pond. Remember, diversification doesn’t necessarily come from multiple advisors providing competing philosophies, but rather a portfolio offering exposure to multiple global asset classes whose return patterns differ from one another. Seek the path that can improve your probability of success, not with the one with the thrilling story that may completely derail your hopes and dreams if it doesn’t deliver. Plan, stick to the plan, and stay diversified.

*Foster Group Inc. is a fee-only investment adviser firm providing a holistic approach to wealth management and financial planning, as well as traditional investment and portfolio management offerings. The firm has more than \$1.4 billion in assets under management and services more than 900 clients across 39 states, with a specialization for clients in the medical profession. For more information please visit [www.fostergrp.com/nma](http://www.fostergrp.com/nma) or call 1-844-437-1102.*

*The information and material provided in this article is for informational purposes and is intended to be educational in nature. We recommend that individuals consult with a professional advisor familiar with their particular situation for advice concerning specific investment, accounting, tax, and legal matters before taking any action.* ☐



Some people say they want to **work forever.**

**WE'RE THINKING PERHAPS YOU'RE NOT ONE OF THEM.**

Foster Group is an independent, *fee-only* Registered Investment Advisory firm that specializes in the unique financial needs of physicians. So, if you feel you may be at risk of contracting FUR\* disease, contact us for a free, no-obligation consultation.

**rossp@fostergrp.com**

\*Financially Unable to Retire



**FOSTER**  
GROUP

800.798.1012 • [www.fostergrp.com](http://www.fostergrp.com)  
8901 Indian Hills Drive, Suite 300A  
Omaha, NE 68114 • 402.733.1700

**SERVING MEMBERS OF THE MEDICAL COMMUNITY FOR MORE THAN 20 YEARS.**

Foster Group's marketing material (1) should not be construed by any existing or prospective client as a guarantee that they will experience a certain level of results if they engage or continue to engage the advisor's services; (2) should not be construed as a current or past endorsement of the advisor by any of its clients; and (3) includes lists or rankings published by magazines and other sources, which are generally based exclusively on information prepared and submitted by the recognized advisor.



The NMA is now on  
Facebook!



Please like our page!

## New hope for patients with Acute and Chronic Pancreatitis

**“Pain-free is the  
new normal for me.”**

**Charlene, Auto Islet Cell Transplant Patient**

Charlene suffered more than 20 years with the debilitating pain of pancreatitis. Unable to live with it any longer, she came to The Nebraska Medical Center's comprehensive clinic for the treatment of pancreatic and biliary disorders.

After an extensive evaluation by a group of specialists, she underwent an auto islet cell transplant. Today Charlene is pain-free. “It was a great option for me. And, there is no pain. It gave me my life back.”

Call **800.401.4444** today or go to  
[NebraskaMed.com/pancreasclinic](http://NebraskaMed.com/pancreasclinic)



**Looking for a better  
way to manage risk?**

**Get on board.**

At MMIC, we believe patients get the best care when their doctors feel confident and supported. So we put our energy into creating risk solutions that everyone in your organization can get into. Solutions such as medical liability insurance, physician well-being, health IT support and patient safety consulting. It's our own quiet way of revolutionizing health care.

To join the Peace of Mind Movement, give us a call at  
**1.800.328.5532** or visit [MMICgroup.com](http://MMICgroup.com).



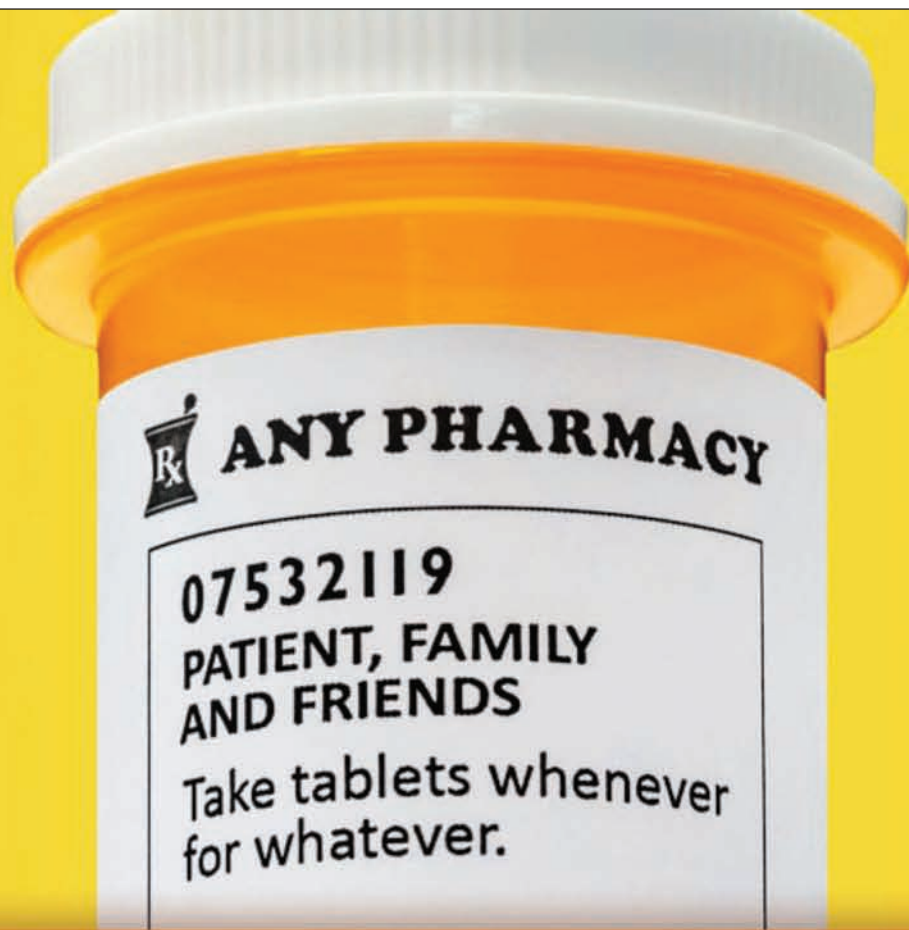
**CELEBRATE LIFE**

**Become a Living Kidney Donor Today!**

Learn more by calling:  
(402) 559-5000 or (800) 401-4444  
or visit us online at  
[www.nebraskamed.com/transplant](http://www.nebraskamed.com/transplant).



UNIVERSITY OF NEBRASKA  
MEDICAL CENTER



# *Just what the* **DOCTOR ORDERED?**

Doctors don't prescribe medication this way, so why treat it as though they do? Prescription abuse is a growing problem in Nebraska. Protect yourself and those you love—always follow instructions from your doctor and pharmacist, and never share prescription medications. Store securely. Dispose of leftovers responsibly.

Learn more at [dhhs.ne.gov/injuryprevention](http://dhhs.ne.gov/injuryprevention).





**THERE IS  
SOMETHING  
BETTER ON  
THE HORIZON.**

**COPIC CAN HELP  
YOU ACHIEVE IT.**

*An advocate on your  
behalf for legislative  
and policy matters*

*Education that  
reinforces patient  
safety principles*

**At COPIC, we always seek to cross over  
into better territory.** And we know that  
what bridges the gap between "what is"  
and "what can be" is commitment. That's  
why we're committed to investing in  
programs and activities that contribute  
to improved medicine and a stable  
environment in which to practice it.  
If you're seeking the path to something  
better, call us today at (800) 421-1834.  
**We'll connect you to where you want to go.**



**callcopic.com**

*Local involvement in  
improving health care  
for our communities*

*Resources to nurture  
physician-patient  
relationships*

**Nebraska Office:** 233 S. 13th St., Ste. 1200, Lincoln, Nebraska 68508 • **(800) 421-1834**

COPIC is exclusively endorsed by the Nebraska Medical Association  
as the medical liability carrier of choice.

