

Physician Cultural Assessment – Gauge and Engage for CPOE Transformation

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January 20, 2011

OBJECTIVES

- ◆ Assessing readiness holistically
- ◆ Why is physician culture important to understand?
- ◆ What is the CPOE value proposition for physicians?
- ◆ Balancing technology with the art of medicine
- ◆ Unintended consequences
- ◆ Identifying approaches that would gain support and engage physicians in the CPOE adoption process
- ◆ Operationalizing CPOE:
 - ◆ Communication
 - ◆ Training
 - ◆ Support

PHYSICIAN ACCEPTANCE OF CPOE...

"Feedback: Dr B. cardiology comes in, sees patient, writes notes in the physician progress notes, looks over at writer, takes notes out of chart, hands notes to writer, then says "Here, put in my orders." These are not written on an order sheet, and writing is hard to read. Notes read back to MD, and put in by writer. Just thought you would like to know."

**There are many challenges even when you have the physician's buy-in but everything is exponentially exacerbated when you
DO NOT!**

CPOE – THE HOLY GRAIL OF CLINICAL SYSTEMS

“Indeed, physician order entry is more than a technology – it is a clinical process facilitated by technology. This distinction is critical to appreciating the fundamental challenge to CPOE implementation.

CPOE requires significant clinical process redesign, which in turn requires extraordinary commitment by physicians, other clinicians, and executive leadership. Although many of the same principles apply to any large-scale clinical change project, they are critical to CPOE, which some have viewed as the Holy Grail of clinical systems.”
(Sittig, DF, et al. *JAMA* 1994;1:108-123).

DEFINITION

◆ **cul·ture** - *noun* \ 'kəl-chər \

- ◆ The characteristic features of everyday existence (as diversions or a way of life) shared by people in a place or organization
- ◆ The set of shared attitudes, values, goals, and practices that characterizes an institution or organization
- ◆ The set of values, conventions, or social practices associated with a particular field, activity, or societal characteristic

PHYSICIAN RESISTANCE

- ◆ What are we (industry leaders) telling physicians:
 - ◆ Must consolidate into larger groups or integrate with hospitals to survive
 - ◆ Cultivate managerial care expertise
 - ◆ Work in multidisciplinary teams
 - ◆ Follow evidence-based or standardized guidelines to practice good medicine
 - ◆ Practice preventative medicine
 - ◆ Develop systems approaches to managing chronic disease
 - ◆ Enter into primary care specialties to assure a less costly health system

PHYSICIAN RESISTANCE

- ◆ What are we (industry leaders) telling physicians (cont):
 - ◆ Install information technologies in their offices
 - ◆ Establish practice web sites
 - ◆ Offload business functions and patient communication to the Internet
 - ◆ Communicate with patients through the Internet and by e-mail
 - ◆ Convert to paperless offices, prescribe electronically
 - ◆ Standardize codes and transactions for diagnostic procedures
 - ◆ Develop leadership skills

UNDERSTANDING PHYSICIAN PERSPECTIVE

- ◆ You became a physician to serve patients, not hospitals or business corporations
- ◆ Physicians are a brotherhood and sisterhood. They come out of a common professional incubator, and know how one another thinks and acts without asking
- ◆ Physicians ask to be trusted to do the right thing, to be considered professionals, to be paid for productivity, and seek information systems that provide relevant information and speed patient flow

UNDERSTANDING PHYSICIAN'S PERSPECTIVE

- ◆ Medicine is a profession centered on the patient
- ◆ Money shouldn't be central in deciding what's best for the patient
- ◆ Data alone is insufficient to judge physician performance
- ◆ Medical practice is not "just another business"

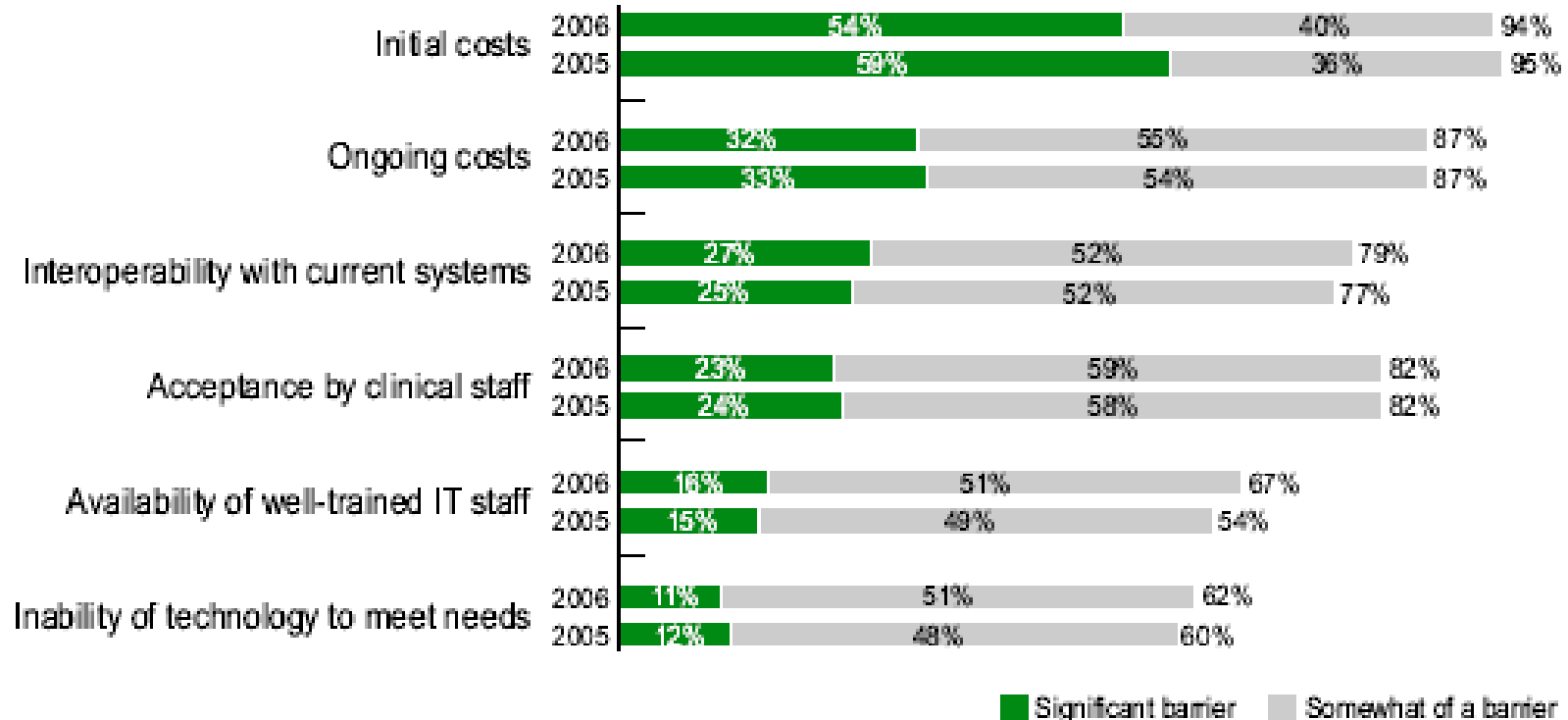
PHYSICIAN RESISTANCE, WHY?

- ◆ Physician perspective:
 - ◆ Physicians hate change
 - ◆ “Not my job, this is clerical work”
 - ◆ CPOE creates more work, does not support workflow, loss of efficiency
 - ◆ Faster to write on paper than enter orders on-line
 - ◆ Forces the way they think and write orders to change
 - ◆ Low level of computer literacy
 - ◆ Limited involvement with implementation – lack of ownership
 - ◆ IT driven projects without full understanding of clinical workflows
 - ◆ Organization did not explain clearly the value proposition to physicians
 - ◆ Systems are not mature to support complex patients
 - ◆ Devices and infrastructure – inconsistent reliability and speed
 - ◆ Once deployed it takes time to remain current and support is often ineffective or not available

BARRIERS: COST, TECHNOLOGY AND ACCEPTANCE

Hospitals continued to report cost as greatest barrier to IT adoption

Percent of hospitals indicating barrier is a "significant barrier" or "somewhat of a barrier"



ORGANIZATIONAL READINESS FOR CPOE

- ◆ Before CPOE implementation – organizational readiness
 - ◆ Success criteria definition => clear scope
 - Meaningful use by x date
 - Physician adoption of x% at 30 days, y% at 30 days and 100% at 90 days
 - Clinical, financial, efficiency outcomes
 - ◆ Level of standardization
 - Order management – pharmacy, order sets
 - Documentation
 - Medication reconciliation
 - Hands-off communication

ORGANIZATIONAL READINESS FOR CPOE

◆ Before CPOE implementation – organizational readiness (cont)

◆ Existing communication strategy

◆ Technology

- Wireless
- End-user devices
- Network
- Data center capacity
- Disaster recovery, etc...

PHYSICIAN READINESS FOR ADOPTION

- ◆ What do we need to understand to develop a realistic implementation plan?
 - ◆ Physician's readiness
 - ◆ Physician workflow
 - ◆ Access need to information
 - ◆ Communication
 - Physician to physician
 - Nursing, ancillaries, other
 - Patients and family
 - ◆ The effects orders trigger from writing to execution and dropping a charge
 - ◆ Clinical staff who support physicians and the executions of orders

EARLY PLANNING STEPS

- ◆ Understanding physician culture is a process
 - ◆ Should be evaluated very early on in the planning stages and post implementation
 - ◆ Evaluation should focus on:
 - Global
 - Single vs. multiple hospitals
 - Academic vs. community
 - Medical staff structure (multiple MEC's, P&T's)
 - External factors (competitive hospitals or health systems)
 - Hospitalists or privileged physicians
 - Acute care vs. ambulatory

EARLY PLANNING STEPS

- ◆ Understanding physician culture is a process (cont)
 - ◆ Evaluation should focus on:
 - Specific (CPOE related)
 - Develop key questions relevant to project success factors
 - » Adoption
 - » Quality
 - » Efficiency: Workflow, user interface, unique needs based on specialty
 - » Training
 - » Support
 - » Standardization of care (order sets, decision support)
 - » Existing roadblocks
 - » Relationships
 - » Communication
 - » Technology readiness

PHYSICIAN TYPES

- ◆ Type 1: Resistant users
 - ◆ Don't waste resources. Executive support is key.
- ◆ Type 2: Variable users
 - ◆ Focus on high-value functions
- ◆ Type 3: Consistent users
 - ◆ Critical to listen to their advice/feedback
- ◆ Type 4: Technophile users
 - ◆ Support their needs, but watch out for the unrealistic expectations. Employ the task force (advisory committee)

UNIVERSAL ADOPTION (AKA: MANDATE)

- ◆ The million dollar question: “Will your hospital MANDATE?”
 - ◆ Impacts of mandating at roll-out vs. later
- ◆ Not mandating changes the implementation plan which impacts:
 - ◆ New processes, maintains dual environments
 - ◆ Education/training
 - ◆ Support
 - ◆ Maximizing benefit realization
 - ◆ Other clinical initiatives (i.e., closed loop medication management)

PHYSICIAN'S PERSPECTIVE ON MANDATE

- ◆ "Hospitalists are the dominant players; it can be mandated to them."
- ◆ "The hospital needs to be aware that the older physicians may need a different level of support."
- ◆ "It should be mandated, it has to have uniformity, and you need to avoid 'piecemealing' the information."
- ◆ "There should a definite change over date of about 6 weeks to allow all rotators to get trained and use the system first."
- ◆ "You need to have absolutes, cannot have both ways."
- ◆ "Cannot give people options, need to obtain consensus and publish the start date."
- ◆ "Based on the patient volume allow time to get up on the system."

PHYSICIAN'S PERSPECTIVE ON MANDATE

- ◆ "Do not mandate the 1st day. There needs to be a reasonable time, let the physicians use the system for 2-3 months to allow everyone a chance to rotate and get familiar with it."
- ◆ "There will be physicians, small groups, fewer and fewer that come to the hospital anyway. For these physicians you need to 'push' them to view on line but not input the information."
- ◆ "Universal adoption cannot be 3-5 years."
- ◆ "It should be mandated in one year when there is 70-80% usage of the system."
- ◆ "It should be mandated at some point since it is very dangerous to 'live' in two worlds, you can get errors of omissions."
- ◆ "There should not be a date set up front."

ADOPTION: DO NOT ADDRESS, DECIDE LATER

◆ Benefits

- ◆ Maintains provider satisfaction level as is

◆ Disadvantages

- ◆ Huge investment with no ROI (patient, efficiency and financial)
- ◆ Meaningful use reimbursement at risk for all 3 stages
- ◆ Very difficult to change after deployment
- ◆ Increased patient safety risks
- ◆ Dual environments
- ◆ Increased workload for staff
 - Nursing, HIM, IT

ADOPTION: MANDATE DAY 1

◆ Benefits

- ◆ Clear expectation, “the new way to deliver care at Hospital Name”
- ◆ One environment: CPOE
- ◆ Predictable support and training strategy
- ◆ Strong foundation to build new processes on
- ◆ Favorable position for meeting all 3 stages of meaningful use for CPOE
- ◆ Immediate measurable benefits
- ◆ Predictable cost

◆ Disadvantages

- ◆ Not in line with Hospital Name’s culture of collaboration
- ◆ Higher number of resources for training and support
- ◆ The system may not have all options day 1 to support the use by all specialties
- ◆ Decrease physician satisfaction
- ◆ No room for error in planning, all has to be anticipated and in place day 1:
 - Hardware, functionality
 - Not feasible in large organizations with complex patients and processes

ADOPTION: PROGRESSIVE, CLEAR TIMELINE

◆ Benefits

- ◆ Preserves physician satisfaction
- ◆ Manageable expectations, in line with Hospital Name's culture of collaboration
- ◆ Predictable support and training strategy
- ◆ Strong foundation to build new processes on
- ◆ Favorable position for meeting all 3 stages of meaningful use for CPOE
- ◆ Predictable cost
- ◆ Logical deployment for larger facility
- ◆ Allows for additional CPOE functions development
- ◆ Allows for fine-tuning of processes before expanded house/system wide

◆ Disadvantages

- ◆ Dual environments for a period of time
- ◆ Additional retraining and support for physicians as deadline approaches
- ◆ Implementation costs may increase
- ◆ Prolongs the implementation timeline
- ◆ Interim processes
- ◆ ROI delayed until full adoption is achieved

PROGRESSIVE ADOPTION RECOMMENDATION

- ◆ What does 100% CPOE adoption means to your hospital(s)?
 - ◆ Lateral move of current orders management
 - If physicians write 80% of their total orders on paper today then 80% will be entered in CPOE
 - ◆ Allow the use of telephone orders when appropriate
 - ◆ Minimize verbal orders (JCAHO)
 - ◆ Set realistic expectations, avoid unattainable goals
 - 100% of all orders in CPOE is not realistic for a non-teaching organization

PROGRESSIVE MIGRATION TOWARD UNIVERSAL ADOPTION RECOMMENDATION (90 DAYS)

CPOE Live 1-30 Days

- Initial training (pre-live)
- Post live support
- Identify/document opportunities for improvement
 - System level vs. regional
- Communicate

CPOE Operational 31-60 Days

- Optimization:
 - Order sets
 - System, functions
 - Processes
 - Training
 - Support model
 - Resolve outstanding opportunities
 - System level vs. regional
 - Begin preparation for universal adoption
- Communicate

CPOE Universal Adoption 61-90 Days

- Validate results, improvements
- Train providers
- Provide support
- Implement on-going process improvement
 - CPOE
 - Clinical processes
 - Outcomes
- Universal adoption achieved
- Begin benefit measurement efforts

VALUE PROPOSITION

◆ Complete a CPOE readiness evaluation

◆ Cultural evaluation

- Assessment of physicians attitudes and readiness for new clinical technologies and transformation
 - “Will this (CPOE) be used for reporting statistics per MD? Or, for tracking and punishing doctors who have a longer length of stay?”
 - “Physicians must always have individual choice and prerogative.”
 - Order Sets: “The roadblock is not the tool itself, but what is intended behind it which is standardization.”

◆ Organizational evaluation

- “Is the hospital leadership prepared to identify and eliminate variations in processes in different care units before the hospital implements CPOE?”

VALUE PROPOSITION TO PHYSICIANS

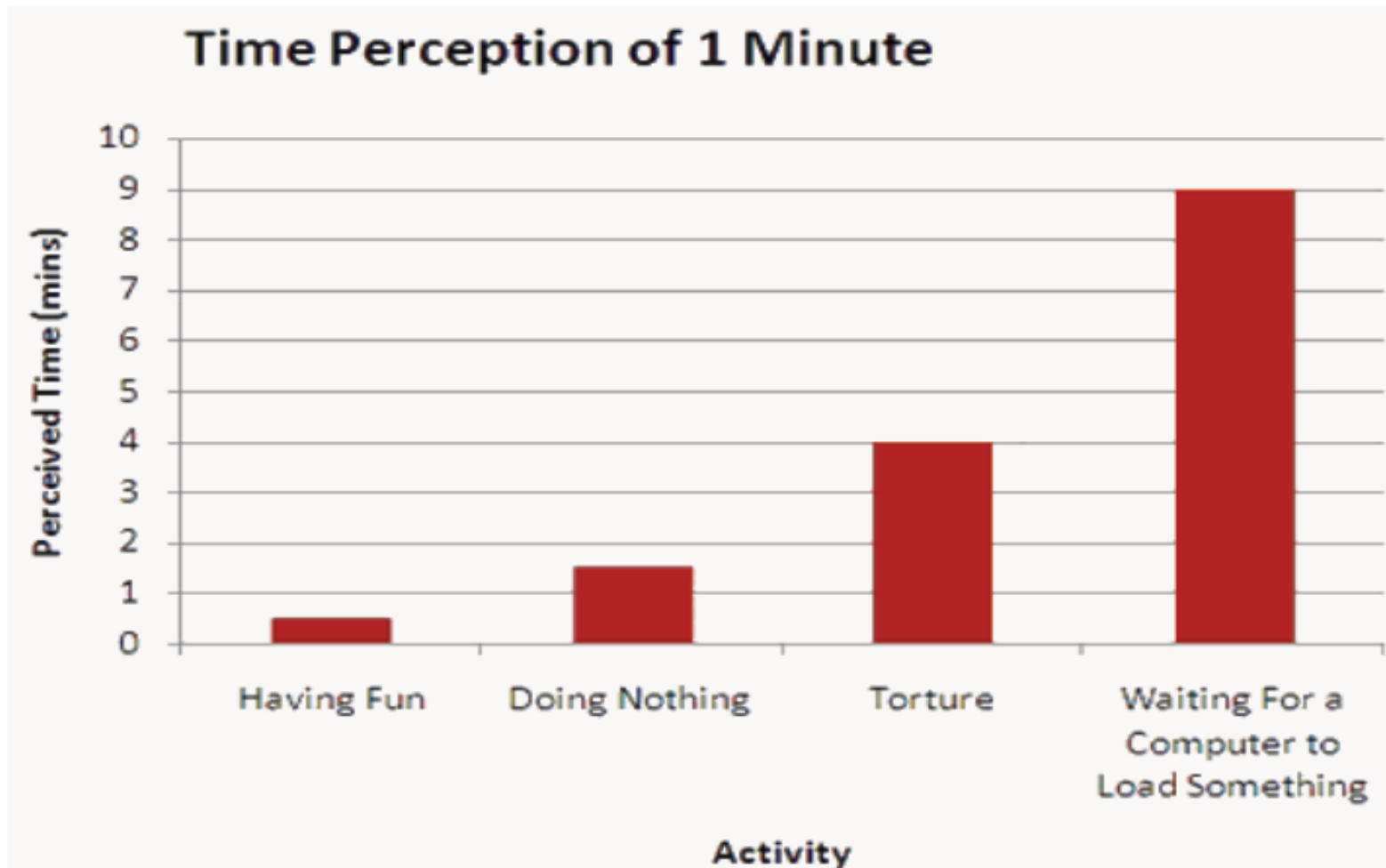
- ◆ A strong value proposition must be made in order to engage physicians in fully adopting CPOE as part of their workflow
 - ◆ “Has to be efficient” – stated by 100% of physicians
 - ◆ “It will be great to have access to view the medications online”
 - ◆ “Reduction of errors, clarity of medical orders. There has to be a safety net if errors are made, especially with residents they need to be stopped”
 - ◆ “The system has to be intuitive, flow well”
 - ◆ “Access from home”
 - ◆ “The system has to support the alerts for VO so they can be signed easy”

WHAT DO PHYSICIANS WANT?

- ◆ What do clinicians want?
 - ◆ System speed
 - ◆ Ease of use, intuitive, "smart system"
 - ◆ "Help at the elbow"
 - ◆ Value to Users/Decision Support Systems
 - ◆ No downtime
 - ◆ Hardware reliability and uptime
 - ◆ Streamlined access – single sign-on
 - ◆ Remote access
 - ◆ System integration, "one stop shop"
 - ED systems
 - Pharmacy, Med/IV charting – on-line MAR
 - Discharge instructions
 - Physician documentation
 - Clinical data warehouse (more so with new ARRA reporting)



REALITY VS. PERCEPTION



COMMUNICATION STRATEGY

- ◆ Build a comprehensive communication strategy to include:
 - ◆ What CPOE is
 - ◆ Implication for their practice and productivity
 - ◆ Education campaign that dispels misinformation and builds the value proposition
 - ◆ Must be on-going—regular (bite size) presentations at various forums
 - ◆ System demo's (1:1)—demo "point & click", standard order sets and options
 - ◆ Positive messaging and clear expectations from administrative senior leaders
 - ◆ Outreach to key individuals and nursing leadership

MIXED MESSAGES

- ◆ A distraught patient phoned her doctor's office. Was it true, the woman wanted to know, that the medication the doctor had prescribed was for the rest of her life? She was told that it was. There was a moment of silence before the woman continued, "I'm wondering, then, just how serious my condition is. This prescription is marked "NO REFILLS."

GETTING BUY-IN

- ◆ Begin by engaging their scientific and competitive qualities
- ◆ Encourage and cultivate a positive attitude toward using the new system

PSYCHOLOGY OF “MINE”

- ◆ Self enhancement

- ◆ Focus on how technology can help improve the efficiency and effectiveness of physician’s patient care and services rather than on the steps or procedures of actual use of the system

PSYCHOLOGY OF “MINE”

- ◆ Self continuity
 - ◆ Desire to maintain stability over time
 - ◆ Understand the long term impact

PSYCHOLOGY OF “MINE”

- ◆ Sense of control
 - ◆ Involvement in design
 - ◆ Venue to make their own needs and desires known to other key actors
 - ◆ Demonstrate improvement

HUMILITY: STRIVE TO MAKE THE PROCESS ENJOYABLE



- ▣ Home Page
- ▣ SEEDIE Certification
- ▣ SEEDIEspeak

What does this little girl have to do with selecting an EHR? Absolutely nothing! But it does register 10 on the warm and fuzzy meter!



Welcome to
The Society for Exorbitantly Expensive
and Difficult to Implement EHR's



Those vendors who pay for platinum level certification are required only to review scenario criteria and state, out loud, "Yes, we can do those things."



Gold level certification requires vendors to attest, in writing, to their ability to meet scenario criteria.



Silver level certification actually requires a demonstration of vendor ability to meet at least 35 percent of the identified scenario criteria, give or take a few percentage points based on effort and how cool the software looks.

This sliding scale approach ensures that vendors with limited interoperability capabilities pay more for certification, enabling SEEDIE to continue operating profitably. These profits fund our annual executive forum and conference in Vail.

When customers see the SEEDIE seal, they can be confident that the EHR vendor displaying it will charge them a fortune for a convoluted implementation.

SEEDIE Links

- SEEDIE Certification
- SEEDIEspeak
- Get SEEDIE Updates
- Forward to a Friend

SEEDIE Certification

SEEDIE Certification gives the appearance of putting EHR vendors through their paces, and is based on a unique process unlike any other in the industry.

Working with a handpicked, semi-objective group of medical practitioners who are paid handsomely by our member vendors to participate, we developed a set of SEEDIE scenarios that resemble, in many respects, realistic clinical situations.

Depending on how much each vendor pays for SEEDIE certification, they are required to demonstrate their ability to meet specific criteria outlined in these scenarios.

HUMILITY: STRIVE TO MAKE THE PROCESS ENJOYABLE

The screenshot shows the Extormity website with a green and white color scheme. At the top left, there are navigation links for 'Links', 'Help', and 'Sitemap'. The main header features the Extormity logo with the tagline 'Expensive, Exasperating, Exhausting'. Below the header, a large green banner says 'Welcome to Extormity'. A prominent orange message reads 'EXTORMITY UPTIME GUARANTEE' followed by a technical difficulty notice: '** This section of the site is experiencing technical difficulty. Please check back in 30 days...better make that 45 days, just to be safe.**'. On the left side, there is a 'QUICK LINKS' menu with items like 'EXTORMITY KNOWS BEST', 'PERPETUAL INVESTMENT', 'ABOUT EXTORMITY', 'UPTIME GUARANTEE', 'SERVICE AND SUPPORT', 'CLIENT TESTIMONIALS', and 'TELL A FRIEND'. At the bottom left, there is a 'SIGN UP FOR EXTORMITY ALERTS' button. The footer contains copyright information for 2003 and links for 'Privacy Policy', 'User Agreement', 'Terms of Use', and 'Copyright Information'.

Links
Help
Sitemap

Extormity

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EXTORMITY UPTIME GUARANTEE

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QUICK LINKS

- EXTORMITY KNOWS BEST
- PERPETUAL INVESTMENT
- ABOUT EXTORMITY
- UPTIME GUARANTEE
- SERVICE AND SUPPORT
- CLIENT TESTIMONIALS
- TELL A FRIEND

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HUMILITY: STRIVE TO MAKE THE PROCESS ENJOYABLE

LINKS

- Help
- Sitemap

Extormity
Expensive, Exasperating, Exhausting

Welcome to Extormity

EXTORMITY SERVICE AND SUPPORT

Extormity service and support is available on an hourly fee basis, with a minimum initial commitment of 225 hours at an hourly rate generated by a confusing algorithm.

Please have your credit card information available, and call us for service and support (regular long distance rates apply, average on-hold time roughly 97 minutes). You will be connected to the Extormity Call Center, where a lengthy and bewildering series of automated voice commands will prompt the entry of financial information. After credit approval, your call will be forwarded to our operations command center located in a bunker on a remote island. In the event that actual contact cannot be made online, we're told a supply ship is able to deliver messages to them at least every two months.

QUICK LINKS

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UNINTENDED CONSEQUENCES

- ◆ Consequences are positive, negative or both
 - ◆ Independent of the duration CPOE is used
- ◆ **Understand failure points** that devastate CPOE implementations
- ◆ Review published literature
 - ◆ “The Extent and Importance of Unintended Consequences Related to Computerized Provider Order Entry”
 - *JAMIA* 2007;14:415-423 doi:10.1197/jamia.M2373

UNINTENDED CONSEQUENCES

- ◆ Undesirable consequences:
 - ◆ More/New work issues
 - ◆ Workflow issues
 - ◆ Never-ending demands
 - ◆ Paper persistence
 - ◆ Communication issues
 - ◆ Emotions
 - ◆ New kind of errors
 - ◆ Changes in the power structure
 - ◆ Overdependence on technology

UNINTENDED VS. UNANTICIPATED

- ◆ The two terms are not synonymous
- ◆ Expect both to happen
- ◆ Both will evolve with time
- ◆ They may decrease in frequency but will periodically reappear in new disguise

WHY THIS TALK?

- ◆ Gain understanding of physician concerns
- ◆ Recognize that technology and the art of medicine can coexist if...
- ◆ Learn to better articulate and translate clinical workflow and needs into actionable tasks in our implementation plans
- ◆ It is serious business but we can still have some fun with it
- ◆ It is not meant to be negative

QUESTIONS, COMMENTS, FEEDBACK...