What is I-PrACTISE and Why Does It matter to Clinicians?

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  - Erkin Olles, BS
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- Disclosures: EPIC is not paying me to give this talk. Neither is any drug company. I wish they were.

The Challenge

“Primary care physicians are overwhelmed by crammed schedules, inefficient work environments, and un-rewarding administrative tasks … the quality of physician-patient interactions… has been declining. What's more, primary care has become increasingly complex. (Bodenheimer, 2010).
The flogging will continue until morale improves!

Primary care needs help from Industrial and Systems Engineering!

The I-PrACTISE Vision

- Vision:
  - The care of patients will be improved and the practice of primary care medicine will become more efficient through new knowledge and techniques created by the collaboration between Industrial Engineering and the primary care specialties

“The Basic Science of Primary Care”
We knew they would work in 1929, but there was a lot of work to be done on the basic science, the technology, the implementation and the training.

A (very) Brief History

- Started as informal collaboration in 2000
- Bentzi realized, when observing primary care, that it’s a mess!
- Studies Where WREN Played a Role
  - Quality of work life of clinicians and staff
  - Medical errors in primary care
  - Health hazards to the elderly in primary care
  - Complexity and workflow in primary care
  - Use of systems and technology to support primary care

Employed Family Physician Satisfaction and Commitment to Their Practice, Work Group, and Health Care Organization

How Many Problems Do Family Physicians Manage at Each Encounter? A WREN Study

Quality of Work Life of Independent vs Employed Family Physicians in Wisconsin: A WREN Study

Workflow? Schmerkflow!

Implications for Health IT
Results of Studies Done with WREN

• Quality of Worklife
  – “It’s the relationships, stupid!”
  • With self, colleagues, organization and patients
  • Substantial differences between groups
  • Smaller, more independent groups more satisfied

• Reporting of Medical Errors in Primary Care
  – (remember the IOM report?)
  – Were able to present testimony to legislature that helped to block proposal for mandatory error reporting
  • Supported idea of a voluntary system

• Health hazards to the elderly in primary care
  – Using engineering definition of hazard
  – Cause of most hazards and errors: **Information Chaos!**
  • Information Overload
  • Information Underload
  • Information Scatter
  • Information Conflict
  • Information Error
Results of Studies Done with WREN

- Complexity and Workflow
  - Task Analysis (the tool)
  - Workflow? Schmerkflow!
    - Because we are patient-centered, there is no organized workflow – and should not be!
    - Technology and systems have to be designed to support clinicians in this reality

- Technology and systems have to be designed to support clinicians in this reality


  Workflow? Schmerkflow! The Myth of Workflow in Primary Care and Why It Matters for Electronic Health Record Design and Implementation. Submitted, JABFM

Results of Studies Done with WREN

- Use of systems and technology to support primary care
  - What happens when we use the in-box?
  - PGT -> PGU!
  - Pre-visit Planning

  Wetterneck TB, In submission

Results*: Physician Pre-visit SA

**Increase in info available by 1 point across measures**

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*Unadjusted analyses
Additional I-PrACTISE Work

- **2 Book Chapters**

- **Short Papers**
  - (Pending – What is the cost of not dictating?)

- **Position paper for the Office of the National Coordinator**

Next Steps

- Continue the formal development of the ISyE and Primary Care Collaboration
- **Next Conference:** Madison, April 12-14, 2015
- Colloquia
- **Next major project:**
  - Understanding Primary Care Teamwork in Context: Implications for HIT design
    - 1 R01 HS 22505 – 01A1
    - Wetterneck, TB
Karsh Education and Research Fund

Industrial and Systems Engineering (ISeE) Professor Ben-Chin (Ben) Karsh, PhD, was passionate about how human interaction with technology can improve healthcare safety and quality. Academicians, clinicians, and patients consider his research to be among the best in the world, though tragically, his 2012 death cut his work short.

Dr. Karsh’s legacy lives on through E-PRACTISE, a collaboration of experts in ISeE, family medicine, internal medicine, pediatrics, and related disciplines. They are developing new collaborative research that will improve healthcare quality, efficiency, effectiveness, and safety.

Through the Ben-Tzion Karsh Education and Research Fund, we can continue this important work. But we need your support.

http://www.fammed.wisc.edu/practice/karsh-education-research-fund