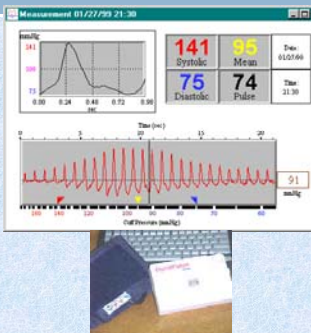


PREVENTION IN THE CLINICAL SETTING

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Prevention in the Clinical Setting

- ❖ Primary Care leadership
- ❖ “Like rolling off a log”
- ❖ Cost-savings
- ❖ Outcome improvement



Focus on RRR

		<u>POOR OUTCOME</u>
❖ Risk	→	Probability
❖ Resistance	→	Exists → Worse?
❖ Resilience	→	Bounce Back

Community Resilience as a Metaphor, Theory, Set of Capacities, and Strategy for Disaster Readiness.
Fran H Norris, Susan P Stevens et. al.
Am J Community Psychol 2007 Dec 22 EPub

Person with Alzheimer's Disease

- ❖ What is Risk of Sundowning?
- ❖ How Resist serious perturbation in sleep/wake cycle?
- ❖ How Bounce Back from significant Sundowning causing agitation of the patient and **stress** on the care giver?

Primary Care Team

- ❖ Nurse
- ❖ Medical Assistant
- ❖ Community Health Worker
- ❖ Psychiatric Social Worker
- ❖ Physical Therapist
- ❖ Physician

How do we think of the Three R's at all times in all visits and then act independently and together?

The Essences of Prevention:

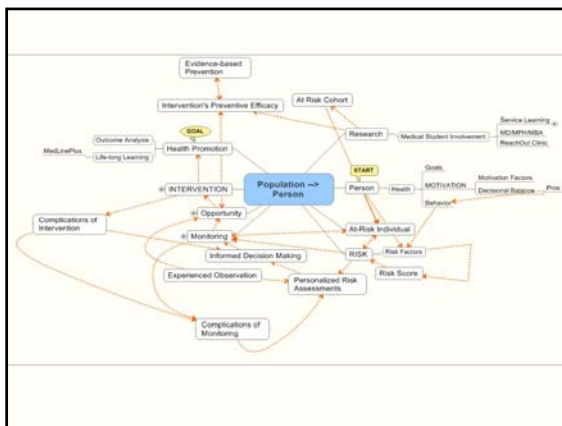
- ❖ Awareness
- ❖ Observation
- ❖ Imagination
- ❖ Hypothesis Testing
- ❖ Communication

PREVENTION occurs when an action takes place in a non acutely ill person to improve that individual's and/or family's life, usually in the future. Of course, the most important person to act is the person with the guidance of team members as necessary.

The EGAD visit

E = Events
G = Goals
A = Assessment
D = Documentation





YIKES this is complicated!

❖ As a team, we need to focus on GOALS (PLURAL) for every patient.

1. We want to avoid hospitalization, avoid medication errors.....etc!
2. We want to facilitate GREAT outcomes!!
3. We want to make early diagnoses!!!
4. We want to promote health and protect it!!!!
5. Oh yes, we need to see the patient in 15 minutes or less for the reason they came to see us!!!!

How do WE do it?

An Answer:

Create a system ("microsystem" in the small office)
focused on facilitating prevention

A practice guideline savvy computer, like it or not,
has to be the engine of this "microsystem".

Practice guidelines have to be restructured to work
within the small office setting.

WE have to push this or else others (NHII et al) will
do it for us without involving primary care.



Department of Bioinformatics
University of Utah

The "Dream" is about to become our
nightmare

Moving Forward On the Dream *The National Health Information Technology Agenda*

The University of Utah, Department of Bioinformatics

September 14, 2007

Robert M. Kolodner, MD
National Coordinator
Office of the National Coordinator for
Health Information Technology (ONC)

How Many Informaticists Do We Need?

❖ Safran's Conjecture:



❖ There approximately 6,000 hospitals in the U.S.
Each one needs a "cross-trained" physician and
nurse

❖ Round it off to 10,000

❖ Clearly an underestimate: neglects office
practices, industry needs, public health

❖ *What about the additional 160,000 private practices
and ??? other ambulatory care centers?*

Informatics Participants on AHIC Workgroup

Contact	Workgroup	Organization
Don Detmer	Confidentiality, Privacy and Security	American Medical Informatics Association
Jon Einbinder	Population Health/Clinical Care Connections	Partners Healthcare
Peter Elkin	Electronic Health Records	Mayo Clinic
Linda Fischetti	Electronic Health Records	Veterans Health Administration
Betsy Humphreys	Personalized Healthcare	HHS/National Institutes of Health/National Library of Medicine
Blackford Middleton	Electronic Health Records	Partners Healthcare System
Jerry Osheroff	Quality	Thomson Healthcare
Charles Safran	Consumer Empowerment	American Medical Informatics Association
Paul Tang	Consumer Empowerment	Palo Alto Medical Foundation
Jonathan Teich	Quality	Brigham & Women's Hospital
William M. Tierney	Quality	Regenstrief Institute, Inc.

We don't have a dog in this hunt but who will be blamed if it does not work?

WE have no choice but to try to make it work with a focused effort to utilize existing Electronic Medical Record technology (i.e., Praxis EMR), incorporate Clinical Practice Guidelines that have been tweaked to facilitate their application within a small office setting with LIMITED PERSONNEL resources.

We should focus on:

1. Cardiovascular Disease
2. Diabetes Mellitus
3. Asthma

Wiley Science Evidence-Based Medicine Guidelines for Primary Care	
Cardiology Guidelines	
Acute Coronary Syndromes: Unstable Angina Pectoris and non-ST segment elevation myocardial infarction (NSTEMI)	
Acute pulmonary edema	
Ambulatory ECG Monitoring	
Antihypertensive drug choice for different patient groups	
Aortic aneurysm and dissection	
Bradycardia	
Bundle Branch blocks in ECG	
CPAP treatment in pulmonary edema	
Calf pain	
Cardiac murmur in a child	
Cardiac pacemakers: follow-up of patients and surveillance of pacemaker function	
Cholesterol embolism	
Chronic heart failure	
Classification of hyperlipidemias	
Computerized ECG Interpretation	
Contraindications to physical exercise	
Coronary heart disease (CHD): symptoms, diagnosis and treatment	
Diabetic macroangiopathy	
Diagnosis of and initial investigations for hypertension	
Diagnostic coronary angiography	
...etc	

Literature Search Strategies	
@(predict\$ OR validate OR rule\$ OR predictive value of tests) AND (coronary AND atherosclerosis AND noninvasive)	
@(probability OR risk OR classification OR algorithm\$ OR rule\$) AND (criteria OR question\$ OR scor\$	
OR characteristic\$ OR risk factor\$ OR finding\$ OR factor\$) AND (predict\$ OR model\$ OR decision\$ OR prognos\$) AND foot	
@ (clinical AND guideline) AND (criteria OR scor\$	
OR characteristic\$ OR finding\$ OR factor\$)	
AND (predict\$ OR model\$ OR decision\$ OR prognos\$) AND congestive heart failure	
@Randomized controlled trial AND (ramipril AND ARB)	
@Randomized controlled trial AND (stroke AND risk factors AND recurrence)	

Brief efficacious interventions - "like rolling off a log"	
Decrease Risk	
Increase Resistance	
Increase Resilience	

Knowledgebase

TheBrain™ www.thebrain.com - Desktop + Enterprise

EMR

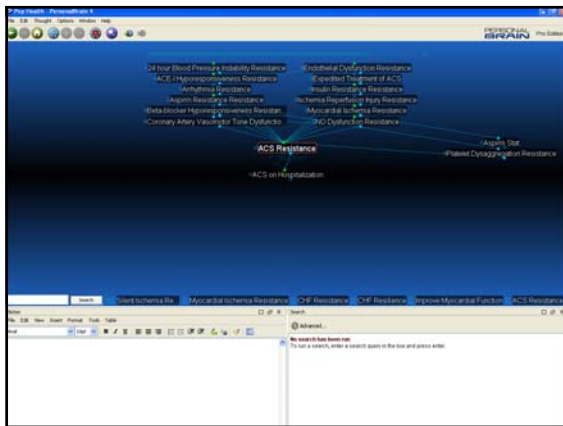
Praxis™ (www.infor-med.com)

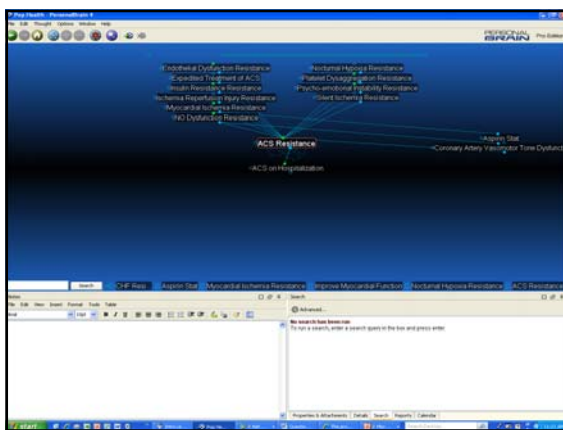
Move from Treat to Prevent to Predict

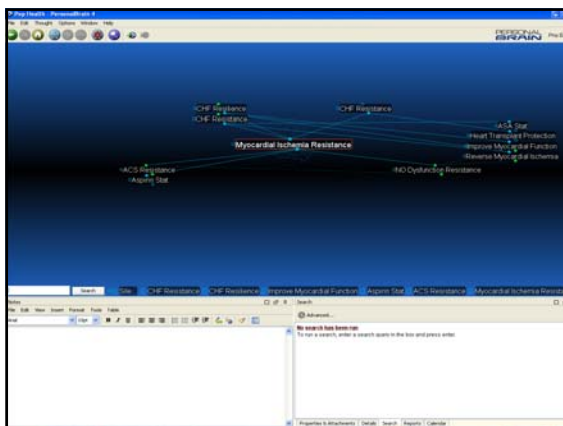
Family History, Genetics, Environmental Exposures, Lifestyle, Injury and Acute Illness, Chronic Illness

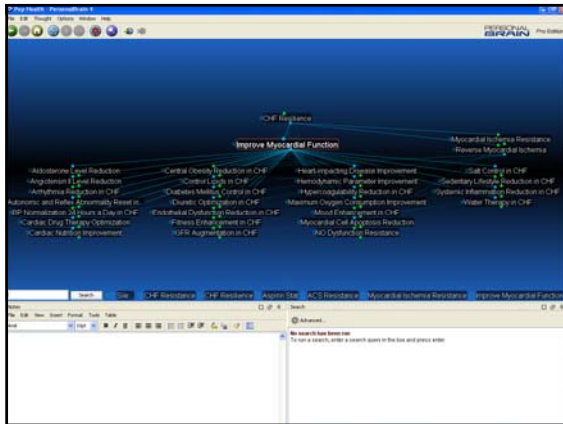
Predict, Prevent, Intervene

6. Adapted from Pettit, Dr. Jonathan B. Healthcare 1015 & beyond: Some Thoughts on Planning Ahead, p. 95









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