

Step Four Choosing Therapy

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Version 1.0/Fall 2010 1

Choosing Therapy: The Myth

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graph TD; A[Patient Care Problem] --> B[Diagnosis]; B --> C[Treatment]; C --> D[Problem Resolution]; OI[Organization Imperatives] --> B; SE[Scientific Evidence] --> B;
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Choosing Therapy: The Reality

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graph TD; A[Patient Care Problem] --> B[Diagnosis]; B --> C[Management]; C --> D[Problem Management]; CC[Coexisting Conditions] --> B; PP[Patient Preferences] --> B; OI[Organization Imperatives] --> B; SE[Scientific Evidence] --> B; EC[Economic Constraints] --> C; SF[Social Factors] --> C; LP[Local Practices] --> C; PE[Personal Experience] --> C;
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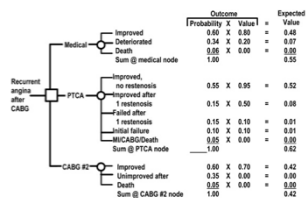
Individualizing Management

- Coexisting conditions
- Patient preferences
- Social factors
- Economic limitations
- Scientific Evidence
- Local practices
- Personal (clinician) experience
- Organizational imperatives
- HTN in DM – choose ACEI
- PSA test – patient preference
- Hmong belief re death
- New murmur, no insurance
- PPI over H2 blocker for GERD
- Specialist availability, beliefs
- Choice of surgical procedure
- Formulary of insurance plan

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Decision Analysis

- List options available
- List possible outcomes of each option
- Find probability of each possible outcome
- Ask patient for utility of each outcome
 - e.g. time trade off
- Calculate expected utility of decision
- Toss ups
- Heuristics and biases

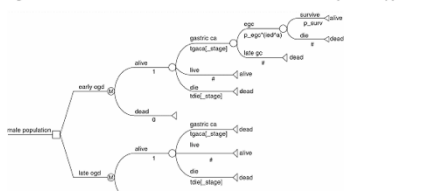


<http://www.nlm.nih.gov/nichsr/hta101/tree15.jpg>

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Cost Effectiveness Analysis

Figure 20: Markov model to evaluate the cost-effectiveness of early endoscopy



Age	Cost (£)	Effectiveness (life years saved)	Average c/e*	Incremental cost (£)	Incremental effectiveness	Incremental c/e*
70	91.80	0.00731	12,563	/	/	/
65	123.20	0.00930	13,261	31.40	0.00199	15,779
60	159.80	0.01070	14,995	36.60	0.0014	26,142
55	199.10	0.01170	17,021	39.30	0.001	39,300
50	240.50	0.01250	19,303	41.40	0.0008	51,750
45	283.80	0.01290	21,998	43.30	0.0004	108,250
40	329.20	0.01300	25,242	45.40	0.0001	454,000

*c/e = cost-effectiveness (£/life year saved) Health IT Workforce Curriculum Version 1.0/Fall 2010 <http://hcna.zodccife-oxford.com/2010/05/28/2010052801.htm> 6

"Medical Records That Guide and Teach" (Weed 1968)

- Subjective
- Objective
 - Hx, PE, Lab
- Assessment
- Plan
 - Diagnostic
 - Therapeutic
 - Patient Education
- Structure similar to scientific argument
- Logic embedded in structure
- Continuity over time
- Three part plan reminds clinician of uncertainty, patient inclusion

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~~Diagnosis and Treatment Management Plan~~

SOAP Format

Problem # 1: Polydipsia, Polyuria
 Dx: blood sugar, hemoglobin A1c, urinalysis
 Tx: diabetic diet, exercise prescription
 Pt. Educ: meet with diabetic educator, referral to local diabetes group

Problem # 2: High BP
 Dx: EKG, urinalysis, serum electrolytes
 Tx: low salt diet, exercise prescription, diuretic
 Pt. Educ: Hypertension handout, list of useful websites

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Management Plan

	initial plan	secondary	tertiary
GI			
GERD	trial of PPI (H2B?)	f/u appt for decision	EGD
PUD/bleeding	Hct, hemoccult	EGD	H pylori therapy (\$\$\$)
Gastritis	Education re lifestyle changes	EGD	
Non-ulcer dyspepsia	(dx of exclusion)		
gallbladder, pancreas			CT or US
zebras: cancer, etc			EGD or CT if unimproved
Cardiac			
CAD	Education re lifestyle changes	ETT	ASA??
