

Evolution of Critical Illness

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Benefits of Travel....



Benefits of Travel ???



Agenda

- Review of Critical Illness 'challenges'
- International efforts to find solutions
- Other changes to the CI product

The Annual of Pediatrics
"Making Your Child's World a Better Place"

What are we concerned about?

- Population Trends
 - You can only stop smoking once
 - Obesity
- Medical Advances / Public health
 - Screening / Early Detection
 - Awareness
 - Disease Definitions
- Legal Challenges

The Annual of Pediatrics
"Making Your Child's World a Better Place"

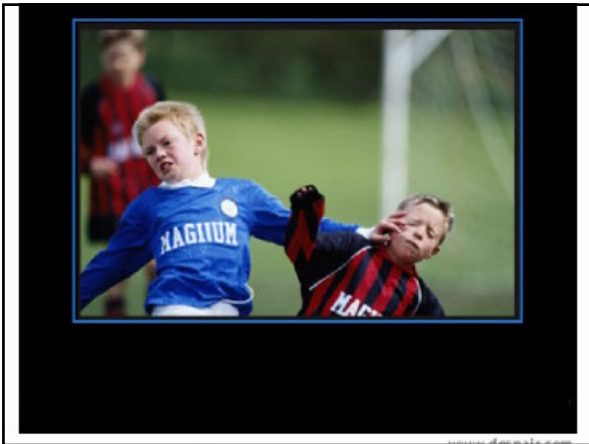
Bird Flu coming to UK from Florida???





Issues with Current Critical Illness

- Open to medical advances and early detection
- Lottery mentality
- Public paying for cover with questionable need
- Is this fair to average consumer
 - "TCF"





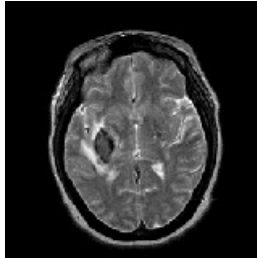
Claim for Stroke

- 59 year old male, accountant
- CI policy in force for 1 year
- 6 months ago, CT head to investigate headaches showed small defect
- Claims he had mild weakness left arm that lasted a few weeks resolved. Now claims his math is worse then last year.
- Doctor says he had a stroke

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Helping You Get the Most from Your Claim

What is “damage” or “deficit”?

- Psychiatric / Cognitive?
- Silent Strokes
 - Cardiovascular Health Study
 - 3,324 participants without a history of stroke
 - **28%** had evidence of silent infarcts (n = 923)



Bernick C et al. Neurology 2001 Oct 9;57(7):1222-9

The Journal of Neuroscience
Making the Most of the Brain

New Heart Attack Definition:

- Clinical context compatible with ischemic myocardial damage
- Elevated Cardiac Troponin

The Journal of Neuroscience
Making the Most of the Brain

Impact of New MI Definition

- Pell et al showed that “The new criteria increased admissions for myocardial infarction by 58%”

Pell JP, BMJ. 2003 January 18; 326 (7381): 134–135

The Journal of Neuroscience
Making the Most of the Brain

Doctors of the Past....



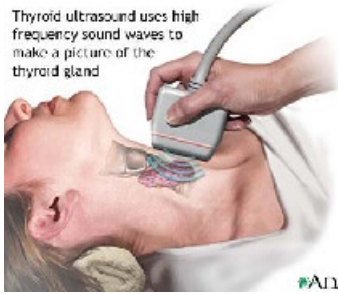
The Art of Medicine
Making Them of One of the Years

Doctor of the Future.....



Thyroid ultrasound

Thyroid ultrasound uses high frequency sound waves to make a picture of the thyroid gland



#A11A.M.

<http://www.nlm.nih.gov/medlineplus/ency/imagepages/18056.htm>

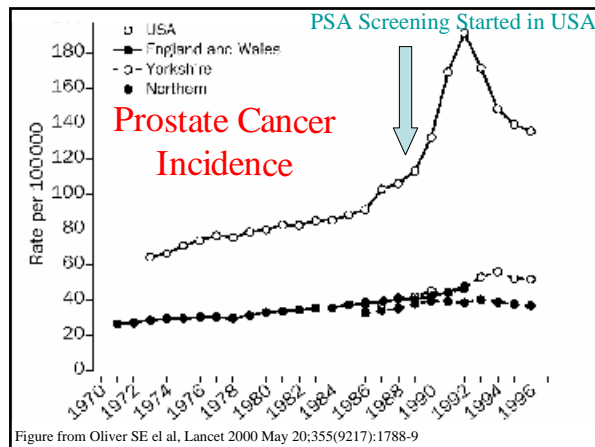
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Thyroid Cancer Screening

- 697 women who presented for breast U/S with no thyroid history
 - 246 (35.3%) were found to have thyroid nodules
 - 21 (3.0%) found to have thyroid cancer
 - Sensitivity of U/S: 80% to 100%
 - Specificity: 91.7% to 33.3%

Lee HK et al. Yonsei Med J. 2003 Dec 30;44(6):1040-4

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Making Your Education a Priority



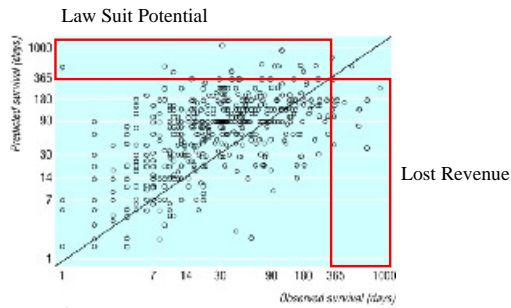
Claim for Breast Cancer

- 38 year old female
- Mother had breast cancer at 52 years old
- Sister had breast cancer at 39 years old
- Critical Illness issued at +100

- 6 months post issue:
 - Genetic Test BRCA 1 positive
 - Treated with bilateral mastectomy and oophorectomy

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Terminal Illness Claims



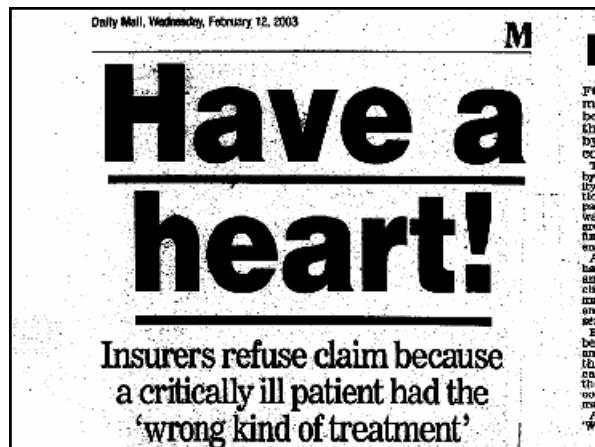
20% accurate
63% over-optimistic and 17% over-pessimistic

Graph from Christakis NA et al, BMJ 2000 Feb 19;320(7233):469-72

Claim for Cardiac Bypass Surgery

- 56 year old male
- 2 vessel Coronary Artery Disease
- Treated with angioplasty

The Journal of Pediatrics
Making Your Child's World a Better Place



Plain Vanilla to 'The Works'....



CI in 1985



CI in 2005

Evolution of Critical Illness....

1985



2005

- Heart Attack, Stroke, CABG, Cancer
- Accelerated
- > 40 impairments covered
- Stand Alone and Accelerated
- Buy Back Options
- TPD
- Hybrid Products
- Scaled Benefits

The Act of the Parliament
making provision for the future

Other Critical Illness Variations

- Group Critical Illness with limited or no underwriting
- Female CI
- Juvenile CI
- 'Preferred' CI

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Changes to Critical Illness Definitions

- Industry definitions versus company specific definitions
- Rating houses
- New CI definitions being designed
 - Plug holes but also creates confusion

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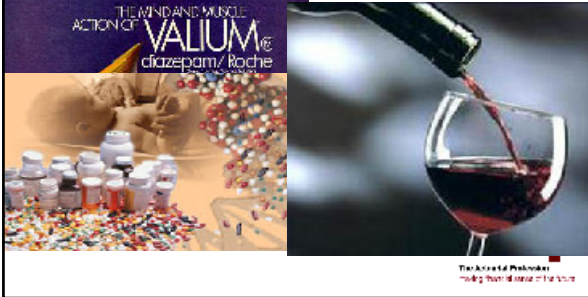
What is the definition?????

- Insurer's view
- Doctor's view
- Policyholder's view
- Ombudsman's and Lawyer's view

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Now time to relax.....





Purpose of Critical Illness ?



Health Insurance Disability Insurance TPD Long Term Care Life Insurance

← Critical Illness →

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Making Your Insurance Work for You

Putting the Word "Critical" back in Critical Illness Cover?

- Strict Definitions that exclude minor diseases
- Demand therapy must be necessary
- Demand impaired Activities of Daily Living
- Demand hospitalization or number of MD visits
- Link to time from work or lost income
- Demand proof of decreased lifespan

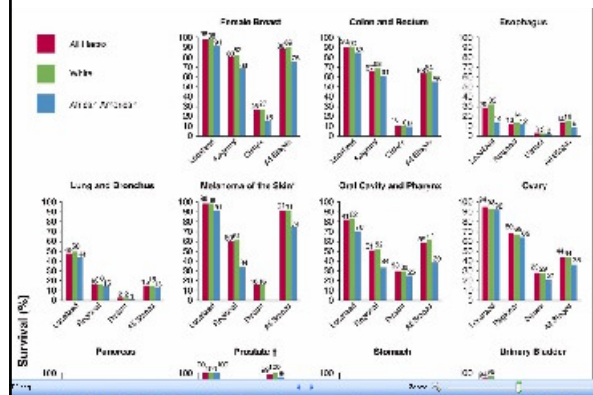
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 Making Them of Sense of the World

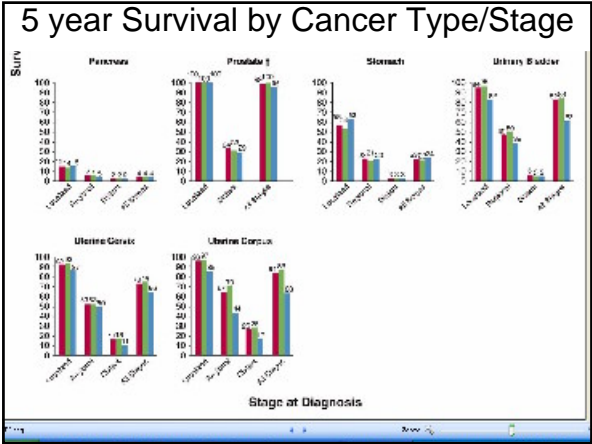
Other Possible Solutions??

- Limit number of covered impairments
- Educate agents/public and limit who sells it
- Consider changing impairment titles?
 - "Critical..." or "Serious..." etc
- Consider lay person explanation brochure?
- Consider partial payments for lesser degrees of severity with scaled benefits?

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5 year Survival by Cancer Type/Stage





Ways to Scale Cancer

1. Pay excluded cancers
2. Vary the number of exclusions
3. Pay by severity

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1. Pay excluded cancers

Two Tiers:

- Pay 100% for main cancers
- Pay 10% for
 - Carcinoma in-situ
 - Other minor cancers that are excluded from the main benefit
- Still some cancers are completely excluded

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Making Health Care of the Future

2. Vary the Number of Exclusions

- Category 1: Life Threatening
- Category 2: Disabling
- Category 3: Traumatic

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Scale by Varying Exclusions

Class 1: Life threatening Cancer exclusions

- Any skin cancer other than malignant melanoma with a depth of greater than 0.75 mm
- Lymphoma and Kaposi's sarcoma in the presence of HIV
- Chronic Lymphocytic Leukemia (CLL)
- Stage 1 Hodgkin's Disease
- Intraductal non-invasive carcinoma of breast
- Stage A Prostate cancer
- Testicular cancer
- Duke's Stage A Colon Cancer
- Stage 0 or 1 transitional cancer of bladder

Class 3: Cancer exclusions

- Any skin cancer other than malignant melanoma
- Lymphoma in the presence of HIV

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3. Pay by Cancer Severity


The Account of Physicians
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Severity	Cancer	Pay
A	Stage IV: Tumour extending beyond organ with nodes and/or distant metastases OR AML(M6) OR CLL(Stage IV) OR CML OR Bone Marrow Transplant OR aplastic anemia	100%
B	Stage III: Tumour within organ with regional lymph node spread OR ALL(Adults) OR AML(M4-5) OR CLL(stage III)	75%
C	Stage II: tumour invading organ, no lymph node involvement OR ALL(children) OR AML(M2-3) OR CLL(stage II)	50%
D	Stage I: Primary tumor site with no spread within organ OR AML(M0-1) or CLL(stage 0-1) or marrow aplasia	25%
E	Carcinoid or pre-leukemia syndrome (myelodysplastic syndrome)	15%
F	Prophylactic mastectomy for carcinoma in-situ	10%
G	Basal Cell Carcinoma >2cm OR Squamous cell carcinoma >2cm OR Prostate Cancer T1N0M0	5%

Payment linked to Clinical Severity		
Cardiomyopathy		
NYHA Class	Patient Symptoms	Benefit Paid
Class I (Mild)	No limitation of physical activity. Ordinary physical activity does not cause undue fatigue, palpitation, or dyspnea (shortness of breath).	5%
Class II (Mild)	Slight limitation of physical activity. Comfortable at rest, but ordinary physical activity results in fatigue, palpitation, or dyspnea.	20%
Class III (Moderate)	Marked limitation of physical activity. Comfortable at rest, but less than ordinary activity causes fatigue, palpitation, or dyspnea.	50%
Class IV (Severe)	Unable to carry out any physical activity without discomfort. Symptoms of cardiac insufficiency at rest. If any physical activity is undertaken, discomfort is increased.	100%

Using Whole Person Impairment (WPI)

- WPI rating scale assigns a level of impairment based on permanent changes in health
- Used with disability claims already
- Well suited to scaling of benefits



The Art of Medicine
John F. Gennep
Series: The Art of Medicine

The Art of Medicine
"The Art of Medicine" is the title of the book.

Example of WPI Use...

Myocardial Infarction:

An acute event resulting in new ECG changes typical of myocardial infarction with an elevation of cardiac enzymes 3 times the normal limit including a CK-MB fraction of >9% of the total CK. Elevation of Troponin is not considered to be diagnostic of a Myocardial Infarction.

The benefit will be payable after a post infarct stress test showing the following:

- **WPI > 10%** **BENEFIT = 25%**
- **WPI > 30%** **BENEFIT = 50%**
- **WPI > 50%** **BENEFIT = 100%**
- **Heart Transplant** **BENEFIT = 100%**

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Using Activities of Daily Living (ADL)

- ADL essentially becomes the trigger for payment and not the just the CI “condition”
- Definition becomes more timeless
- Essentially only need to price for a Loss of Independent Existence Benefit
- Multiple CI conditions linked to a common payment criteria

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Scaling by Varying Impairment Definition

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Multiple Sclerosis Definition – pays on diagnosis

- Unequivocal diagnosis by a consulting neurologist confirming the following combination of symptoms referable to tracts (white matter) involving the optic nerves, brain stem, or spinal cord, producing well-defined neurological deficits:
 - A multiplicity of discrete lesions; and
 - A well-documented history of exacerbations and remissions of said symptoms/neurological deficits.



UK ABI Definition Multiple Sclerosis – pays only with persistent impairment

A definite diagnosis by a consultant neurologist of multiple sclerosis which satisfies all of the following criteria:

- There must be current impairment of motor or sensory function, which must have persisted for a continuous period of at least 6 months; and
- The diagnosis must be confirmed by diagnostic techniques current at the time of claim



Challenges with Scaled Benefits

- Multiple payments
 - Pay difference if severity worsens
 - Pay up to cap of total sum assured only
- How handle unstaged or not listed diseases?
- Product complexity
- Claims and agent education
- Agent sells the “100% level”



Benefits to Scaling

- Matches payment to disease severity
- Improved public image....less 'declined' claims
- More resilient to medical advances

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Summary

- More screening and early disease detection
- Medical definitions continue to change
- Living longer and better quality lives due to medical advances and public health initiatives
- Many ways to evolve Critical illness to make the product fair to the public, affordable and profitable

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Thank You !!!



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