

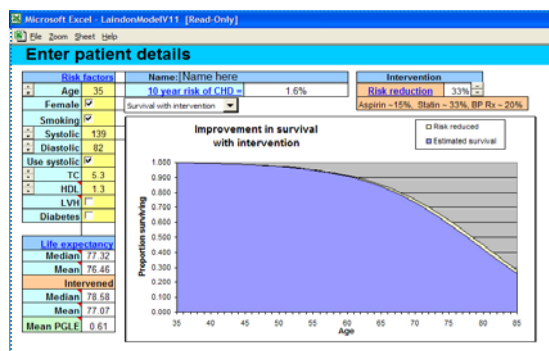
Risk Assessment Software



Laindon Survival Model

Introduction

The Laindon Survival Model has been developed to enable people to make a more informed choice about their healthcare. This mortality assessment technology translates the percentage risk of cardiovascular disease from the varying presentations of particular people. Every person has their own view of acceptable and unacceptable risk, and what interventions they would tolerate or avoid. This software allows people to visually see the impact of their life-style habits and also the benefit of available interventions.



Need

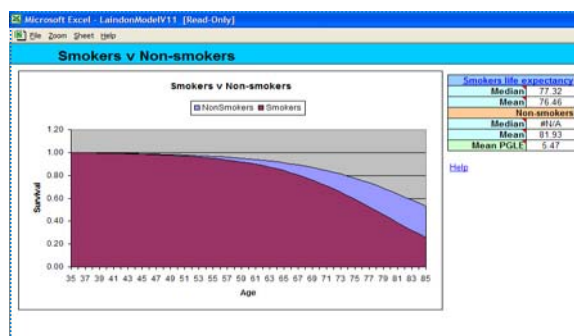
Cardiovascular disease is the main cause of death in the UK, accounting for over 245,000 deaths per year. This is attributable to approximately 1 out of 4 deaths in men and 1 out of 6 deaths in women. Cardiovascular related disease costs the UK health care system £1,750 million per year, and this figure is predicted to rise dramatically in the future. Prevention strategies, rather than treatment interventions, are much needed to stem this future epidemic.

Solution

This excel-based software utilises the Framingham risk equations along with risks of death and disease elucidated from UK mortality and health statistics. As a result, assessable risk factors include:

- Smoking Vs Non-smoking;
- Systolic blood pressure;
- Diastolic blood pressure;
- Diabetes;
- Left ventricular hypertrophy;
- Total cholesterol;
- High density lipoprotein; and
- Age

These risk factors are then utilised to project the probability of an individual's survival over a life-time. This software is a high-impact visual awareness tool which incorporates over 2000 fixed probabilities, and has a 96% model accuracy validated through a 20 year trial involving 1391 people in Whickham (*BMC Medical Informatics and Design Making*, 2004, 4: 6).



Solution (Cont.)

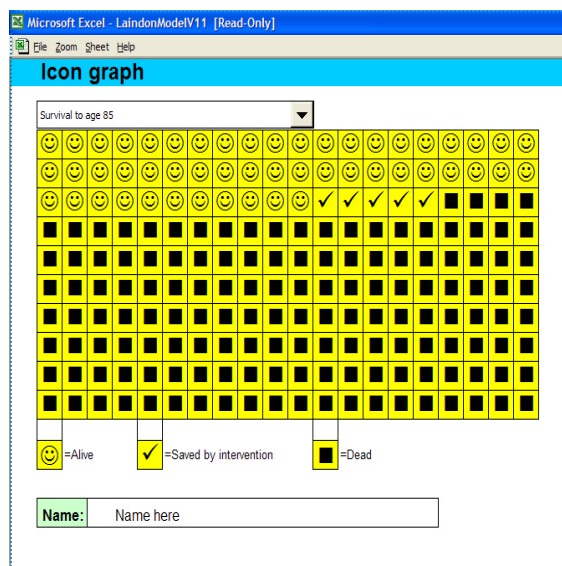
This unique decision-making and risk communication software is one of the only packages commercially available which assesses age in a real-time manner.

Thus, allowing the impact of risks and interventions to be visually represented over time.

About the Inventor

Dr Chris Martin, a practicing GP for nearly 15 years, now based at Laindon Health Centre, has actively been working on risk assessment software since 1991.

Developing the Laindon Survival Model over a 6 year period, Dr Martin is now focusing this interest further via a research PhD at the Centre for Health Informatics and Medical Education in London.



Licence Details

This software can be used immediately from any computer with Microsoft Excel and included is a value-added comprehensive instruction manual.

Health Enterprise East are seeking to market this software to a select group of GP surgeries and Healthcare Centres throughout the Eastern Region. For further details of how to trial or purchase this exciting software, please contact Stuart Thomson on:

Tel: +44 (0)1480 364175

Email: stuart.thomson@papworth.nhs.uk

Description of risks			
Female		Aged	35
BP	139 / 82	Smoker	
Total cholesterol =	5.3	HDL =	1.3
Without left ventricular hypertrophy			
Without diabetes			
Out of every 1000 people like you,		258	
will still be alive at the age of 85 untreated			
Out of every 1000 people like you,		23	
more will survive to the age of 85 if you take the actions discussed			
Out of every 1000 people like you,		948	
will still be alive in 20 years time without treatment			
Out of every 1000 people like you,		3 more will survive another 20 years if you take the actions discussed	
Out of every 1000 people like you,		16 will develop heart disease or stroke in the next 10 years without treatment	
Out of every 1000 people like you,		5 will avoid coronary heart disease in the next 10 years if you take the actions discussed	
Name: <input type="text" value="Name here"/>			

User Satisfaction

The Laindon Survival Model has been used effectively in GP surgeries and Health Centre's throughout Essex for three years.

"Patients have really responded to the opportunity to have their risk explained in a visual way."

Dr McFarlane, Basildon.

"I really like it, much better than using the charts. I particularly like the way you can alter their cholesterol and see how the risk changes."

Dr Hurter, Stifford Clays Health Centre.

"I like the way it shows the information in lots of different ways."

Dr Hopcroft, Laindon Health Centre.

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