Healthcare – at what cost?

Presentation to:
Society of Actuaries in Ireland
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Speaker: David Costello

Overall Disclaimer

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Agenda

- Brief Information about AWC
- Costs Differences from Around the World
- Medical Tourism
- Comparing Quality of Provision
- Medical Inflation
- Relative Healthcare Costs by Age
- We Are Not Alone – Worldwide Healthcare Dynamics
- Funding and Provision of Healthcare
- Some Ideas
- Take-Away Message

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Who Do I Work For?

One of the four buildings we use in the Park West campus.

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Some AWC Statistics

	Staff	Growth	GWP €Million	GWP Growth
2009	253	7.7%	180	10.4%
2010	370	46.2%	250	38.9%
2011	498	34.6%	302	20.8%
2012	700	40.6%	490	62.3%

2012 (a prediction) includes €100M of business written by Allianz France but administered by AWC

- AWC do not write business in Ireland => Virtually unknown here
- There are enough opportunities abroad for AWC to take advantage of

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Cost Differences from Around the World

In the next few slides we look at:

- Where AWC members are based
- Where AWC claim by claims count
- Where AWC claim by claims amount

We see that there is a huge variation in claims cost throughout the world.

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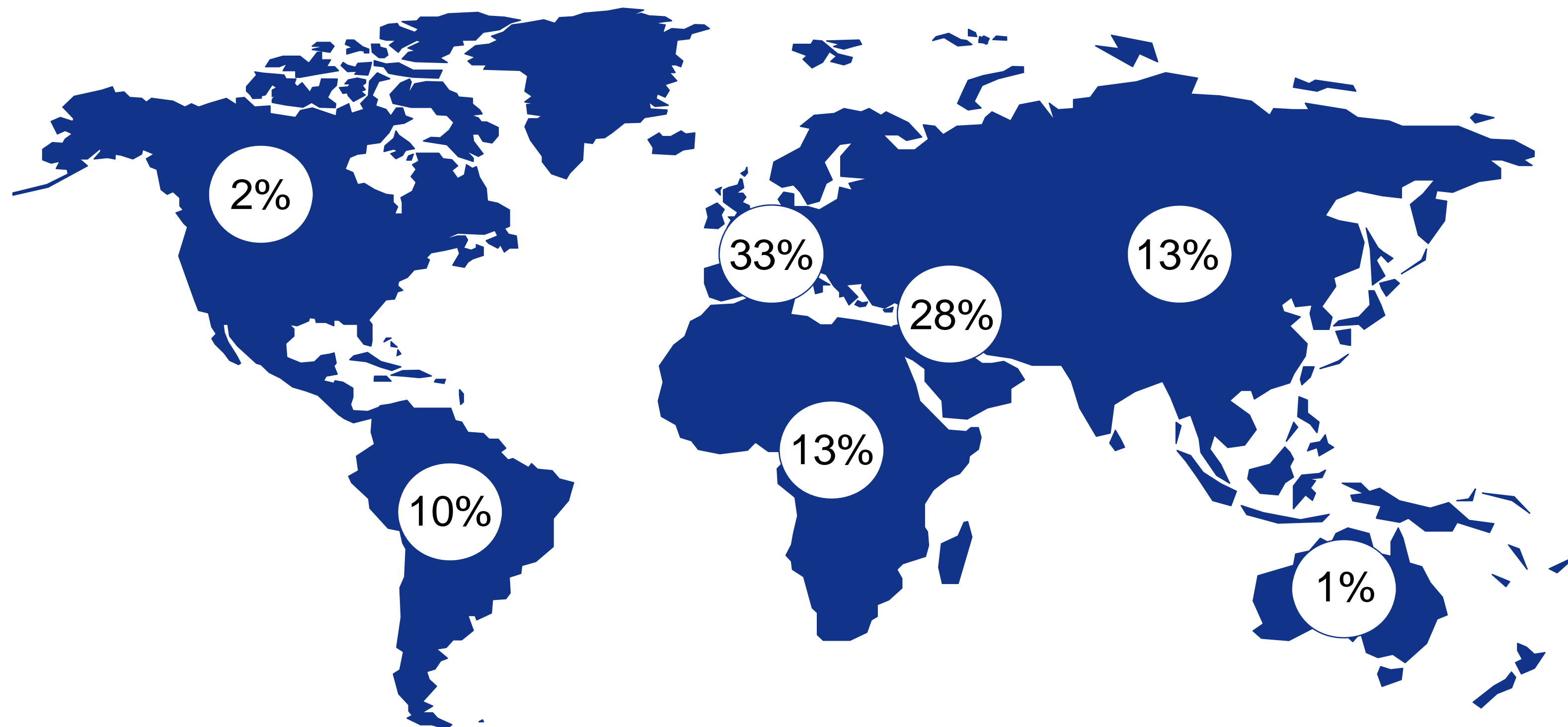
Where are AWC Insured Members Based?

- Figures reflect number of insured members by country of residence as at 31 March 2012



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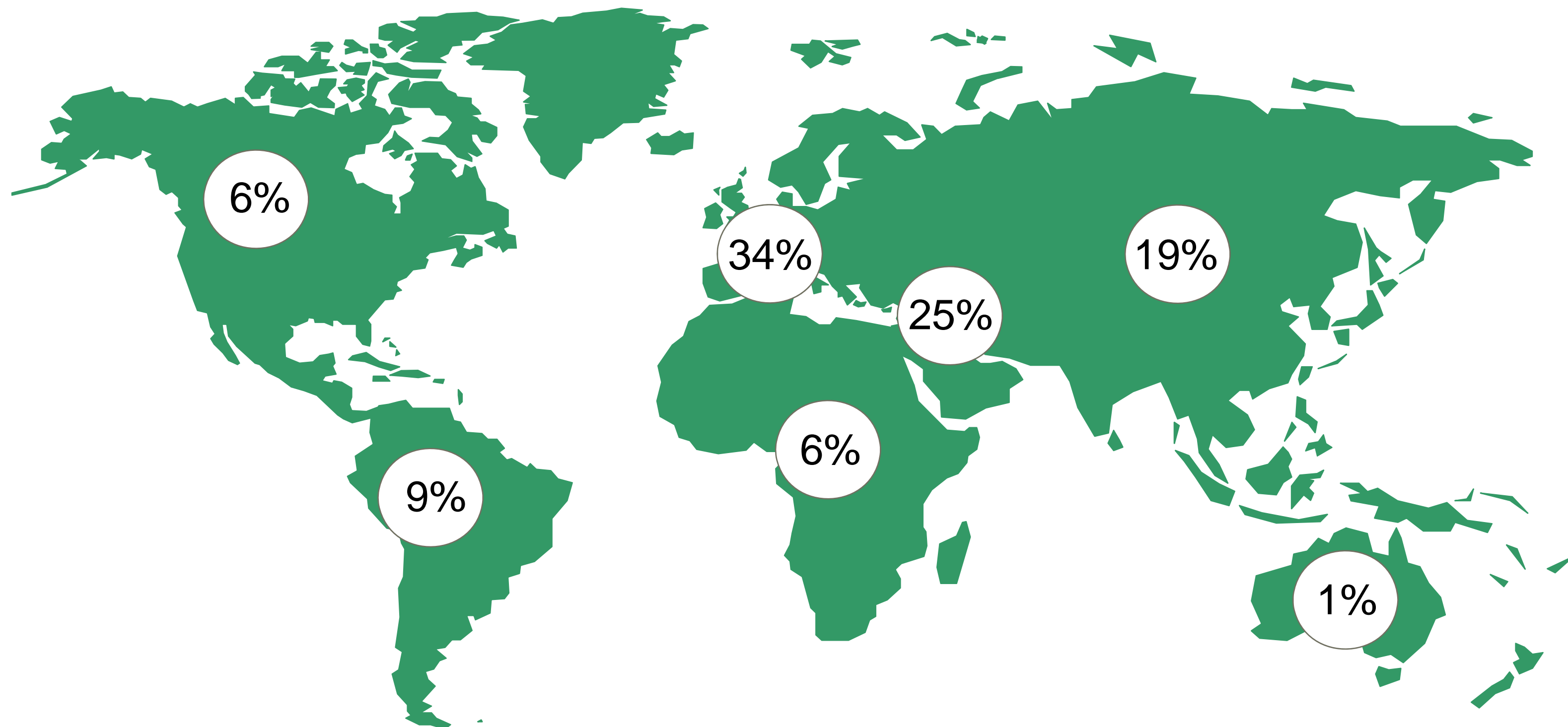
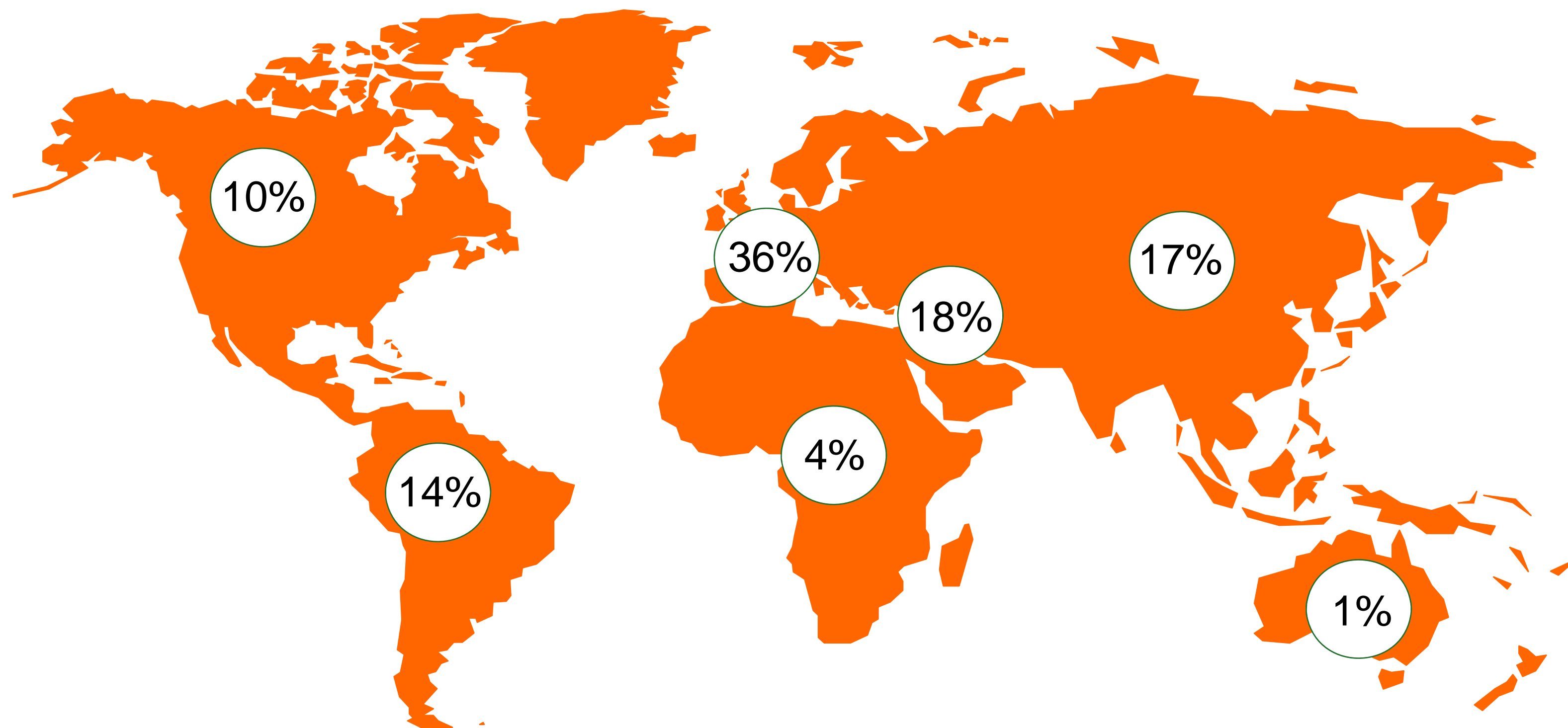
Where are AWC Members Being Treated?

- Figures reflect number of claimants by country of treatment: April 2011 – March 2012



How Much Have AWC Spent Over the Last Year?

- Figures reflect total paid claims to date by country of treatment: April 2011 – March 2012



Cost Comparisons Around the World

- There are large variations in cost around the world
- Even between neighbouring countries having similar social profiles
  - Switzerland is much more expensive than its neighbour Germany
  - USA is much more expensive than its neighbour Canada
  - Hong Kong much more expensive than mainland China
- This happens within countries as well – London versus rest of UK
- North Dakota and New York are cheaper than Florida and California
- Rome, Milan and Genoa dramatically more expensive than rest of Italy

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What is Medical Tourism?

Travelling to other countries to obtain medical, dental or surgical treatment at an affordable cost with reduced waiting times

Happens mostly from highly expensive and/or long waiting lists and/or insufficient public health service locations to emerging market countries offering sophisticated medical treatment in private facilities that are still significantly cheaper than the home country.

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Medical Tourism in Ireland

- Outbound this only takes place to a lesser extent
  - Dentists in Northern Ireland or Eastern Europe
- If the treatment is not insured and not an emergency
  - Trips for procedures that are self funded
  - However this is on the increase
- How many tourists come to Ireland for medical treatment?
  - How many pay privately for this treatment?

Turkey: *is home to more JCI-accredited healthcare facilities than any nation outside the US (34!). The medical system has plenty of doctors who are Western-trained and fluent in English. The Turkish government enforces strict quality standards in every area of medical technology, facilities and personnel. 300,000 medical tourists in 2011.*

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Conclusions on Cost Analysis

- Treatment costs vary considerably throughout the world
  - They vary between and within countries
- Limited local supply and high demand drives cost up
- Most treatment takes place where people live
  - However an increasing amount of treatment is abroad
- The level of comfort factor drives the cost up
  - Is this what the patient is looking for?

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Future Developments

- Increasingly we are moving towards specialization of care
- This can be in hospitals / regions / zones
- Some of these may not be in the country any more

“Tomorrow’s health consumer will not accept any traditional borders”

2011 Powerhouse Report

- Boundaries between international and domestic health insurers narrowing

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Comparing Quality of Provision

- Health Consumer Powerhouse have produced a EuroHealth Consumer Index 2012
  - Puts a measure on the quality of healthcare of a country

Comment on Ireland

"Ireland has an on-going problem with public perception of healthcare services being more negative than reality would warrant."

EuroHealth Consumer Index 2012

For more info please visit:
www.healthpowerhouse.com

Euro Health Consumer Index at a glance:

Winner: **Netherlands**
Runner-up: **Denmark**
Third place: **Iceland**

Sub-disciplines:

Patient rights and information:
Denmark

Accessibility:
Belgium, Luxembourg, Switzerland

Outcomes :
Norway, Sweden

Range and reach of services
Netherlands

Pharmaceuticals :
Denmark

- Good (3)
- Intermediary (2)
- Not-so-good (1)
- n.a. = data not available (1)
- n.ap. = not applicable (2)

Sub-discipline	Indicator
1. Patient rights and information	1.1 Healthcare law based on Patients' Rights
	1.2 Patient organisation involvement
	1.3 No-fault malpractice insurance
	1.4 Right to second opinion
	1.5 Access to own medical record
	1.6 Registry of bona fide doctors
	1.7 Web or 24/7 telephone HC info
	1.8 Cross-border care seeking freely allowed
	1.9 Provider catalogue with quality ranking
	1.10 EPR penetration
	1.11 On-line booking of appointments?
	1.12 e-prescriptions
2. Accessibility (waiting times for treatment)	2.1 Family doctor same day access
	2.2 Direct access to specialist
	2.3 Major elective surgery <90 days
	2.4 Cancer therapy < 21 days
	2.5 CT scan < 7days
3. Outcomes	3.1 Heart infarct case fatality
	3.2 Infant deaths
	3.3 Cancer deaths relative to incidence
	3.4 Preventable Years of Life Lost
	3.5 MRSA infections
	3.6 Caesarean sections
	3.7 Undiagnosed diabetes
	3.8 Depression
4. Prevention/ Range and reach of services provided	4.1 Equity of healthcare systems
	4.2 Cataract operations per 100 000 age 65+
	4.3 Infant 4-disease vaccination
	4.4 Kidney transplants per million pop.
	4.5 Dental care included in public healthcare?
	4.6 Rate of mammography
	4.7 Informal payments to doctors
	4.8 Smoking Prevention
	4.9 Long term care for the elderly
	4.10 % of dialysis done outside of clinic
5. Pharmaceuticals	5.1 Rx subsidy
	5.2 Layman-adapted pharmacopoeia?
	5.3 Novel cancer drugs deployment rate
	5.4 Access to new drugs (time to subsidy)
	5.5 Alzheimer drugs
	5.6 Schizophrenia drugs
	5.7 Awareness: Antibiotics against viruses?

Subdiscipline weighted scores, total score and rank:

	Albania	Austria	Belgium	Bulgaria	Croatia	Cyprus	Czech Republic	Denmark	Estonia	Finland	France	FYR Macedonia
1. Subdiscipline weighted score	102	141	117	88	146	112	107	175	141	131	136	112
2. Subdiscipline weighted score	217	217	233	133	133	183	183	167	167	133	167	183
3. Subdiscipline weighted score	113	188	213	138	200	188	225	250	175	250	238	113
4. Subdiscipline weighted score	70	111	140	64	128	88	117	140	123	152	140	82
5. Subdiscipline weighted score	33	81	81	33	48	57	62	90	48	86	86	38
Total score	535	737	783	456	655	627	694	822	653	752	766	527
Rank	29	11	5	33	17	20	15	2	18	10	8	30

	Germany	Greece	Hungary	Iceland	Ireland	Italy	Latvia	Lithuania	Luxembourg	Malta	Netherlands
1. Subdiscipline weighted score	117	88	122	146	107	131	107	131	112	88	170
2. Subdiscipline weighted score	200	200	167	183	150	133	117	183	233	183	200
3. Subdiscipline weighted score	200	175	138	263	238	213	138	138	250	163	263
4. Subdiscipline weighted score	111	88	99	146	134	93	88	99	134	128	163
5. Subdiscipline weighted score	76	67	52	62	86	52	43	33	62	48	76
Total score	704	617	577	799	714	623	491	585	791	609	872
Rank	14	22	28	3	13	21	31	26	4	26	1

	Norway	Poland	Portugal	Romania	Serbia	Slovakia	Slovenia	Spain	Sweden	Switzerland	United Kingdom
1. Subdiscipline weighted score	160	126	126	88	102	122	112	102	141	126	160
2. Subdiscipline weighted score	83	117	117	167	117	200	133	100	100	233	133
3. Subdiscipline weighted score	300	188	163	100	113	188	213	213	300	213	200
4. Subdiscipline weighted score	146	99	117	88	82	99	99	117	158	111	146
5. Subdiscipline weighted score	67	48	67	48	38	67	81	71	76	86	81
Total score	756	577	589	489	451	675	638	603	775	769	721
Rank	9	27	25	32	34	16	19	24	6	7	12

For more info please visit:
www.healthpowerhouse.com

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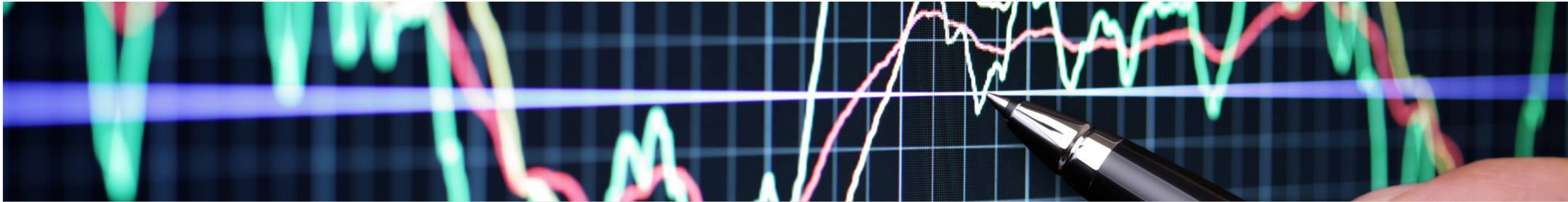

Comparing Healthcare Systems

- Health Consumer Powerhouse have produced a EuroHealth Consumer Index 2012

Netherlands Denmark Iceland

- Despite spending so much of GDP the United States regularly does not come up as the best country in the world for healthcare. Switzerland despite being very expensive place only comes seventh in Europe
- From this we conclude quality of healthcare varies considerably. It is not consistent throughout Europe

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Medical Inflation

- Are countries coming more into line or diverging?
- How consistent is this across countries?
- How bad is it really going to be in future?

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Medical Inflation (cont.)

- Medical inflation is consistently higher than general inflation
- Top 3 drivers from Towers Watson Survey 2012:
  - Higher costs due to new medical technology (52%)
  - Overuse of Care – too many services are recommended (50%)
  - Profit motives of providers (30%)

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Medical Inflation Around the World

	2009	2010	2011	2012
Asia Pacific	9.9%	9.6%	10.1%	10.2%
Europe	9.4%	9.0%	8.5%	8.1%
Latin America	11.6%	10.0%	10.4%	10.5%
Middle East / Africa	10.9%	9.8%	10.7%	10.0%
North America	10.8%	12.1%	11.4%	11.0%
Global	10.2%	9.6%	9.8%	9.6%

Towers Watson Survey. 2012 is a projection.

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Medical Inflation Around Europe

	Gross Medical Inflation			Net Medical Inflation		
	2010	2011	2012	2010	2011	2012
Belgium	6.50%	6.25%	6.00%	4.20%	3.09%	4.00%
Czech Republic	6.50%	5.75%	5.50%	5.04%	3.95%	3.50%
Denmark	7.00%	6.25%	6.50%	4.70%	3.05%	4.10%
France	6.00%	7.50%	6.17%	4.26%	5.35%	4.82%
Greece	7.56%	6.50%	5.00%	2.86%	3.62%	3.97%
Hungary	7.00%	6.75%	6.00%	2.15%	3.05%	3.00%
Ireland	8.00%	8.00%	8.00%	9.56%	6.88%	7.36%
Italy	7.50%	7.25%	7.00%	5.86%	4.64%	5.36%
Netherlands	7.00%	6.75%	6.00%	6.07%	4.25%	4.00%
Norway	9.50%	9.25%	9.00%	7.10%	7.59%	6.83%
Poland	8.50%	7.75%	6.50%	5.92%	3.72%	3.68%
Portugal	3.85%	7.89%	8.25%	2.46%	4.45%	6.14%
Romania	5.00%	8.50%	9.00%	-1.11%	2.13%	4.74%
Sweden	14.00%	13.50%	11.50%	12.09%	10.50%	9.00%
Turkey	7.84%	9.57%	9.29%	-0.73%	3.55%	2.42%
United Kingdom	8.50%	9.63%	9.88%	5.16%	5.11%	7.44%

We will spend more each year on healthcare as a % of our total income.

Towers Watson Survey. 2012 is a projection.

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Conclusions of Comparison of Countries

- We have seen large differences in the cost of healthcare
- There are also large differences in the quality of healthcare
- There are differences in the rate of increase of inflation
- This inconsistency between countries
  - Local Supply and Demand are really driving the cost

There are big opportunities to affect the system

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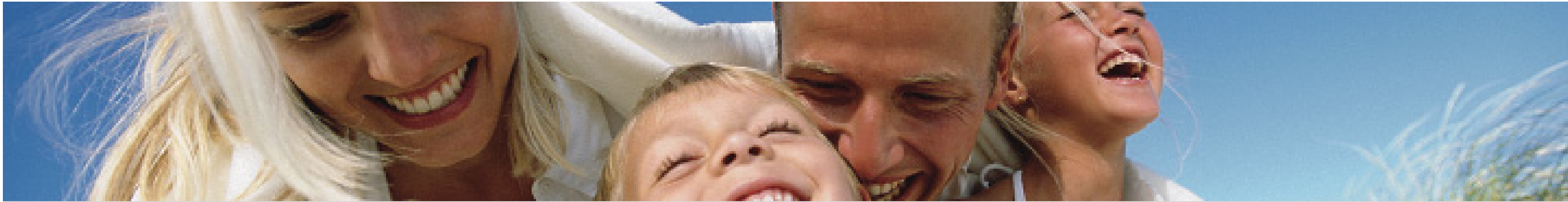
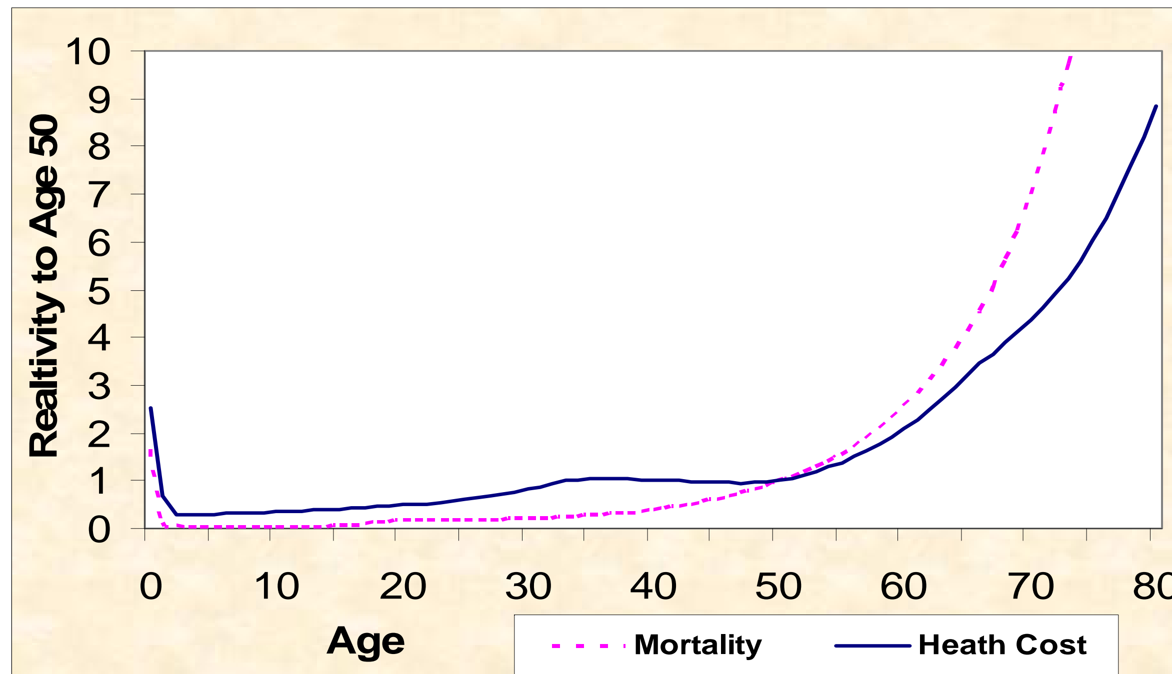


Relative Healthcare Costs by Age



- An eighty year old incurs the same level of cost as 9 fifty year olds
- A fifty year old incurs the same level of cost as 2 twenty year olds

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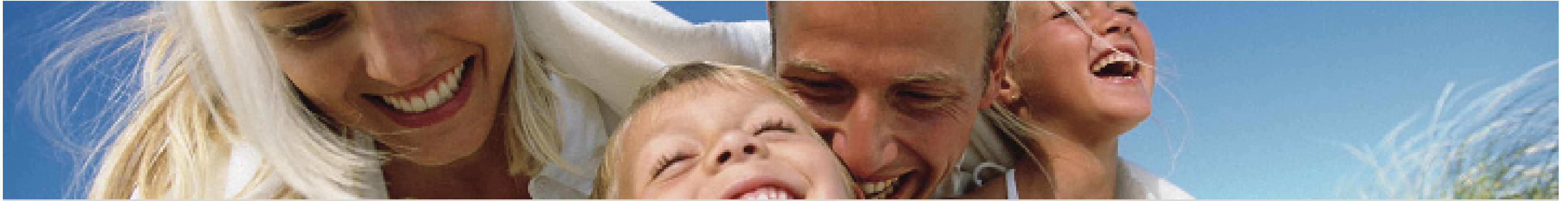

Relative Healthcare Costs by Age (cont.)

Conclusions

- Community Rating – there are large cross subsidies going on
- Ageing Population – we are living longer
  - The employed to retired ratio is falling – pensions issue
  - Now it's a healthcare provision issue as well
- Expectations – we do more things for more people later in life

The above items imply a significant gap in funding is coming

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We Are Not Alone – Worldwide Healthcare Dynamics

- Many countries have reviewed healthcare legislation recently
  - Obamacare in USA – some detail on the following slides
  - UK – Healthcare Reform Bill – Mar 2012
  - Spain have just changed their rules – Apr / Aug 2012
  - French healthcare reforms in 2011 due to drug safety
  - German healthcare reforms in Nov 2010
  - Netherlands had a complete overhaul in 2006
  - India changed their tax exemptions 2012
- Most / all countries are looking at this very subject we are grappling with

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ObamaCare

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Patient Protection and Affordable Care Act

- One of the most contentious issues in the US Presidential Election
- Issues
  - In 2009, over 50 million US residents had no health insurance
  - Americans spend 15.2% of their GDP on healthcare – highest in industrialised world
- Aims
  - Increase coverage while reducing the overall costs in the USA
- Highly contentious as much on ideological grounds as a cost-benefit basis

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ObamaCare – Some Detail

How will this Act increase coverage?

- Increase amount of poorer families that get Medicaid
- Incentivise individuals and employers to take out insurance
- Limit insurers discriminating on pre-existing conditions and gender

How will this Act reduce overall cost of healthcare?

- Limits the amount premium insurers can use for non-medical payments (e.g. advertising)
- Charges employers who provide members with very high premium policies
  - This aims to force insurers to provide more economical policies

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Digression into Funding and Provision

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Funding of Healthcare

Who pays for the cost of healthcare?

- You (the public) do
  - Direct
  - Government Taxes
  - Medical Insurance
- The latter two are just vehicles to spread the cost
- The sooner we get away from looking at trying to maximize individual balance accounts the better

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Who Pays the Cost of Healthcare Provision?

How effective are these vehicles of payment at:

- Cost transfer i.e. expense control
  - Direct has little to no overheads
  - Government is unknown but there are potential economies of scale
  - Insurance is known – generally about 10-20%
- Cost containment
  - Direct has no way of applying economies of scale – can pay less!!
  - Government can “set” the costs
  - Insurers will try to cost contain
- Cost re-distribution
  - Direct has zero transfer between “haves” and “have nots”
  - Insurers and Government cannot discriminate
- What strategies can be employed to improve the above?

Some Ideas – A Disclaimer

There now follows some ideas that I have come across in preparing for this presentation. None are original but they are the ones that I feel could be concentrated on to have success with controlling the healthcare costs without affecting service or improving it.

Exporting patients to Turkey clearly is not the answer to the issue. However looking at the successes and failures of other countries is.

There are many ideas and details to think about. No one idea nor approach will solve the issue. A multi-faceted integrated approach is required.

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Healthcare Costs – Some Ideas #1 – Fraud

- Improve Laws and Regulations on Healthcare Fraud
  - Penalties for where it is proven
- Set up of a small Healthcare Fraud Unit for detection
  - Studies show 6% of spend savings from full fraud detection
- More likely in an international environment.
- This is a once off improvement. As more of this is done the payback may be less than the spend. The savings here should be used to fund one of the other initiatives with “real” long term savings to curb the medical expense growth

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Fraud Stories – Patients

- An individual in the US broke his leg
- They then took out insurance through a European broker
- They waited two days for this to come through
- Then went to the hospital for treatment
- The doctor saw that the fracture was not recent

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Fraud Stories – Provider in Eastern Europe

- We noticed high levels of claims activity from a particular clinic
- The sheer volume of treatments carried out for the illnesses concerned led us to think of over-treatment in the extreme
- On investigation we found the majority of the claims were for two people, one of which is the Medical Director of the clinic concerned
- Full medical notes for all treatments have been requested. We are now concerned that the second member does not exist at all

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Healthcare Costs – Some Ideas #2 – Wellness

- Prevention is better than cure. Canada and Austria have good education systems surrounding healthcare
- Regular Checkups
  - This can reduce cost through spotting issues before they happen
  - Medical tax for not having an annual checkup? Or loss of tax benefit?
- Education
  - The issues with alcohol, cigarettes, obesity and general health
  - The inverse correlation between the price of drink and liver failure
- This results in cheaper costs with better population health

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Healthcare Costs – Some Ideas #3 – Technology

- Critical healthcare cost is people
  - It is much cheaper to invest in proven technologies
  - Get these working well
- Integrated patient system
  - As soon as tests are done they are put on the system for all
  - Eliminates re-tests and meetings where tests are not available
  - Cost of transferring notes is eliminated. This results in better patient care
- Billing and Scheduling systems
- Identity Cards are working well in some countries
- Technology as an enabler
  - Are there specialties in Ireland that are unique to Ireland that would cause medical tourists to come here?

Technology – Kenya, Uganda and Tanzania

Smart service delivery journey

Feeling unwell?

Visit your doctor

Present your smart card

Register your fingerprint

Fast access to your information in the card

Receive treatment and medication hassle free

Approve bills using your fingerprint

Out you walk to your recovery

How the Smart system works

Smart

Now that's Smart!

Some Ideas #4 – Out-patient Care

- Move the treatment from expensive in-patient settings to less expensive out-patient care
  - If there is no necessity to be in hospital, patients need alternatives
  - What treatments can be done at home? What support is required?
  - Desirable for the patient to be in a setting (home or not) best suited to their needs
- The Irish Healthcare system is not as advanced here as many other developed countries. Many patients remain in-patient due to lack of out-patient support
- Elderly people with confusion/Alzheimer's/dementia etc. do much better at home
- Can we use technology here? Mobile phone support as well as on-site visits?
  - Germany and Australia are quite advanced in Telemedicine – “Skype” Technology

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Some Ideas #5 – Co-Payments

- Currently:
  - The spend comes from the public
  - The buying is done mostly by government and insurers
  - There is a perceived lack of control
- Each individual tries to maximize their own benefit / cost
- Want:
  - Foster a culture of empowerment of public in healthcare
  - Public to challenge what is being done and the spend
  - Greater alignment between spend and receipt of benefits

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Some Ideas #5 – Co-Payments (cont.)

- Increase the alignment of provision of treatment with cost to patient
- This would make a huge difference
  - Private Sector – Patient has a vested interest not to be over-treated
  - Public Sector – Reduces the "no shows" for treatment. Billed anyway
  - Drugs – Patient may ask for generic drugs over the brand names
  - Awareness – Increases the public awareness to the real cost
- Exclude treatments linked to preventative care?
  - Need to consider that the poorest in society cannot pay

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Some Ideas #6 – Culture

- Need to have a simple healthcare policy that is widely known
  - Simple => small number of key issues to concentrate on
  - Everyone understands why things are being done
  - Use legislation to back this up
  - Clear communication to all on what is happening
- Education that the public bears the cost, not government nor insurers
- Education that the cost is going up significantly
- Education on health awareness
- Focus on "real" results and measures rather than substitutes – later
- Need to move away from "no change" vested interests – public pressure

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Insurance Changes in Ireland 2002 – 2004

- Ireland was faced with a compensation culture
- Increasing bodily injury claims and increasing insurance premiums
- Hitting the news on a very frequent basis
- Setting up of the Personal Injuries Assessment Board
- Book of Quantum must be considered in awards
- Affidavits
- Penalty Points System
- Advertising on Claims Fraud
- As at 2012 – While not disappeared, this has reduced as an issue
- This shows that in Ireland:

Culture can and has been changed but it is led from the top

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Some Further Thoughts on Culture

- Aims - what is it we are aiming for?
  - Universal Coverage versus General Health of Population
  - Adding more people to the system will not help access
- Public involvement
  - Aim is to be people-centered so need to involve Public
  - Create a link between needs assessment and delivery
- Measurement – how do we best measure success?
  - Provision of Treatment versus Health Outcomes by Spend
  - The latter rewards success and efficiency

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Some Further Thoughts on Culture (cont.)

- Reimbursement - By Treatment versus By Diagnosis (Germany)
  - Set amounts paid by Diagnosis – Provider manages costs
  - Will shortcuts be made to increase efficiency?
  - Current real issue is a lack of access to care
- Method of Treatment - There is an international trend of moving away from centres for treatments to integrated Practice Units for Medical Conditions.
  - In Ireland we have this for Strokes and Cardiac – what about other areas?
  - Proven to give better care as the cases work through the system
  - How many patients are needed for such a unit to be cost effective?

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Take-Away Message

- Medical costs are set to rise – medical inflation at 8%
  - The ageing population worsens the situation
  - Best healthcare is not always the most expensive
- There are some Win/Win initiatives that can be done
  - Technology, Wellness, Co-payments, Fraud, Out-patient Care
- However in my view setting Culture is the key to success
  - Need clear direction with a multi-faceted and integrated approach
- We can look elsewhere for comparisons however the question remains:

What type of healthcare system do you want to live with?

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Questions

Thank you for your attention.