RISK SHARING MODELS FOR
PRIVATE HEALTHCARE INSURANCE

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SYNOPSIS

The risk sharing models used by private healthcare insurers and their medical service providers are diverse and have resulted in a range of economic and patient outcomes across the healthcare value chain. They can involve the insurers and their suppliers, key stakeholders and medical service providers. They sometimes seek to mitigate downside risks and improve the likelihood of achieving benefits from the upside potential, leading to market development opportunities. The paper discusses the patient’s role, responsibilities and capability to make informed choices about their healthcare treatment options, as the patient’s behaviour can influence the likely outcomes. In some countries (e.g. UK), the rights of private healthcare insurance beneficiaries have been recognised in the regulatory concept of TCF (Treating Customers Fairly). ERM (Enterprise Risk Management) concepts and techniques can be used by private healthcare insurers and medical service providers, in conjunction with their suppliers and key stakeholders. A holistic view will be proposed, aligned with recent developments in ERM thinking and its applicability to the private healthcare arena.

1. INTRODUCTION

The risk sharing models used by private healthcare insurers and their medical service providers are diverse and have resulted in a range of economic and patient outcomes
across the healthcare value chain. They can involve the private healthcare insurers, their suppliers, key stakeholders and the medical service providers. They seek to mitigate downside risks and improve the likelihood of achieving benefits from the upside potential, leading to market development opportunities.

This paper focuses on the insured patient interface with the private healthcare insurer and their medical service providers. Risk sharing has been taken to include collaborative working between the private healthcare insurer, their medical service providers and the other key stakeholders. The insured claimant sits in between these two powerful groups and their actions, however well intentioned (in accordance with their contractual obligations), will impact upon the patient.

ERM (enterprise risk management) has been included as the unifying theme that can bring all the relevant parties together in a collaborative way to satisfy the insured patient’s interests and result in best practice patient outcomes. Risk sharing models between the insurers and their service providers can be embedded within the ERM framework.

TCF (treating customers fairly) addresses the regulatory theme (in the UK) for transparency in dealing with retail customers of private healthcare insurance products. Although many private healthcare insurers would say that TCF is something that they have always done, their customers may have a different perspective, especially if they have claimed under their policies. For example, claimants under moratorium underwriting policies may find out only at the point-of-claim that they have been victims of insurance mis-selling practices.

Although most of the data references are taken from the United Kingdom and the Republic of Ireland, most of the points are of generic application. Similar points could have been made for many of the EU member states and other developed countries.

2. SUMMARY
This paper addresses risk sharing models in the private healthcare insurance arena from the perspective of the insured patient interface with the insurer and their medical service providers.

We first consider private healthcare insurance in the UK and Ireland. The UK has a mixed economy with regard to public versus private healthcare delivery. PMI (private medical insurance) is primarily a supplementary VHI (voluntary health insurance) system and is an important component of the mixed healthcare economy that comprises public and private financing and public and private provision. Ireland operates a form of complementary PMI governed by the principles of open enrolment, community-rated premiums, minimum benefits and maximum waiting periods.
We next consider private healthcare insurance risk selection. European insurers are subject to solvency level requirements but are not subject to statutory price and product controls. The implications for selection of risk, premium rating and product definitions and terms are that in the majority of EU member states, with the exception of those where private healthcare insurance is offered as a direct substitute for NHS provision, insurers are able to flex the product components without statutory constraints. Price levels will be influenced by the premium rating methodology.

We then consider a value innovation theory model, which challenges the view that higher customer value inevitably involves higher costs. Instead, raising customer value comes from eliminating and reducing the factors insurers compete on and creates uncontested new market space by creating valued new factors. It can be characterised as the simultaneous pursuit of product/service differentiation and low cost. Risk sharing innovations between insurers and the service providers can help increase customer value and lead to a sustainable private healthcare insurance business model.

For value innovators, a management tool to help achieve the streamlining and cost innovations required will be to develop a virtual value chain, which can be used to re-configure the physical value chain to meet customer value needs in the increasingly digital world of healthcare insurance services. The underlying concept was that every business competes in two worlds, the physical world (where we can see and touch the products and services) and the virtual world (where we have only digital information) and a new marketspace for customers.

Finally, we introduce the need for both ERM and TCF, which can provide the unifying suite of holistic business processes that can be applied to almost any enterprise or organisation, including private healthcare insurers, their medical service providers and the key stakeholders (e.g., public hospitals, regulators, Government).

3. PRIVATE MEDICAL INSURANCE IN THE UK
The UK has a mixed economy with regard to public versus private healthcare delivery. PMI (private medical insurance) is primarily a supplementary VHI (voluntary health insurance) system and is an important component of the mixed healthcare economy that comprises public and private financing and public and private provision. The flow of funds between the public and private healthcare sectors is illustrated below.\(^{15}\)

PMI provides cover for the costs of treatment in respect of acute medical episodes. There are three key markets:

a. **Individuals** – community rated, medically underwritten (e.g., full medical underwriting, moratorium underwriting) and excluding pre-existing medical conditions.
b. **Small Company Paid** – partially experience rated (sometimes via rating pools), generally medically underwritten and excluding pre-existing medical conditions.

c. **Large Company Paid** – experience rated and not medically underwritten.

**Medical Underwriting and Risk Rating**

PMI insurers generally use medical underwriting and risk rating to set the office premium rates. Full medical underwriting requires a declaration of the applicant’s medical history. The insurer then determines, at the point-of-sale, the medical conditions that will be excluded. Moratorium underwriting, on the other hand, shifts the underwriting process to the point of claim. With moratorium underwriting, pre-existing conditions (and directly related conditions) during the last 5 years are
excluded for 2 years, following which they are covered provided that the insured has been symptom free.

**Group Experience Rating**
Groups with 50+ members are generally experience rated, with credibility being given to their own claims experience, the larger the group the greater the credibility factor. Experience rating in sometimes thought of as a form of community rating, as all employees within the group will be accorded the same risk value. However, it is also a form of risk rating, as it is the group sponsor who pays the premium and the group premiums partially reflect past actual claims experience of the group.

**PMI as a supplementary coverage to the NHS**
As PMI is a supplementary coverage, the insured always has the option to try and access the NHS and receive public treatment, provided that they are prepared to wait. If the insured decides to use their PMI cover, they still have to deal with NHS business processes. In practice, the insured will need to consult their GP, who will refer them to a private consultant. Some insurers require the insured to contact them at the time referral to ensure that the consultant is on their approved list, as well as prior to booking any acute treatment.

**Preferred Provider Networks**
The larger PMI insurers in the UK operate preferred provider networks, whereby the insured claimants are directed towards in-network medical service providers. Although private hospital service providers operate ‘rack rates’ for their hospital beds and ancillary patient services, their actual charge levels are the outcome of confidential negotiations between insurers and providers, conducted on a bilateral basis.

The preferred provider network agreements for a large PMI insurer (in 2000) was the subject of the Competition Commission investigation. The matter investigated was the proposed merger of BUPA Hospitals with Community Hospitals Group. It was concluded that the actual charges set reflected the bargaining strengths and abilities of the two sides, rather than the underlying structure of supply costs. The larger PMI insurers, due to economies of scale and medical expertise, had a competitive advantage over others when it came to negotiating medical service provider prices.\(^7\)

The Competition Commission concluded that the preferred provider discounts achievable were sometimes 25% to 35% off the ‘rack rates’ for non-network business, and even higher for network business. Furthermore, BUPA Hospitals had charged the BUPA insurance business significantly less than it charged smaller PMI insurers. It concluded that it was far from obvious that the lower BUPA Hospitals charges to the BUPA insurance business were fully justified on a volume basis or because of significant cost savings.\(^7\)
There are also preferred provider agreements with medical specialists (e.g. NHS Consultants), although these are less transparent than those for the private hospitals. According to Chapman, \(^5\) “The relationship between private practitioners and insurers is a messy one, not least because of the lack of clarity surrounding fees”.

While insurers usually have direct settlement arrangements with private patient units in hospitals, the insured is generally responsible for meeting the medical specialist fee and then seeking reimbursement from their PMI insurer. The medical expenses that will be reimbursed for medical procedures appear to differ between the PMI insurers, who generally publish their fee schedules to their insured customers. One exception seems to be AXA PPP, who apparently reimburses medical specialist fees on a usual and customary fee level basis.

Models of integrated healthcare similar to Preferred Provider Organisations (PPOs) do not exist within most EU member states. Insurers may work with preferred provider networks to support group contracts. But it can prove hard to restrict provider choice for voluntary as opposed to employer paid (mandatory) cover. Risk sharing is not a feature of the insurer-provider market but is developing in the NHS with evidence of performance-related financing and new guidelines for the operation of NHS Foundation Trust hospitals. Low market penetration rates and consumer attitudes to a voluntary purchase, which restricts choice, present challenges to integrated healthcare and risk sharing.

4. PRIVATE MEDICAL INSURANCE IN IRELAND

The UK model of PMI is positioned as supplementary coverage to the NHS with limited complementary benefits. This contrasts with other EU member states who provide more substantial complementary coverage to the public health service and utilise risk-equalisation to underpin the complementary PMI system. Ireland operates a form of complementary PMI\(^{17}\) governed by the principles of open enrolment, community-rated premiums, minimum benefits, maximum waiting periods (12 months for any treatment, up to 10 years for pre-existing conditions) and lifetime cover. The concept of lifetime community rating, introduced by The Irish Health Insurance (Amendment) Act of 2001, also allows insurers to apply a late entry premium loading for those who defer purchasing private healthcare insurance until they are age 35 or more.

Insurers are subject to a risk equalisation scheme which was intended to be applied for the first time in 2005, but has become the subject of a protracted dispute between the market entrants (since de-regulation), the incumbents (prior to de-regulation) and the Government. The Society of Actuaries in Ireland set up a working party to review the actuarial position on the risk equalisation scheme. The working party concluded that risk equalisation in some form is a logical concomitant
to a voluntary health insurance scheme based on community rating, open enrolment and lifetime cover. Their recommended position was that a risk equalisation scheme based on age and gender should be introduced, preferably on a prospective basis. They added that “this would go some way towards sharing of the risk profiles between insurers but would also favour new entrants to the market and would avoid the ambiguities and complexities of avoiding a utilisation parameter in the scheme”.

VHI Healthcare, established in 1957 as VHIB (Voluntary Health Insurance Board) a non-profit, autonomous body dominated the Irish market until 1994 when a limited element of competition was introduced. The third non-life insurance directive triggered this change and the 1996 market entry of BUPA Ireland. Insurers contract with selected providers, utilize private beds in public hospitals and pay hospitals with a fixed rate per diem. Doctors are able to work in both the public and private sectors. The use of private beds in public hospitals has been cited as a cost to the public sector where private bed costs exceeded insurer per diem rates. This was identified by the Government as a concern in 1999 and proposed as an area for gradual, economic reform.

The Health Insurance Act of 1994 defined the foundations for PMI community rating (age, gender and prior utilization), open enrolment and lifetime cover (Department of Health and Children, 1999). A risk equalisation scheme was also allowed in order to support the use of community rating via risk equalization transfers where there were material differences in insurer risk profiles. New insurers were able to exempt themselves from the risk equalisation scheme during the first 3 years of trading. However, ultimately the intention was to support an equitable distribution of risk amongst insurers and promote a stable, sustainable community rating insurance offer to individuals, particularly the old and those with pre-existing conditions.

The legislation was also intended to give the regulator considerable scope in the assessment of risk profiles and the calculation and transfer of equalization funds between insurers.

Risk equalisation was strongly supported by VHI Healthcare as a proposal and at the implementation stage. BUPA Ireland identified the risk equalisation scheme as a potential mechanism to maintain the existing VHI monopoly and undermine the stability of the market. We understand that BUPA made a formal legal challenge on the grounds that the risk equalisation scheme is illegal under the third non-life insurance directive.

5. PRIVATE HEALTHCARE INSURANCE RISK SELECTION
Consumer access to private healthcare insurance is affected by insurers’ ability to select risks, apply exclusions to cover and set their own premium rating bases.
European insurers are subject to solvency level requirements but are not subject to statutory price and product controls.\textsuperscript{17}

The implications for selection of risk, premium rating and product definitions and terms are that in the majority of EU states, with the exception of those where private healthcare insurance is offered as a direct substitute for NHS provision, insurers are able to flex the product components without statutory constraints. Price levels will be influenced by the premium rating methodology e.g. community, experience or risk rating. Specific consumer risk groups may be identified as representing higher or lower risk profiles e.g. older people, women (adult, child-bearing ages) and those with often multiple, chronic conditions. Individuals may also be disadvantaged over members of employer or other collective schemes due to higher prices and more stringent underwriting terms.

Insurers’ rating-models are often influenced by the need to minimize the affects of adverse-selection. Adverse selection occurs due to the consumer’s ability to exploit the information asymmetry that exists between their actual risk-profile and the insurers’ knowledge and ability to determine that risk.\textsuperscript{1}

Charging a common or community-rated premium is one approach which tries to encourage universal coverage and dilute the effects of adverse selection. The risk inherent in this approach is that younger and lower-risk individuals effectively subsidize the higher-risk groups and may opt-out of the PMI market. The net effect is to destabilize the market as lower-risk individuals opt-out, the subsidy effect is weakened and insurers compensate for the loss of the lower-risk individuals by increasing premium rate levels. The effect is a spiral of increasing claims incidence which can lead to the closure of schemes and market harm.

Conversely, insurers may seek to apply risk-selection to recruit low-risk consumers with a rate which undercuts the artificially high community-rated premium. For example, a successful cherry-picking strategy adopted by a new market entrant may destabilize the incumbent insurer’s portfolio by increasing its concentration of higher-risk individuals by targetting lower-risk switch-business from the incumbent at the same time as new-business ‘non-consumers to lower-priced, risk-selecting products. In extreme applications of risk-selection insurers may decline to insure higher-risk individuals.

Adverse and risk-selection are significant issues where Governments seek to regulate a market based on community-rated premiums in order to promote equality and access to health insurance coverage. Risk-rating, where insurers adjust premium rates according to the individual consumer’s level of risk, combined with policies to reduce the incentive to cherry pick has been adopted by some EU Governments, most notably the Republic of Ireland, in order to counter both adverse and risk-selection.
Risk rating is a difficult concept to apply due to often simplistic rating criteria and proxies available to insurers to predict morbidity levels amongst prospective customers. There is also a socio-economic gradient which underpins actual morbidity experience which can serve to make premium rates disproportionately expensive to these groups in the population. The weight afforded to this issue is related to the extent of core statutory provision e.g. health care sectors, service menu, compared with those types of health and care services often at the margins of statutory provision in EU member states e.g. typically, dental, ophthalmic and, in some markets such as the UK, long-term care.

It is also necessary to convert both incumbent and new market entrant insurance providers to the regulatory framework and mechanisms used to manage risk selectivity at the point-of-sale. The political risk, as evidenced in the case of the Republic of Ireland, is that the major disparity between portfolio mix, between the incumbent and the new market entrant, creates a significant challenge to Government and the regulators to implement risk-equalisation systems.

6. INTERNATIONAL RISK SHARING SYSTEMS

Research into risk adjustment systems across the developed world was carried out by Van der Venn et al. in the late 1990s. A summary of the results (for 1999) in respect of 10 countries with risk adjustment funds (excluding the United States) is shown below.23

Australia has a risk equalisation system operated by its health regulatory authority.10 There is relatively significant variation in the institutional set up between each of these countries. Local conditions are therefore important in establishing the ultimate shape and form of such a mechanism.

The Netherlands have a very well developed risk equalisation system initiated in 1991. It incorporates both risk and income cross subsidies.10 The various inter-relationships are shown below.
<table>
<thead>
<tr>
<th>Risk Adjustment Systems in 10 countries</th>
<th>Belgium</th>
<th>Columbia</th>
<th>Czech Republic</th>
<th>Germany</th>
<th>Ireland</th>
<th>Israel</th>
<th>Netherlands</th>
<th>Russia</th>
<th>Switzerland</th>
<th>United Kingdom</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk adjusters</td>
<td>age/gender, region, disability, unemployment, mortality</td>
<td>age/gender</td>
<td>age</td>
<td>age/gender, hospitalisation both weighted with current expenses</td>
<td>age</td>
<td>age/gender, region, disability</td>
<td>many different regional experiments</td>
<td>age/gender, region</td>
<td>age/gender, prior utilisation, local factors</td>
<td></td>
</tr>
<tr>
<td>Restrictions on premium contributions</td>
<td>Community rating, Zero premium contribution</td>
<td>Community rating, Zero premium contribution</td>
<td>Community rating, Zero premium contribution</td>
<td>Community rating, Zero premium contribution</td>
<td>Community rating, Zero premium contribution</td>
<td>Community rating, Zero premium contribution</td>
<td>Community rating, Zero premium contribution</td>
<td>Community rating per region, Zero premium contribution</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk-sharing</td>
<td>Proportional risk sharing, at least 85%</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>See risk adjusters above</td>
<td>Severe diseases (6% of expenses)</td>
<td>Outlier risk sharing and proportional risk sharing</td>
<td>Many different regional experiments</td>
<td>no</td>
<td>Outlier risk sharing</td>
</tr>
<tr>
<td>Number of Health Plans</td>
<td>6</td>
<td>24</td>
<td>26</td>
<td>1,200</td>
<td>2 (until 1997:1)</td>
<td>4</td>
<td>25</td>
<td>100s</td>
<td>166</td>
<td>2,500 (early 1996)</td>
</tr>
<tr>
<td>Modality A or B</td>
<td>A</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>B</td>
</tr>
<tr>
<td>Open entry for new health plans? (subject to certain conditions)</td>
<td>no</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>Open enrolment every month/year</td>
<td>quarter</td>
<td>year</td>
<td>year</td>
<td>year</td>
<td>year</td>
<td>half year</td>
<td>year</td>
<td>year</td>
<td>half year</td>
<td>no open enrolment guarantee</td>
</tr>
<tr>
<td>Is long-term care included in benefits package</td>
<td>yes</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
</tr>
<tr>
<td>Mandatory or voluntary membership</td>
<td>M</td>
<td>V</td>
<td>M</td>
<td>M</td>
<td>V</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>V</td>
</tr>
</tbody>
</table>
The Committee of Enquiry in 2002 also proposed a possible institutional framework for a central risk equalisation fund for South Africa.

7. VALUE INNOVATION MODEL
The European Health Observatory reported in 2000 that an estimated 45% of the Irish population had some form of complementary or supplementary PMI cover. This contrasts with UK Laing and Buisson industry survey figures quoted by the European Health Observatory which show a decrease from 11.6% (1997) to 11.2% (2003). Although the company paid market has maintained its market attractiveness, the individual purchase market has become less attractive. There has
been a decline amongst individual UK consumers, from 1.38 million (1997) to 1.16 million (2003). The Irish private healthcare insurance model of value innovation based on lifetime community rating (combined with other factors, such as including utilisation of public sector provider services and tax concessions for employee sponsored schemes) has helped to grow the Irish private healthcare insurance market for both companies and individuals. There remains an outstanding challenge for value innovation regarding insurer/provider relationships in both the UK and Ireland.

Maximising customer value creation requires insurers and providers to utilise new concepts of value innovation. Value innovation theory challenges the view that higher customer value inevitably involves higher costs. Instead, raising customer value comes from eliminating and reducing the factors insurers compete on and creates uncontested new market space or blue oceans, by creating valued new factors. It can be characterised as the simultaneous pursuit of product/service differentiation and low cost. Risk sharing innovations between insurers and the service providers can help increase customer value and lead to a sustainable private health insurance business model.

Cost savings are made by eliminating and reducing the factors insurers compete on in the contested, red oceans. Buyer value is lifted by raising and creating elements insurers have never offered. Over time, costs are reduced as scale economies kick in from the higher sales that superior value generates. The 4-actions framework provides a management tool for reconstructing the customer value elements into a coherent strategic value curve and then helping to generate a new value proposition.
Eliminate
Management needs to eliminate factors that other insurers have long competed on. Often these are taken for granted even though they no longer have any value or may even detract from value. Sometimes there has been a fundamental shift in what customers value, but this change is not acted upon. This is generally a result of insurers being too focused on benchmarking themselves on one another and either failing to perceive the fundamental change in customer values or not having the confidence or the courage to act alone.

Reduce
In this scenario, the company over-serves its customers, thereby increasing their cost structure for no gain, as far as customer value is concerned. Management needs to determine whether their products have been over-designed or over-engineered in their race to match and beat the competition. These over-designed and over-engineered factors need to be reduced well below the industry standard.

Raise
The management team needs to uncover and eliminate the compromises that the company, along with its traditional competitors in the industry, has in the past forced its customers to make. These compromises to customer wants and values need to be addressed. The factors for the relevant products and services need to be increased to well above the industry standard.

Create
The management team needs to discover entirely new sources of value for customers and to create customer demand for these new sources of value. It needs to shift the strategic pricing of the industry and design its costs structure to be aligned with its strategic pricing. In essence, the company needs to create factors which the industry has never previously offered.

Basic Principles
There are some basic principles that drive the successful formulation and execution of value innovation and blue ocean strategy. Each of these principles can contribute to reducing the effects of an associated enterprise risk management factor, as indicated below.¹⁹

The operational risk enterprise risk management implications of value innovation and blue ocean strategy are outside the scope of this paper. Readers are directed to relevant papers on insurance companies,²⁰ on general insurance²² and on life assurance.¹²
Case Study – Private Medical Insurance
Consider the case of private medical insurance in the UK, which has its origins in the 19th century based on reimbursing the expenses incurred with using voluntary hospitals and public hospitals. Although they were then expected, following the introduction of the NHS in 1948, to decline and become redundant, they have instead grown from strength to strength, especially for company paid benefits for employees and their dependents. The future prospects, however, depend on integration with NHS funded healthcare and on treating customers fairly. The original value proposition has become less relevant and they need to develop a new value curve.19
The new value curve indicated by the above analysis for a ‘clearsky healthcare insurance’ product is shown above, in the form of a proposed new strategy canvas.

8. VIRTUAL VALUE CHAIN MODEL

For value innovators, a management tool to help achieve the streamlining and cost innovations required will be to review the ‘virtual value chains’ that should be developed. The virtual value chain model can be used to re-configure the physical value chain to meet customer value needs in the increasingly digital world of insurance and financial services.

According to Rayport and Sviokla, the virtual value chain model provides a management tool to help configure a strategic partnerships business model in the market space world of digital assets.21

The underlying concept was that every business competes in two worlds, the physical world (where we can see and touch the products and services) and the virtual world (where we have only digital information). In the virtual world we have
marketspace, in contrast to the marketplace of the physical world. Marketspace services and products are unique to the virtual world, as the value-adding steps are performed through and with information. The creation of new marketspace requires the creation of a new value curve for customers and a different pattern of strategic thinking, which has subsequently lead to the concept of a blue ocean strategy. There is also the Law of Digital Assets, whereby digital assets, unlike physical assets, are not used up in their consumption and so blue ocean businesses can harvest them over and over again, with consequent economies of scale.²¹

Case Study – Virtual Value Chain for Telemedicine
Consider the example, in the world of digital assets, a virtual value chain that embraces telemedicine services (e.g., remote tele-monitoring, tele-assistance, tele-emergency, tele-consultations, tele-cardiology, tele-homecare), as illustrated below.
Telemedicine is a growing phenomenon in many countries and brings with it the prospect of remote monitoring and efficient healthcare provider response, almost irrespective of the patient’s physical location and that of the on-line healthcare provider. It also facilitates risk sharing between insurers and their medical service providers, via the sharing of digital health data.

According to Faghihy,\(^\text{13}\) digital health delivered via telemedicine services has the potential to transform the value chain from a physical to a virtual role, with digital health at its core. Whereas the physical value chain has telemedicine providing a peripheral support activity, the virtual value chain could show telemedicine services directly linked to the medical service providers and driving healthcare delivery through its own physical and virtual value chains.

**Telemedicine Services via the classic Physical Value Chain**

Telemedicine services, however, collect and disseminate a large volume of electronic clinical and administrative data about the patient and their history. This electronic data can be harvested to build and maintain a virtual value chain for telemedicine services. In this virtual world, the telemedicine services provider moves centre stage to the core of the telemedicine business processes.\(^\text{13}\)
Telemedicine Service Provider – a Potential Role

Telemedicine Services via an innovative Virtual Value Chain

User Feedback
Services R&D, Technology, System Development

User & Contract Management
General Administration

System Procurement (HW & SW Equipment, Telecommunication Infrastructures)

Human Resource Management

SUPPORT ACTIVITIES

INBOUND LOGISTIC
Reception, storage and internal distribution of the system (equipment), to be integrated for the service

OPERATIONS
Server Administration & Maintenance, Service Deployment & Software Maintenance, Hosting

OUTBOUND LOGISTIC
Service Integration & Networking

MARKETING AND SALES
Business Development

AFTER SALES SERVICES
Technical Support, Customer Care

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The virtual value chain can be used to provide comprehensive electronic health data (subject to data protection) to the insurer about the patient’s health status, their electronic patient record and their medical history. This data, as part of the virtual value chain process, can be transformed into a body of knowledge that the insurer can leverage to build new services and reach out to empower the consumer. New services and knowledge-based tools can empower the patient giving them the tools and capability to make informed choices about their healthcare treatment options. The patient’s behaviour is likely to influence the likely patient outcomes and so needs to be anticipated.

9. ENTERPRISE RISK MANAGEMENT

ERM (enterprise risk management) principles and methodologies can be interpreted as a unifying suite of holistic business processes that can be applied to almost any enterprise or organisation. Applications can include private healthcare insurers and medical service providers, whether in the public or private sectors.

The COSO (The Committee of Sponsoring Organisations of the Treadway Commission) framework defines ERM as:

“Enterprise risk management is a process, effected by an entity’s board of directors, management and other personnel, applied in strategy setting and across the enterprise, designed to identify potential events that may affect the entity, and manage risk to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives”.

The COSO ERM matrix is 3-dimensional, as illustrated below.
COSO has provided a comprehensive suite of application techniques which can support private healthcare insurers to work together with the medical services providers in their quest for effective ERM and risk sharing for the benefit of insured patients and their dependants. These techniques cover the ERM issues associated with the internal environment, objective setting, event identification, risk assessment, risk response, control activities, information, communication and monitoring.

According to Chapman, the ERM framework is essentially one of risk and opportunity management, as illustrated below.

The ERM framework encompasses the issues associated with corporate governance, internal controls and implementation. The risk management processes play a central role and are likely to occupy most of the human resource time. Finally, management needs to give due attention to the risks internal to the enterprise and those emanating from its environment.
According to Chapman,\(^6\) the 6 stages of risk management processes are indicated below.

Due consideration also needs to be given to internal and external sources of risk.
In the medical services arena, effective ERM should encompass information exchange with multiple disciplines in the hospital in order to capitalise on broader perspectives for correction and improvement. For example, the key ERM factors associated with patient satisfaction might include clinical competency of staff, physical access and environment, patient identification procedures, systems for medication administration. Patient complaints and concerns represent not just exposure to loss, but rather they also present opportunities to improve satisfaction and to increase market share through repeat encounters, increased visits and the hospital’s good reputation in the community.³

Braz et al.³ document the role of management and business unit committees in a medical services provider unit. They consider the example of an operating suite and the importance of cross functional representatives and the variety of associated players, materials, resources, relationships and transactions involved in delivery of care. COSO is introduced as a generic framework which the medical services providers need to consider as an input to their own ERM development program.

According to Braz, the health care risk manager is not only the front line manager, but also nurtures alliances with other departments to develop a broader understanding of ERM and then adjusts the risk management policy in response to the identified ERM issues.³

10. TREATING CUSTOMERS FAIRLY
Several working groups of the Institute of Actuaries, under the General Insurance Board, the Life Board and the Social Policy Board, have taken a keen interest in TCF developments over the years. The GIRO group of the General Insurance Board published a TCF paper in for the GIRO 2006 conference.² The Life Board has also been active, via seminars, papers to the Life Convention 2006 and a forthcoming paper for the Staple Inn Actuarial Society.

TCF has a particular relevance for private healthcare insurers and their medical service providers, in that it is extremely important for potential and existing customers to understanding the nature of their insurance contract and the roles and obligations of the potentially interested parties. Risk sharing between the insurers and their service providers will impact the insured patient, who will need to be dealt with in accordance with best practice and TCF principles. TCF will also embrace risk rating, medical underwriting and moratorium underwriting practices, where there is scope for confusion at the point-of-sale and disputes at the point-of-claim.

TCF (Treating Customers Fairly) has been a major theme for the FSA (Financial services Authority) throughout the past decade. The FSA desired outcomes on TCF for retail market customers were summarised in 2004, via the following graphic.¹⁴
From the insured patient perspective, TCF raises some interesting issues.

1. The ‘individual purchase customer’ viewpoint is essentially that they are making a long-term (maybe lifetime) purchasing decision, even if their policy wording states that it is short-term insurance business. Their perceptions are guided by the point-of-sale marketing literature, which generally indicates long-term peace of mind and lifetime renewable policies, which can lead to potential mis-selling issues in later life when ‘individual purchase customers’ can no longer afford to renew their short-term policy at their then attained age. Furthermore, the renewal terms and conditions may be different from those used at the point-of-sale. There may also be issues with the “care not cash” elements, as the care benefits implied by the marketing literature may be illusory when reviewing the legal policy wording.

2. The ‘group purchase customer’ is in a slightly different position, in that they are primarily acting on behalf of a group (e.g. the employer) rather than on behalf of the group members (e.g. the employees). The group decision maker may be more concerned with short-term business issues (e.g. group contract price for the next underwriting period) than with the long-term implications for their group members. Nevertheless, some would argue that group decision makers have a moral
obligation to protect the long-term interests of their group members. There may also be a conflict between group and individual perceptions on TCF.

3. TCF can also be a controversial subject for long-term health insurers. The ‘individual purchase customer’ viewpoint is guided by the point-of-sale marketing literature, which can lead to mis-selling issues and problems at time of claim. For example, for LTC insurance the definition of disability is related to the inability to perform ADLs (activities of daily living), which are not an exact science and so there may be a mismatch between ‘the spirit of the contract’, the strict interpretation of the words and TCF. Furthermore, LTC insurance was originally being sold as a “care not cash” product, but almost all claimants have opted for “cash not care” benefits. Reviewable long-term policies may have issues associated with medical advances and longevity that might not have been fully addressed at the point-of-sale.

Private healthcare insurers should consider encompassing the total customer experience rather than simply focusing on externalisations of customer intimacy and loyalty such as customer loyalty cards and programmes. Insurance product strategy needs to encompass both technical quality ‘what the customer gets’ and functional quality ‘how he gets it’ (Grönroos). Private healthcare insurance product differentiation and innovation is required to retain loyal/knowledgeable customers, encourage repeat purchases maintain/increase market share whilst copies appear, the competition intensifies and the segments drift apart.

11. CONCLUSIONS
Risk sharing models for private healthcare insurance potentially have an important role to play in facilitating the insured patient interface between the insurer and their medical service providers. Private healthcare insurers in the UK and Ireland (and in some other EU states) need to resolve the issue that many of their customers believe they are making a long-term purchasing decision, even if their policy wording states that it is short-term insurance business. This can lead to potential mis-selling issues when individual purchase customers can no longer afford to renew their policy as the premium increases with their advancing age.

Consumer access to private healthcare insurance is affected by insurers’ ability to select risks, apply exclusions to cover and set their own premium rating bases. European insurers are subject to solvency level requirements but are not subject to statutory price and product controls. The implications for selection of risk, premium rating and product definitions and terms are that in the majority of EU member states, with the exception of those where private healthcare insurance is offered as a direct substitute for NHS provision, insurers are able to flex the product components without statutory constraints. Price levels will be influenced by the premium rating
methodology. Specific consumer risk groups may be identified as representing higher or lower risk profiles.

Healthcare insurers need to build trust and stronger relationships with their suppliers and their customers. Insurers can address this issue upstream by adopting the customer intimacy value discipline, which is the engine of change leading to the value innovation that has the potential to profitably expand the healthcare insurance market. Insurers should encompass the total customer experience rather than simply focusing on externalisations of customer intimacy and loyalty. They need to focus on both ‘what the customer gets’ and ‘how he gets it’.

In the medical services arena, ERM should encompass information exchange with multiple disciplines in the hospital in order to capitalise on broader perspectives for correction and improvement. ERM factors associated with patient satisfaction might include clinical competency of staff, physical access and environment, patient identification procedures, systems for medication administration.

Private healthcare insurers compete in two worlds, the physical world and the virtual world. Marketspace services and products are unique to the virtual world, as the value-adding steps are performed through and with information. The Law of Digital Assets may be relevant, in that digital assets, unlike physical assets, are not used up in their consumption and so can be harvested over and over again. However, if one is to succeed with an integrated healthcare model, consumer attitudes to a voluntary purchase that restricts choice need to be handled with sensitivity.

ERM and TCF are the unifying holistic business processes that should be applied by private healthcare insurers and their medical service providers to give their customers what they want, at a price that their customers are prepared and willing to pay.

REFERENCES


