

Dealing with Risk in Healthcare Environment

Dennis Lee, RSM Risk Advisory
18 August 2016

Disclaimer

While utmost care has been taken to ensure content accuracy at the time of writing, no person should rely on the contents in this presentation without first obtaining advice from a qualified professional. These presentation slides are issued on the terms and understanding that (1) the author is not responsible for the results of any actions taken on the basis of information in these slides, nor for any error in or omission from these slides; and (2) the author expressly disclaims all and any liability and responsibility to any person, whether a reader of these slides or not, in respect of anything, and of the consequences of anything, done, or omitted to be done by any such person in reliance, whether wholly or partially, upon the whole or any part of the contents of these slides. Information contained herein is proprietary to RSM Risk Advisory Pte Ltd and no part should be reproduced without prior permission and due acknowledgement.



Overview

S/N	Topic
1	Corporate Governance and Risk Management
2	Three Lines of Defence Model
3	Understanding Risk & Eight Healthcare Risk Domains
4	Emerging trends and opportunities
5	Aligning Risk with Business Objectives and Performance
6	ERM Maturity Stage
7	Overcoming ERM Implementation Pitfalls
8	Case Studies

1. Concept of Corporate Governance

Defined by Code of Corporate Governance (Singapore)



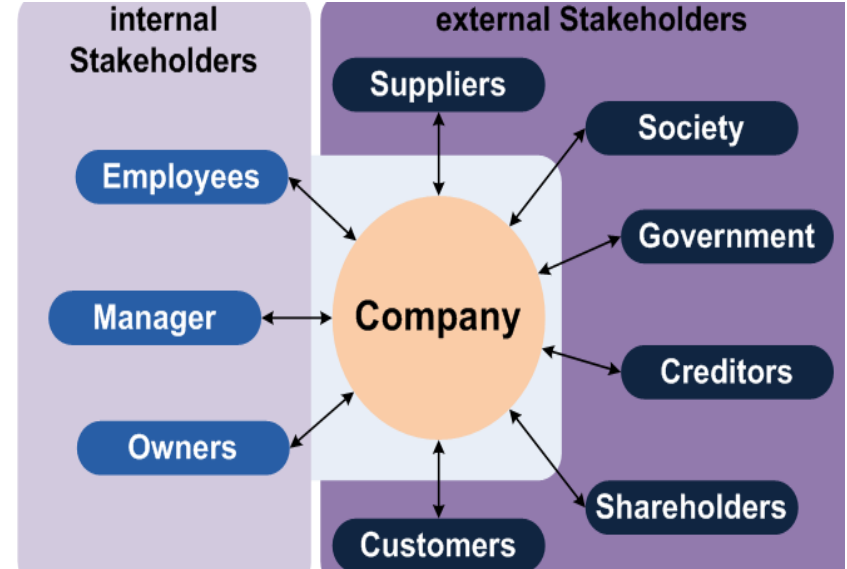
Process by which business is directed and managed



Influences operation, performance and compliance



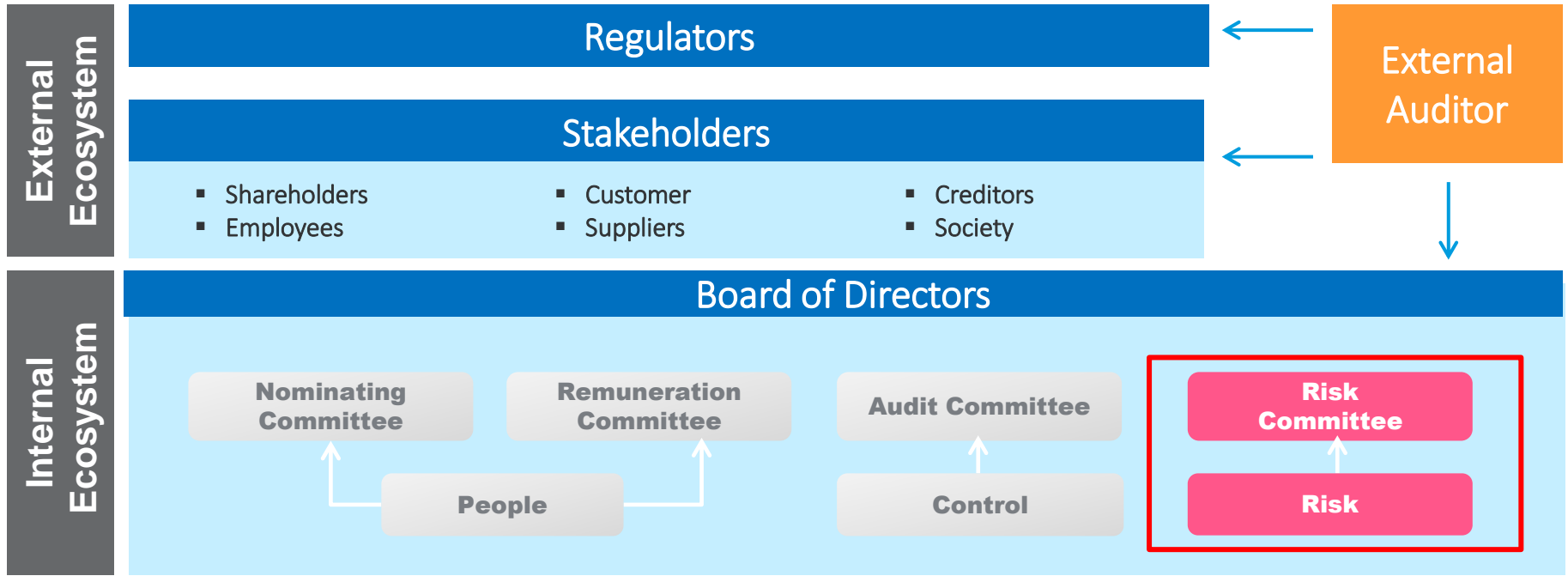
Balances internal and external Corporate ecosystem



Source: Singapore Corporate Governance Code 2015

1. Governance Ecosystem & Risk Management

Governance Ecosystem



1. Risk Management - A Strategic Planning Mechanism



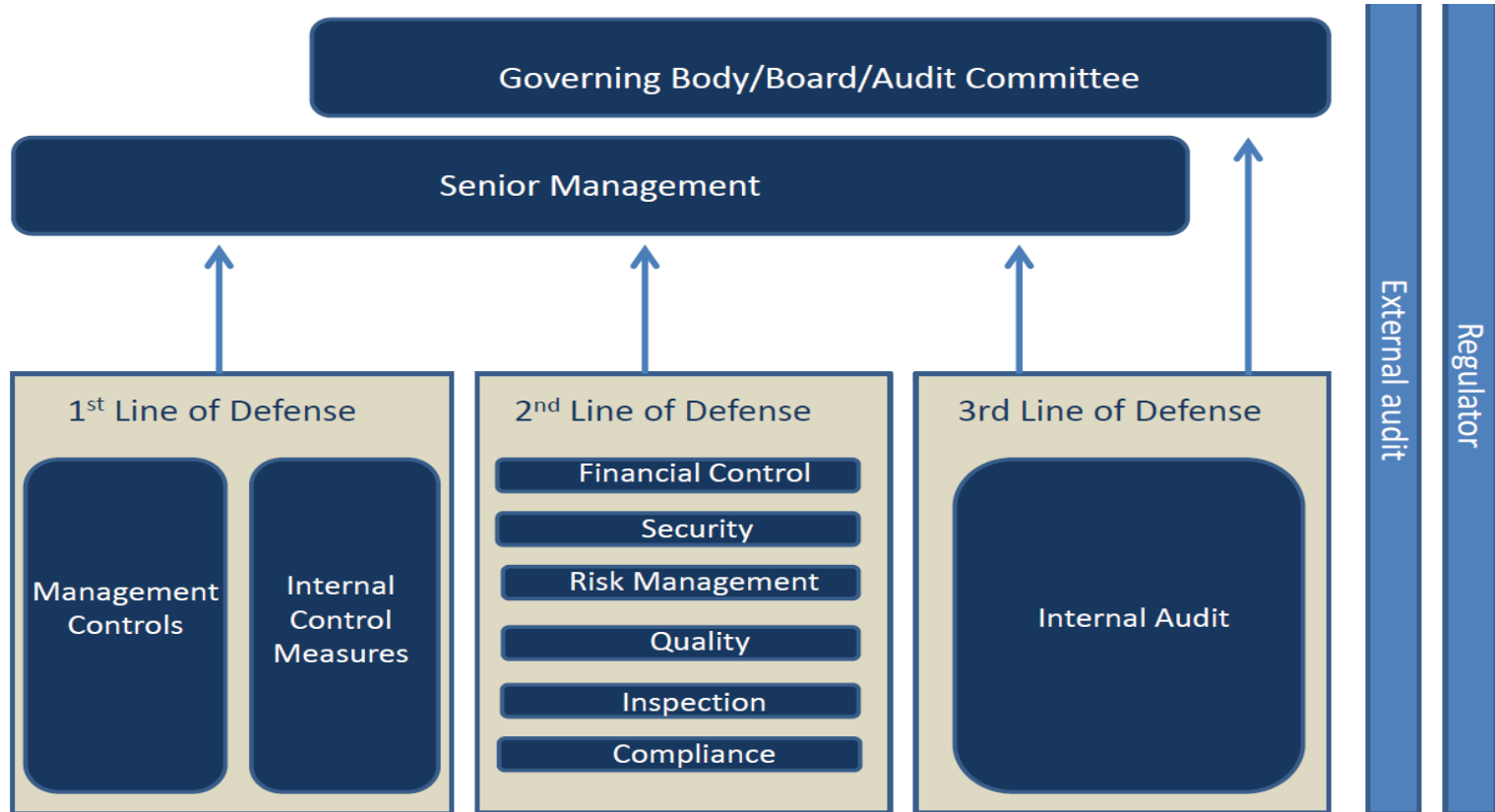
“91% plan to reorganize or reprioritize risk management in the next three years”



Idea Watch: Harvard Business Review
July–August 2015

- *Business leaders now embrace ERM as strategic planning mechanism.*
- *Risks relating to strategic decisions need to be managed and anchored to strategy formulation*
- *Strategic risks are desirable. They generate returns.*

2. Three Lines of Defence Model



3. Understanding Healthcare Sector Risks – VUCA

+ HOW WELL CAN YOU PREDICT THE RESULTS OF YOUR ACTIONS? -	Complexity Characteristics: The situation has many interconnected parts and variables. Some information is available or can be predicted, but the volume or nature of it can be overwhelming to process. Example: You are doing business in many countries, all with unique regulatory environments, tariffs, and cultural values. Approach: Restructure, bring on or develop specialists, and build up resources adequate to address the complexity.	Volatility Characteristics: The challenge is unexpected or unstable and may be of unknown duration, but it's not necessarily hard to understand; knowledge about it is often available. Example: Prices fluctuate after a natural disaster takes a supplier off-line. Approach: Build in slack and devote resources to preparedness—for instance, stockpile inventory or overbuy talent. These steps are typically expensive; your investment should match the risk.
	ambiguity Characteristics: Causal relationships are completely unclear. No precedents exist; you face “unknown unknowns.” Example: You decide to move into immature or emerging markets or to launch products outside your core competencies. Approach: Experiment. Understanding cause and effect requires generating hypotheses and testing them. Design your experiments so that lessons learned can be broadly applied.	uncertainty Characteristics: Despite a lack of other information, the event's basic cause and effect are known. Change is possible but not a given. Example: A competitor's pending product launch muddies the future of the business and the market. Approach: Invest in information—collect, interpret, and share it. This works best in conjunction with structural changes, such as adding information analysis networks, that can reduce ongoing uncertainty.
	-	
	+ HOW MUCH DO YOU KNOW ABOUT THE SITUATION?	

V : Pipeline of medical talent?
Economic cycles?

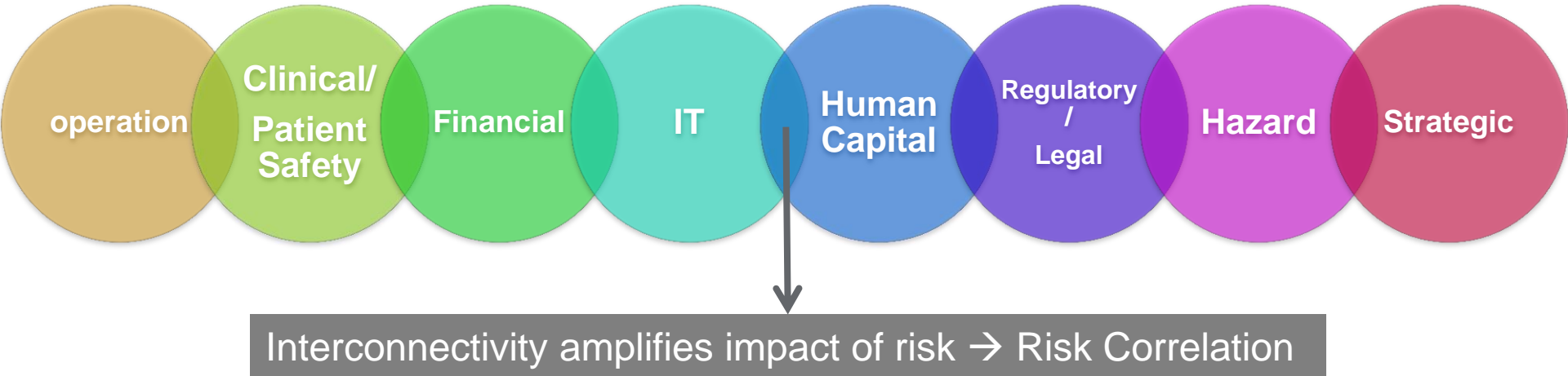
U : Regulatory and demographic changes? Shortening R&D payback period?

C : Cross border practices? clinical complexity?

A : Beyond just treating the patients?

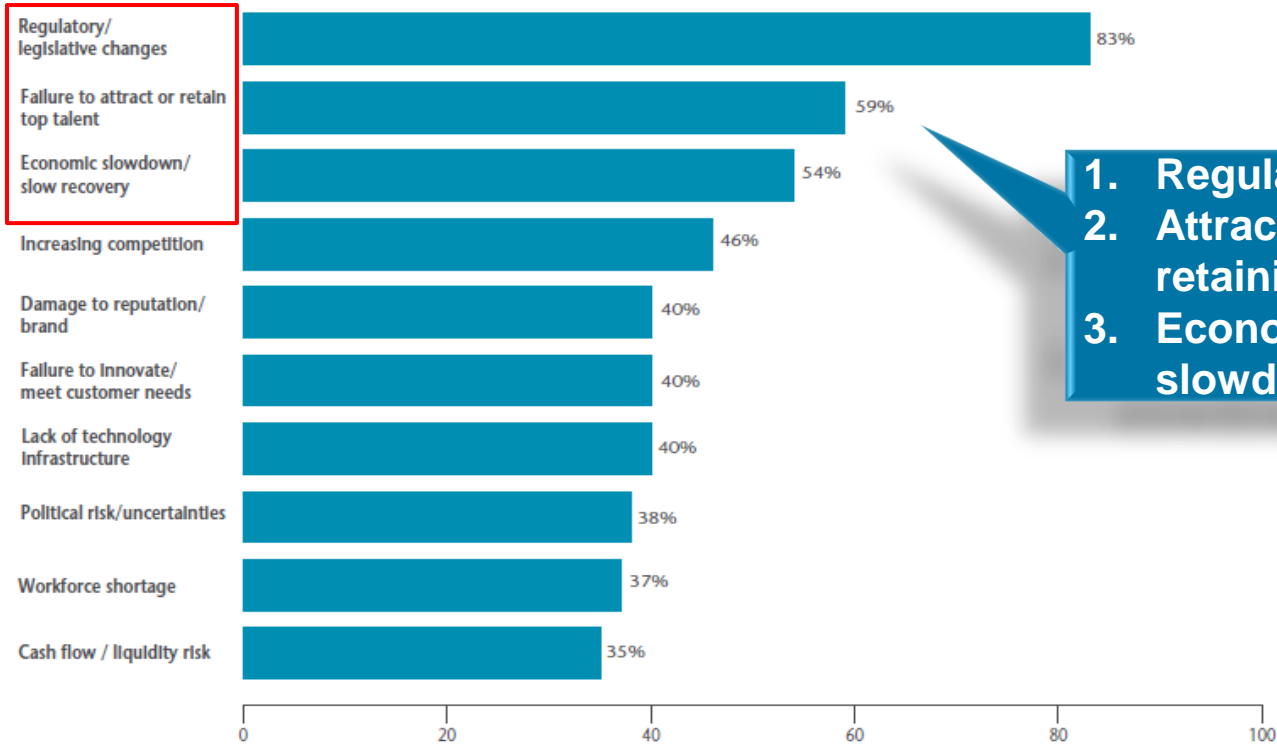
3. Eight Healthcare Risk Domains

8 Risk Domains (American Society Healthcare Risk Management)



3. Top Healthcare Sector Risks of 2016

Top 10 Risk – Loss of Income – Health Care



1. Regulatory changes
2. Attracting and retaining talent
3. Economic slowdown

Data Source: 2013 Global Risk Management Survey

4. Emerging Trends of 2016

1. Dominant players emerge from consolidation

2. Mobile apps adoption

3. New database technology for resource sharing

4. Aging population

5. Importing medical talent

4. Emerging Trends of 2016

1. Dominant players emerge from M&A and Joint Venture

Major players emerge, affecting cross border collaboration projects with Singapore

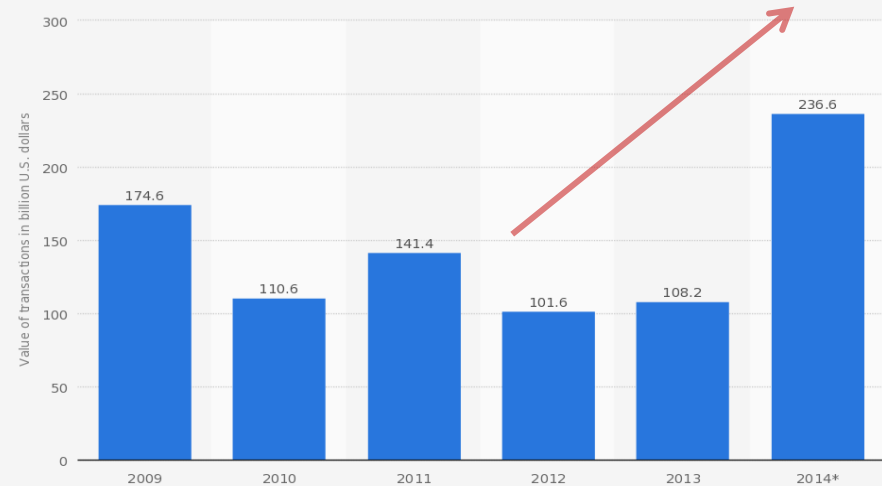
Mergers and acquisitions

The number of U.S. hospital acquisitions peaked in 2012 with 72 mergers involving 131 hospitals.

Year	Transactions	Hospitals involved
2007	45	111
2008	46	52
2009	36	61
2010	49	90
2011	69	107
2012	72	131
2013*	31	55
Total	348	607

Source: Center for Health Care Economics and Policy
* 2013 data are from first half of the year

Transaction value of mergers and acquisitions in the U.S. healthcare and life sciences industry from 2009 to 2014 (in billion U.S. dollars)



Source:
Harris Williams
© Statista 2015

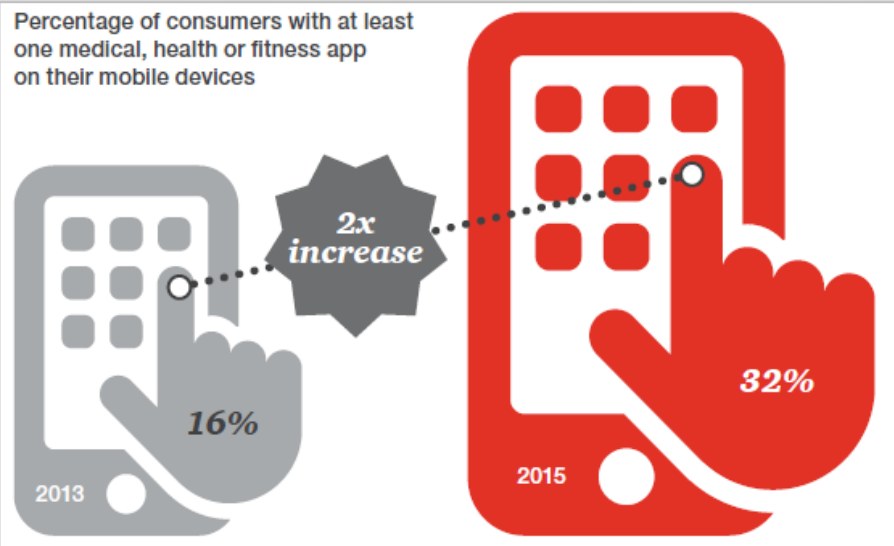
Additional Information
United States

statista

RSM

4. Emerging Trends of 2016

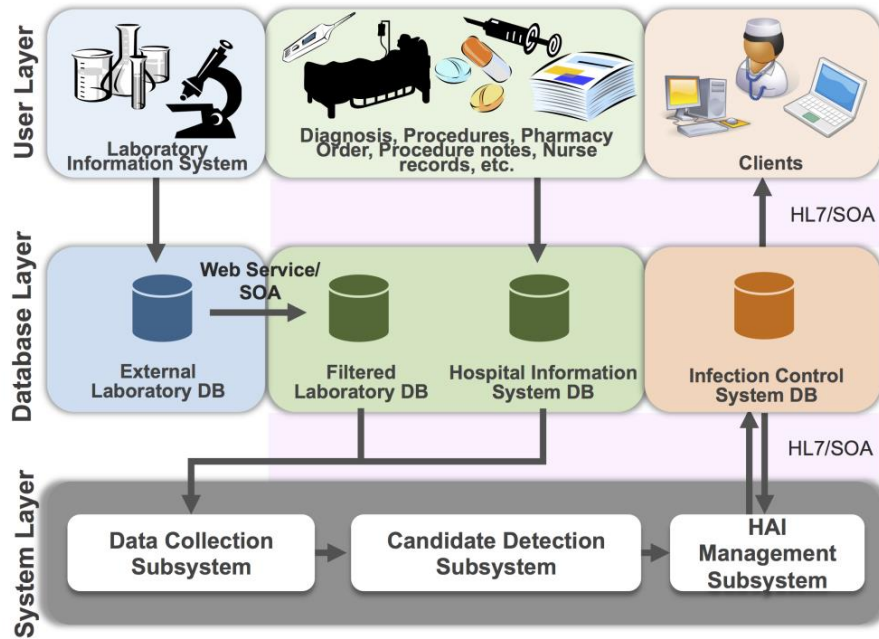
2. Mobile apps adoption VS cyber security



- Security breach give rise to lawsuits, lost revenue and reputational damage
- Healthcare providers “are being routinely attacked and compromised by increasingly sophisticated cyber attacks.”
-- Los Angeles Times

4. Emerging Trends of 2016

3. Balancing risk VS reward: data congregation benefits against risk of data breach



▪ Traditional *electronic health records (EHR)* cannot handle less structured information such as clinician notes and transcripts

▪ Embrace “non-relational” databases to analyze different forms of data

4. Emerging Trends of 2016

4. Silver tsunami and hospital bed crunch

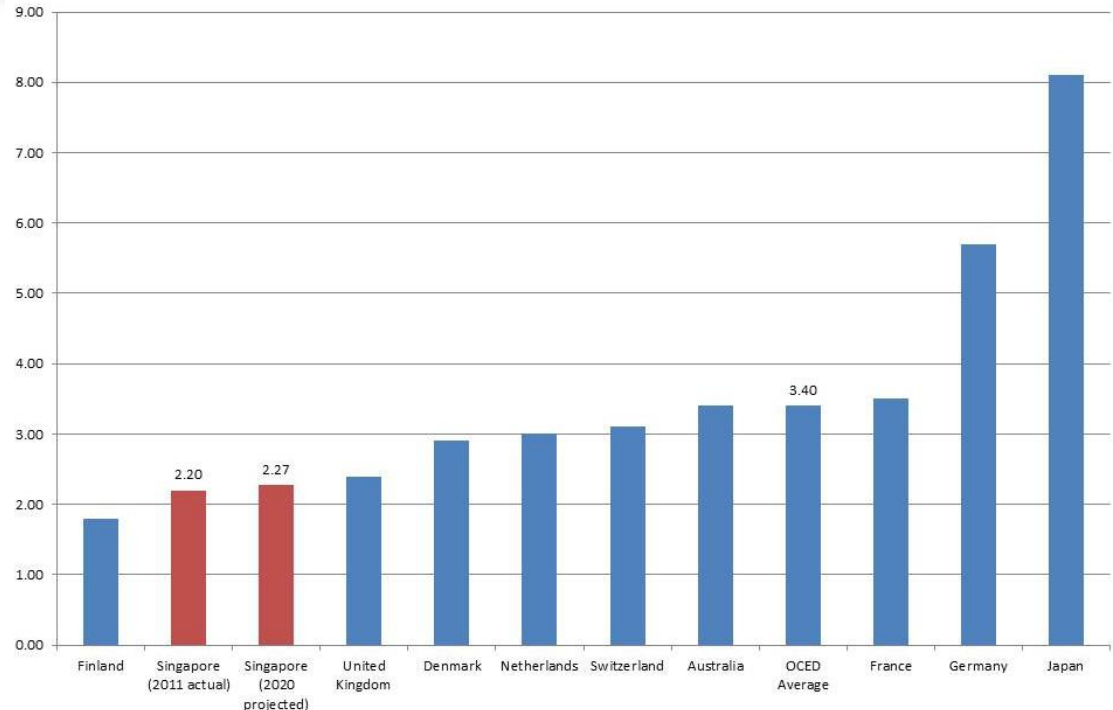
Changi General Hospital started housing patients waiting for beds in this large air-conditioned tent this week. The 800-bed CGH, along with Tan Tock Seng and Khoo Teck Puat hospitals, has resorted to sending patients to Alexandra, one of the few public hospitals here with spare beds. Health Minister Gan Kim Yong said last night that he was aware of the problem - hence, the push to add 1,900 more acute hospital beds and 2,600 community hospital beds by 2020.



Hospitals facing severe bed crunch take unusual steps

- Extension of acute care to community care/nursing homes
- Bed crunch
- Training of nurses for elderly care

Acute Beds per 1,000 Population (Singapore and selected OECD Countries)



Source: World Bank Database

4. Emerging Trends of 2016

5. Importing Medical Talent and keeping quality under control

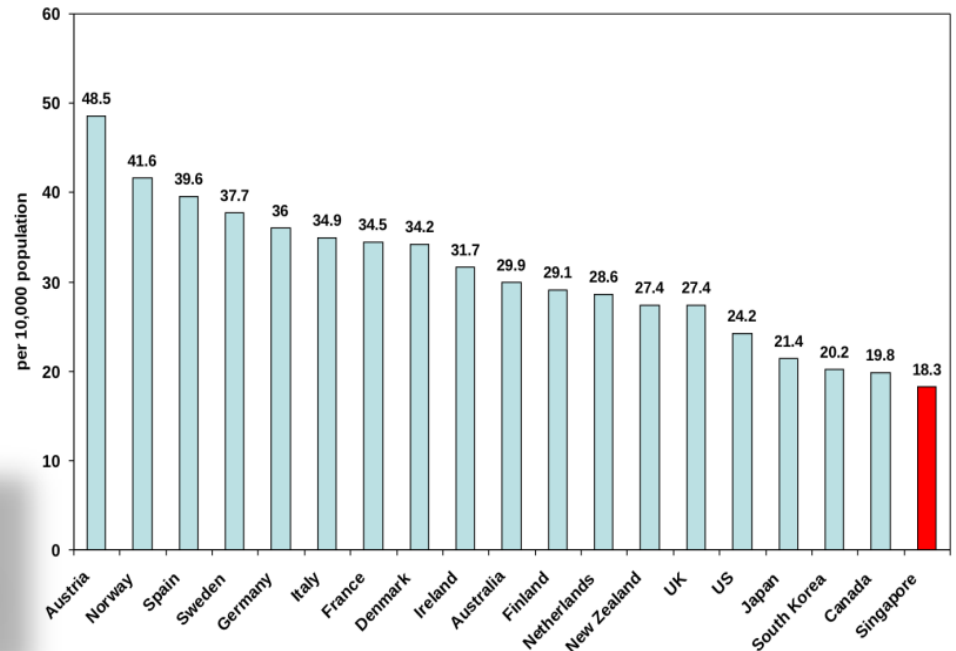
THE STRAITS TIMES

Number of foreign doctors rising in Singapore public hospitals and polyclinics



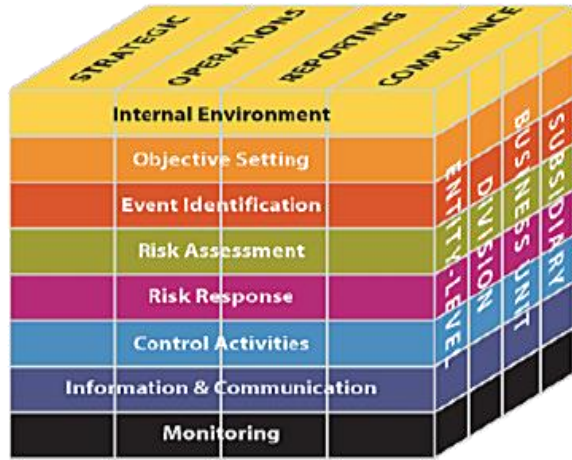
- High attrition rate 6% - 8% of local doctors
- A single university offering medical degree
- Culture and language barrier of foreign talent
- Imported nurses are inadequately trained

Physicians per 10,000 population (2005-2010)

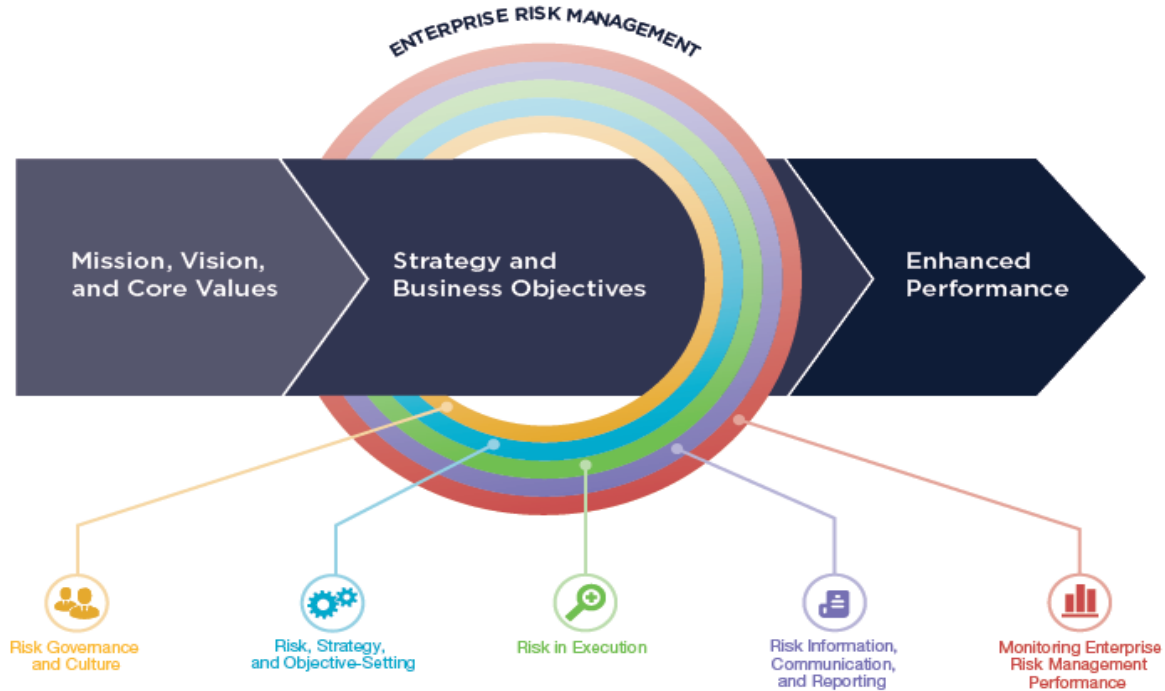


Source: Ministry of Health

5. Aligning Risk with Strategic Objectives and Performance



Source: COSO ERM Framework



6. ERM Maturity Stage



- Drivers**
- Compliance with basic standards/regulations
 - Reduction of regular surprises
 - Avoiding unexpected large loss events
 - Stability to enable growth plan
 - Professionalized management
 - ROE¹ improvement requirements
 - Competitive pressure
 - Navigating trade-offs
 - Top management focus on risk-adjusted performance
 - Finding niche in mature marketplace

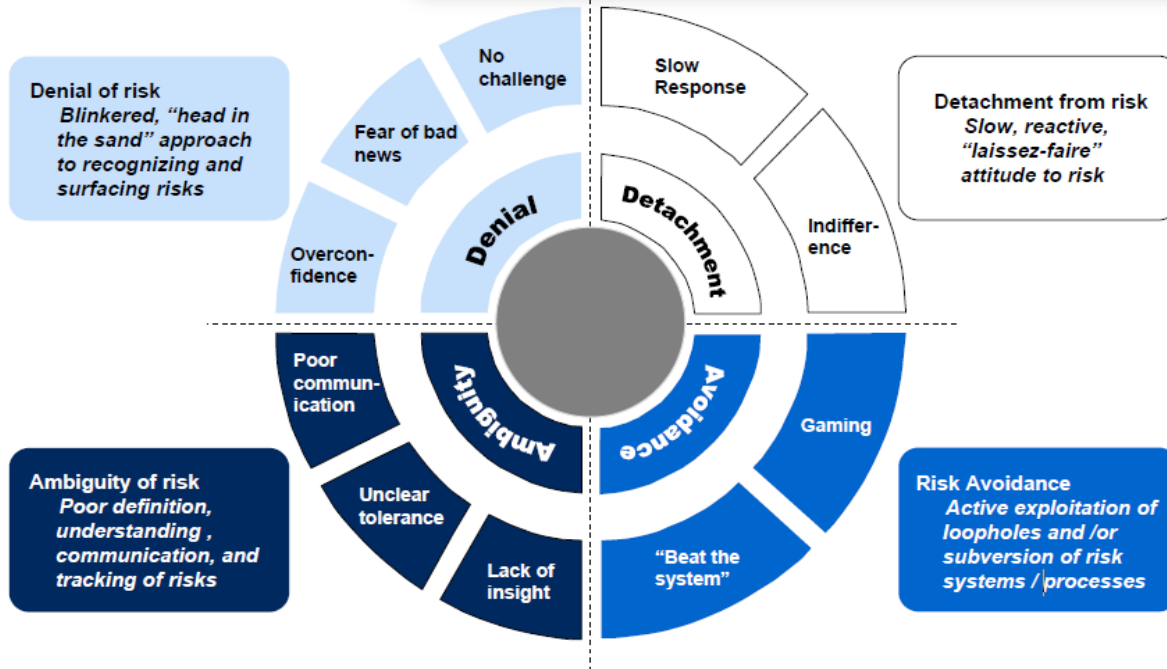
- Key tools**
- **Opportunistic approaches**
 - **Risk heat map** based on consensus assessments
 - **At-risk measures** (eg, VAR,² CFAR³)
 - Systematic **scenario analysis of profit and loss**
 - As left, plus:
 - Strong **risk culture**
 - **Unbundling risks** through contracting and markets

1 Return on equity.
2 Value at risk.
3 Cash flow at risk.

7. Overcoming ERM Implementation Pitfalls

Creating A Risk Conscious Culture

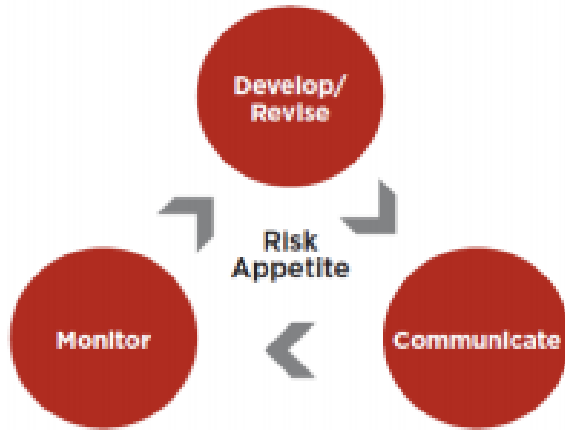
Flaws in risk culture



Tone at the top, mindset shift, correcting judgemental biases are crucial to cultivating the right risk culture

7. Overcoming ERM Implementation Pitfalls

Continuous Communication & Consistent Monitoring



Seamless interaction and monitoring

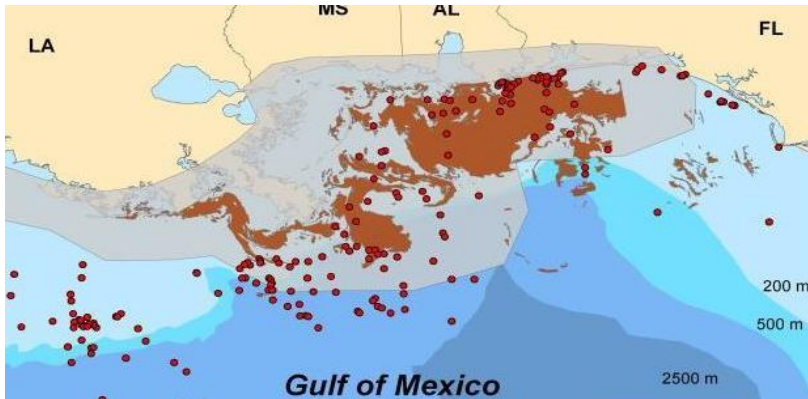


implement a **communication plan and training curriculum** - raise awareness



develop **ongoing monitoring mechanism** (e.g. risk dashboard).

8. Case Study – BP Deepwater Horizon Oil Spill



8. Case Study – BP Deepwater Horizon Oil Spill



CNN speaks with BP survivors

Root Causes

- Decision override by higher management
- Pressure to perform under over-run budget
- Save time & money
- “Safety first” only when you need it

8. Lessons Learnt from BP

Lacking a Common Risk Language & Tone at the top

Pressure to perform
sacrificed safety

Non of 8 Group
values concerned
about safety

Non-existent
operating system for
safety

Accepting risks as part of the job
– fatalism

Management override contractors

8. GSK – “Biggest healthcare fraud in US history”



- Marketed anti-depression drug as weight loss product to appeal to adolescents
- Bribed physicians to prescribe GSK products

GSK paid \$96million to whistleblower who exposed contaminated problems



GlaxoSmithKline – A study in conflicting strategic goals

This conflict caused the quality control of manufacturing to suffer.

Case in point – the Cidra Plant in Puerto Rico made 20 drugs under unhealthy conditions that lead to a \$750 million FDA fine

One of GSK's strategic goals was to sell safe and effective prescription medication

Another goal was to increase profitability by outsourcing manufacturing to other parts of the world

8. Emergency Management - Boston Marathon Bombing

Hospitals size up the lessons of Marathon attacks

Chief among concerns: accurately identifying patients amid chaos



Near misses of mixing up patients and victim identities.

“Understaffing at hospital results in lack of time to identify patients in the initial minutes of a crisis.”



Lessons Learnt

1. Emergency drill on a regular basis
2. Panic attack is a major factor for failure of crisis management
3. Social media and internet will play a pivotal role in reuniting and identifying patients

8. Data Breaches Sap Patient Confidence

The Next Cybersecurity Target: Medical Data

The health industry is not immune to cyberattacks.













Majority of the breaches are perpetrated by *an insider*.

It's much harder to detect someone snooping around if they're just *abusing their own network-access privileges*.

Existing tools *often go unmonitored*.

Top 10 Healthcare Data Breaches 2015

Organization	Records Breached	Type of Breach
 Anthem	78,800,000	Hacking / IT Incident
 PREMERA	11,000,000	Hacking / IT Incident
 Excellus	10,000,000	Hacking / IT Incident
 UCLA Health	4,500,000	Hacking / IT Incident
 mie	3,900,000	Hacking / IT Incident
 CareFirst	1,100,000	Hacking / IT Incident
 DMAS	697,586	Hacking / IT Incident
 GEORGIA DEPARTMENT OF COMMUNITY HEALTH	557,779	Hacking / IT Incident
 BEACON HEALTH SYSTEM	306,789	Hacking / IT Incident
 DJO GLOBAL	160,000	Laptop Theft
2015 Total	111,022,154	(almost 35% U.S. population)

Source: Forbes

Thank You For Your Attention



RSM Risk Advisory Pte Ltd

8 Wilkie Road, #03-08, Wilkie Edge, Singapore 228095

T +65 6533 7600 F +65 6538 7600

info@RSMSingapore.sg

www.RSMSingapore.sg

DENNIS LEE, Director

Email: dennislee@RSMSingapore.sg

Phone: (65) 6594 7627 Mobile: (65) 9100 6941