

HIMSS[®] 和变革中的 的医疗



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Healthcare Today: A Disconnected System



- Disconnected islands of data
- Poor coordination
- Fragmented processes
- Limited connectivity
- Patients and clinicians often left without tools and data required

医院门诊大门实景



What's Possible? *With a Connected Community*



Information technology is a MUST

Using information technology, we can help make healthcare ...



Crossing the quality chasm: A new health system for the 21st century. (2001). Washington, D.C.: National Academy Press.



Himss® 是什么？

Transforming Health through IT

Global Knowledge Sharing



1

会员组织

组织会议和展出，促进交流

2

HimSSanalytics™

医院信息化建设评级

3

专业人员能力认证



数据



信息



知识



解决方案

HimSS[®]15

Annual Conference
& Exhibition

SAVE THE DATE!
APRIL 12-16, 2015
CHICAGO
McCORMICK PLACE





专业人士认证项目

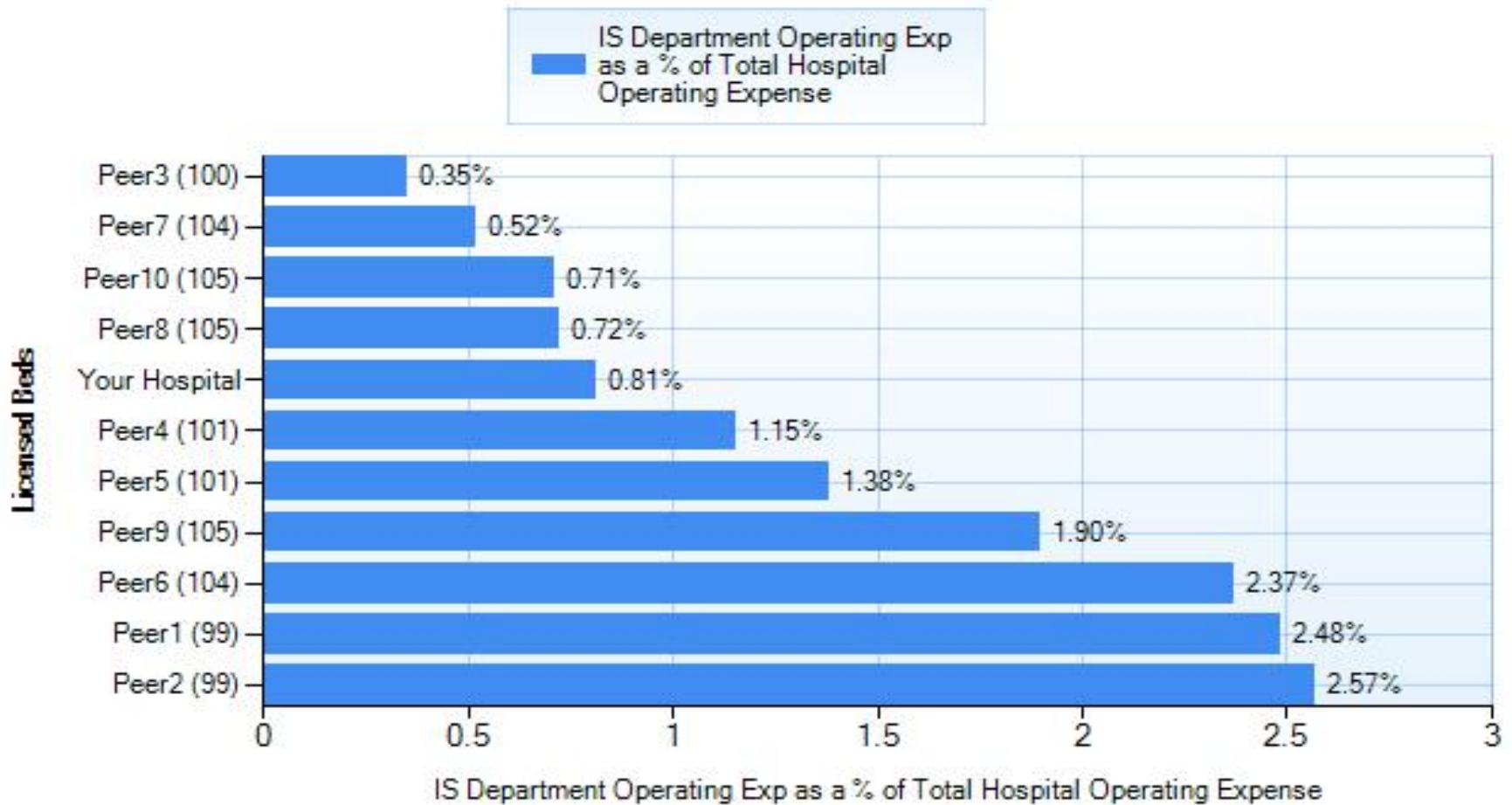


HIMSS Analytics提供综合性医疗信息化数据和研究，为改善医疗IT界的决策提供支持。

HIMSS Analytics: 为什么？

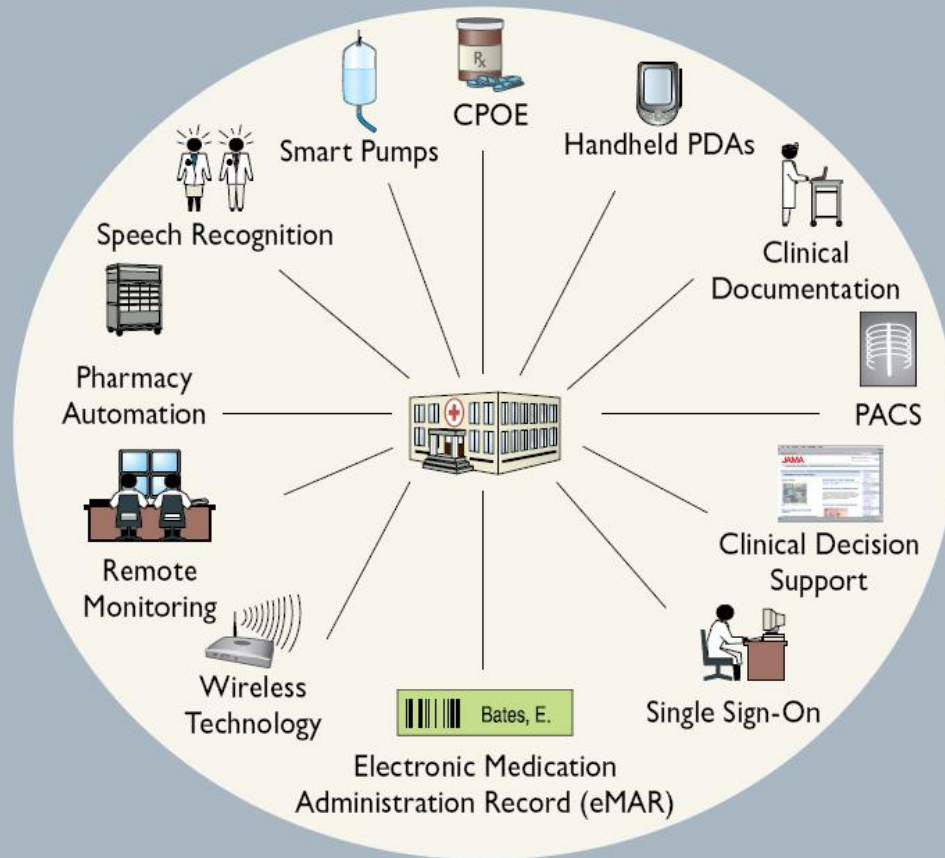
- **理念的引领**
 - 提高质量、安全、效率、效益、患者体验、员工满意度
- **提供信息，支持政府制定政策**
 - 很多国家和地区都在采用HIMSS Analytics的数据和结论，用于制定政策
 - 很明显，EMRAM模型是奥巴马政府“数据有价值利用”项目设计框架当中的一部分
- **反映市场**
 - 市场走向
- **“拉动市场”**

信息部门运营开支占医院总运营成本比例 (%)



Electronic Medical Record

Busy Building the Core



Source: Clinical Advisory Board interviews and analysis.

Shared Vision



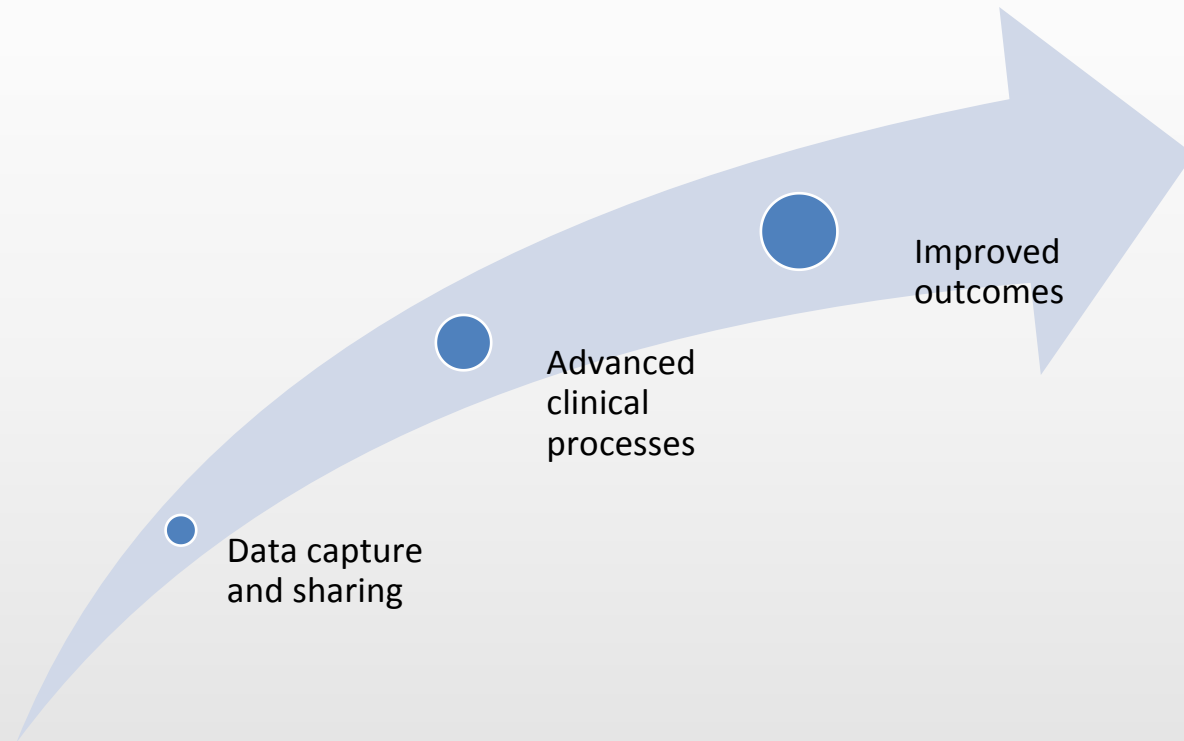
**Better health through
Information Technology**

STAGE	CUMULATIVE CAPABILITIES
Stage 7	Complete EMR, Data Analytics to Improve Care
Stage 6	Physician documentation (templates), full CDSS, Closed loop medication administration
Stage 5	Full R-PACS
Stage 4	CPOE, Clinical Decision Support (clinical protocols)
Stage 3	Clinical documentation, CDSS (error checking)
Stage 2	CDR, Controlled Medical Vocabulary, CDS, HIE capable
Stage 1	Ancillaries - Lab, Rad, Pharmacy - All Installed
Stage 0	All Three Ancillaries Not Installed

Progressively sophisticated model ...

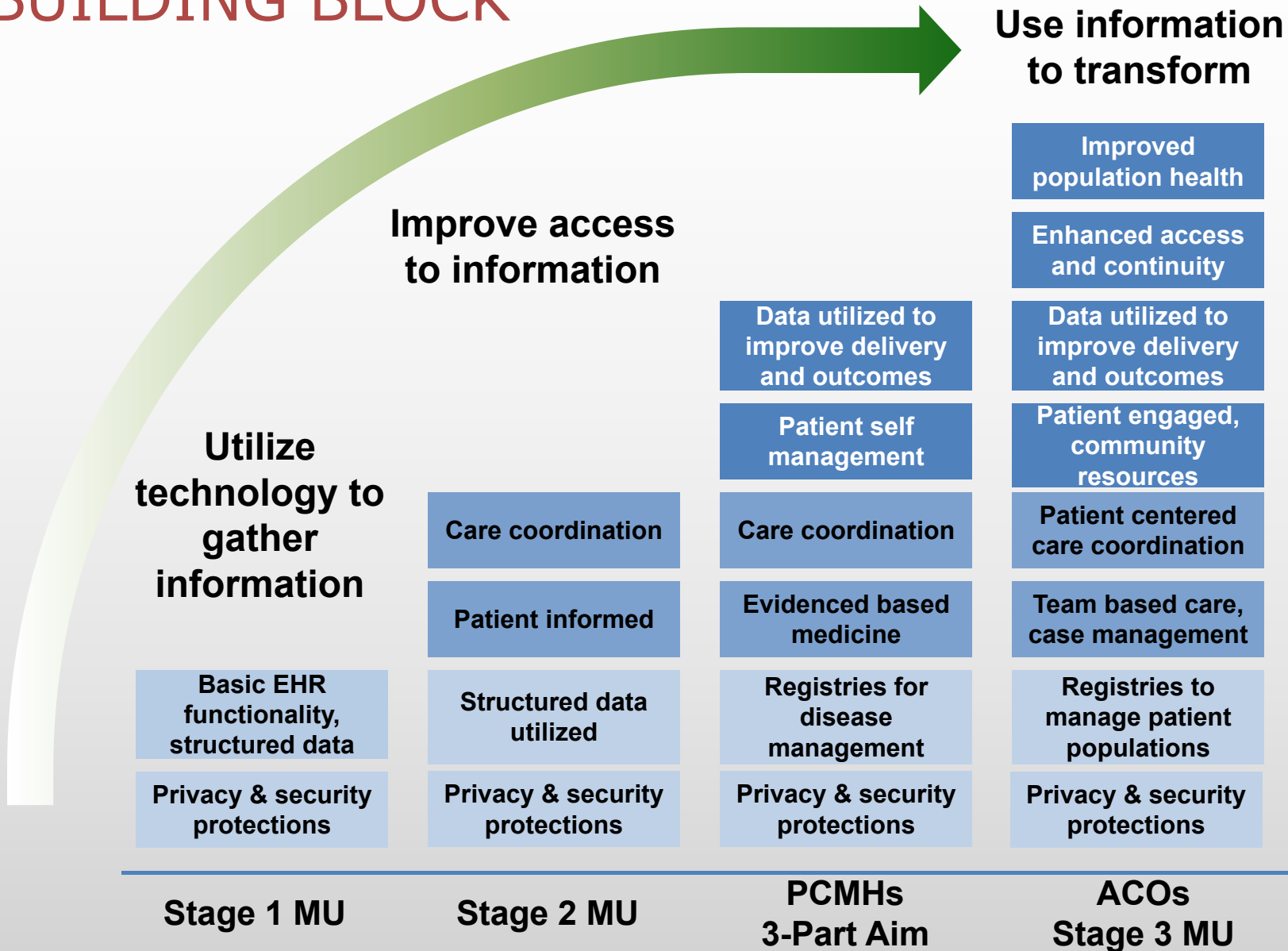
... 7 Stages that lead to the Highest Quality in Patient Care

A Conceptual Approach to Meaningful Use



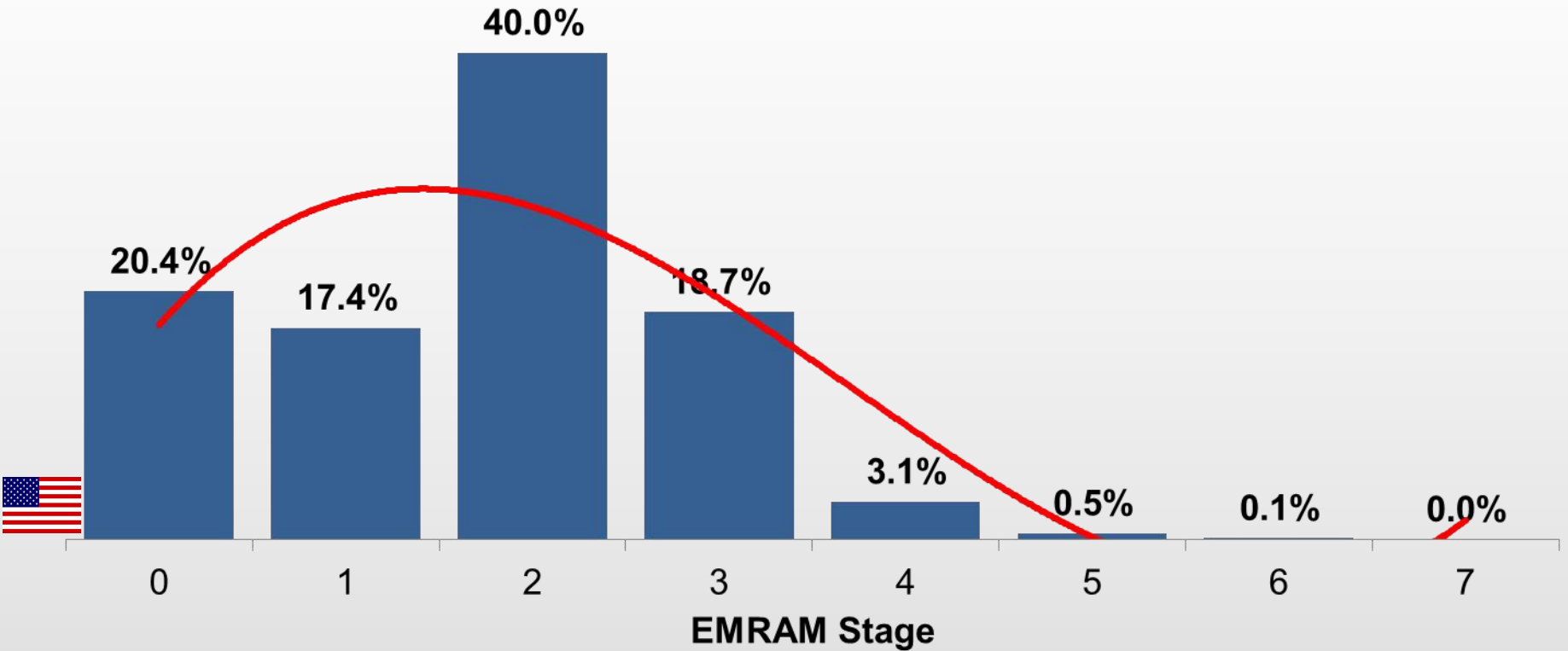
<http://www.cms.gov/EHRIncentivePrograms>

MEANINGFUL USE AS A BUILDING BLOCK

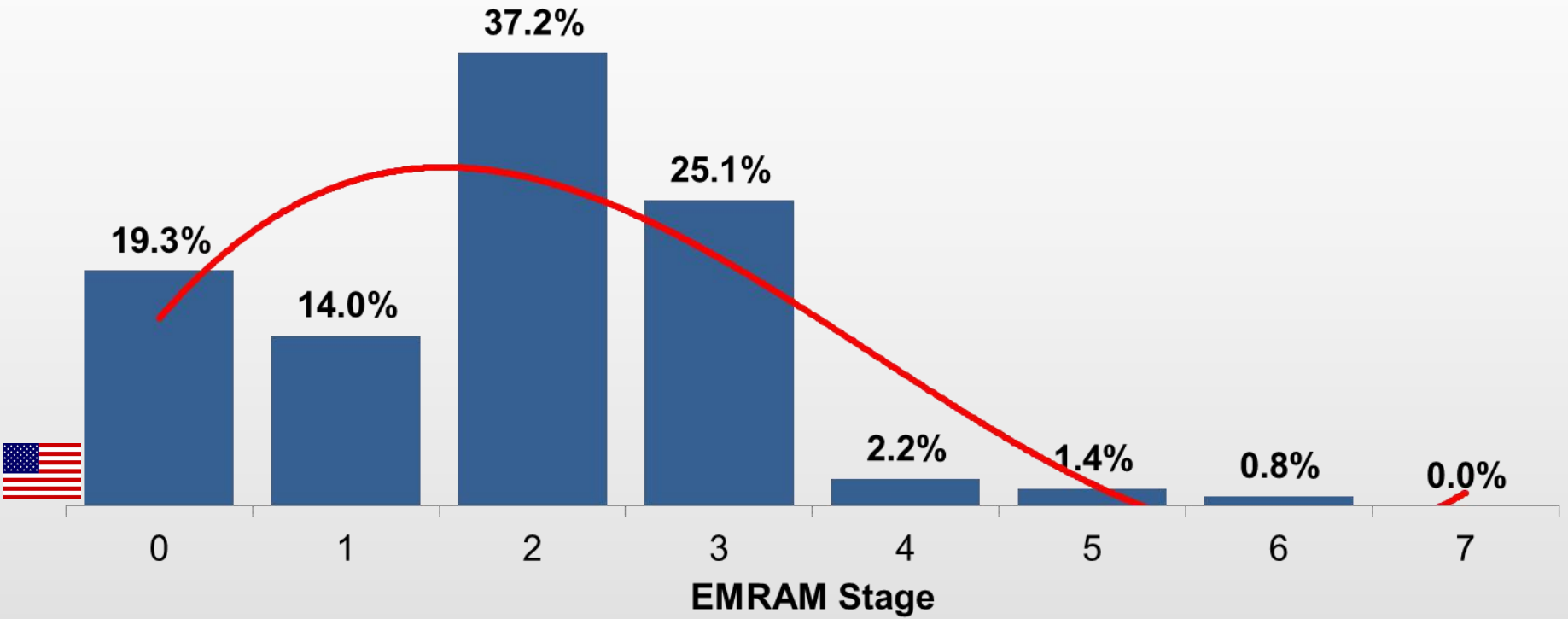


It takes time to make
“significant” national
progress

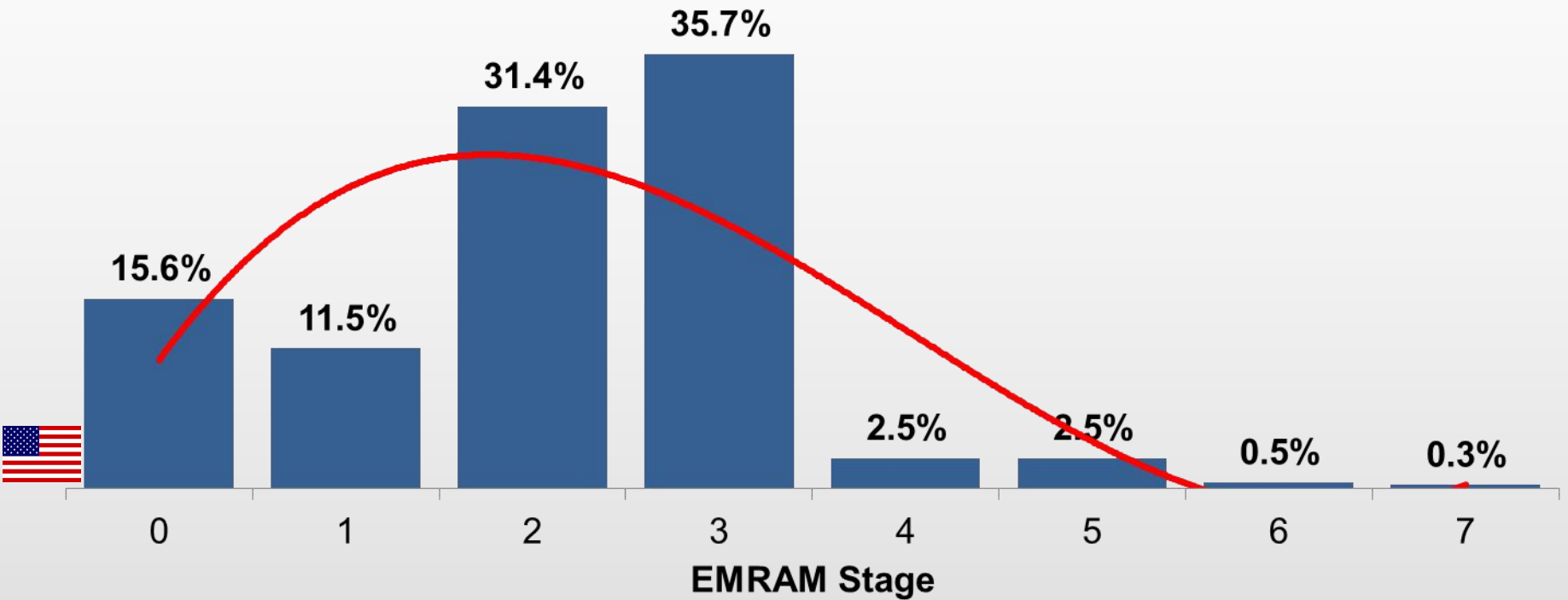
2006



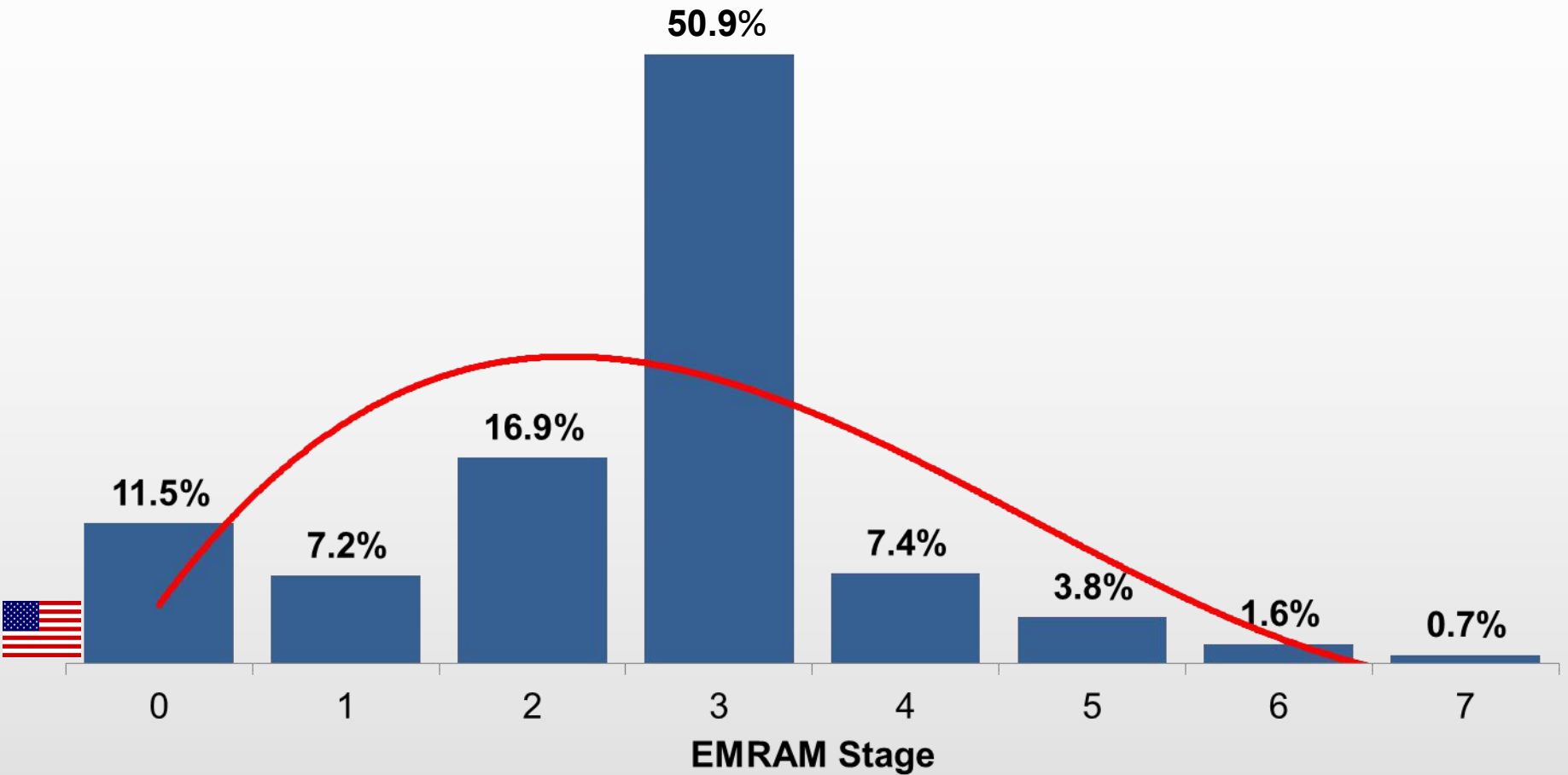
2007



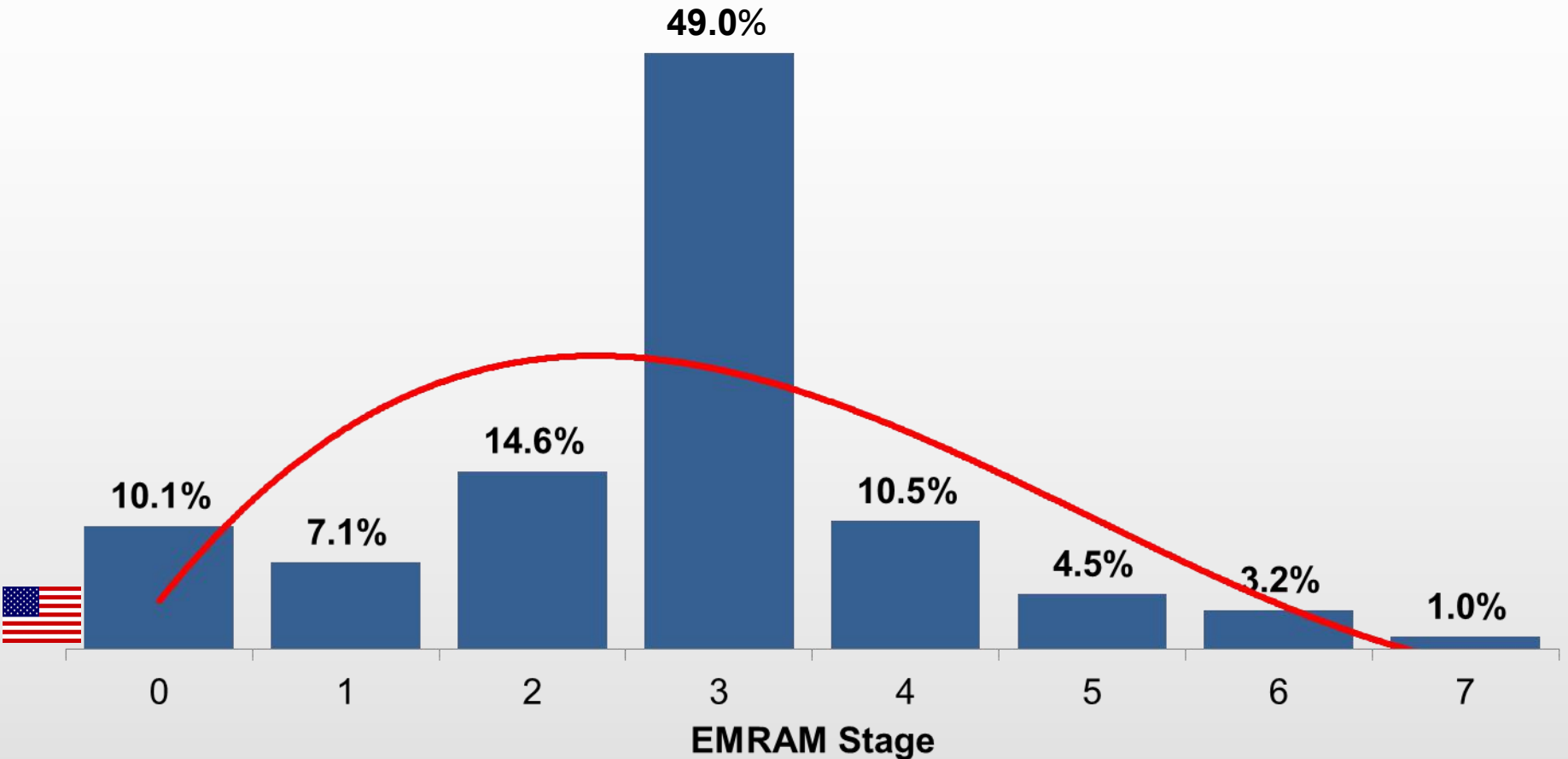
2008



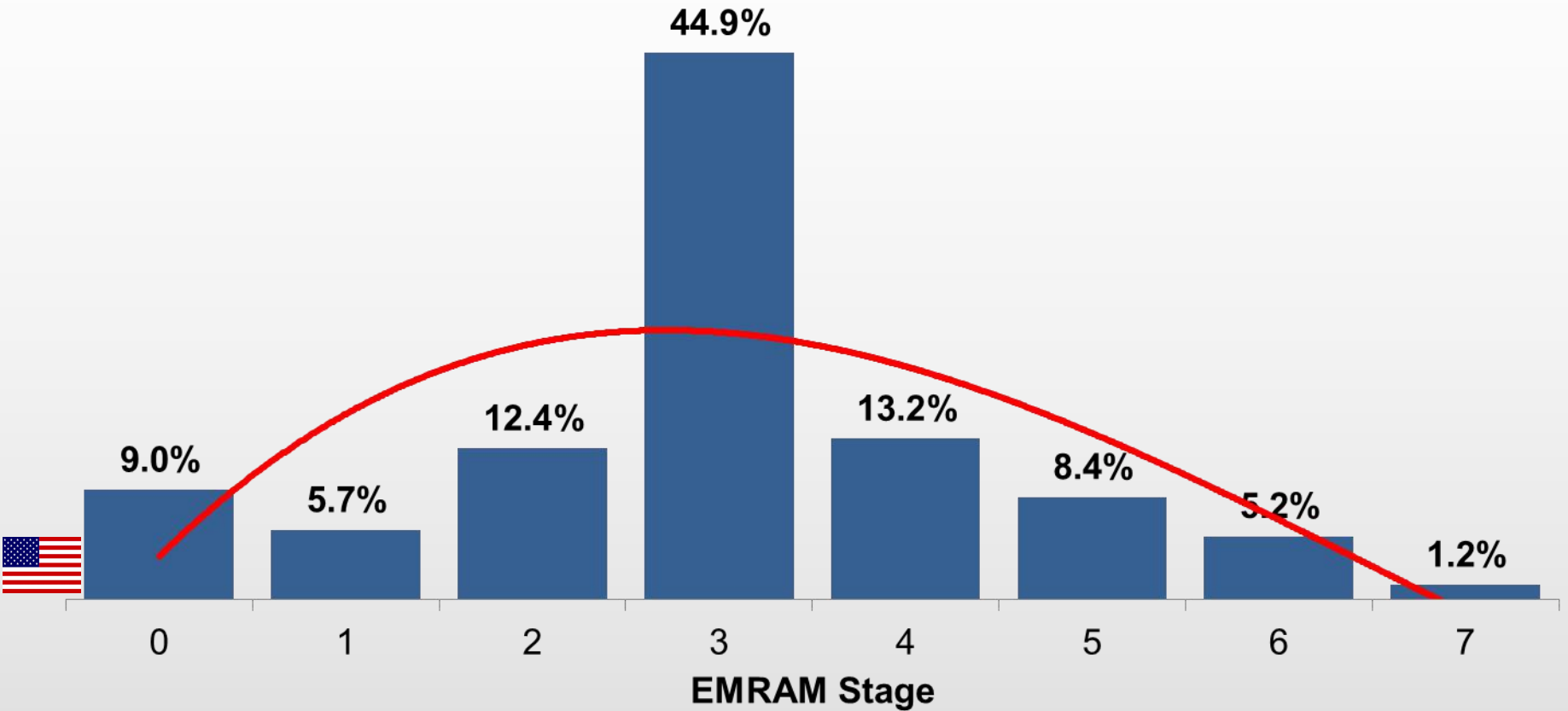
2009



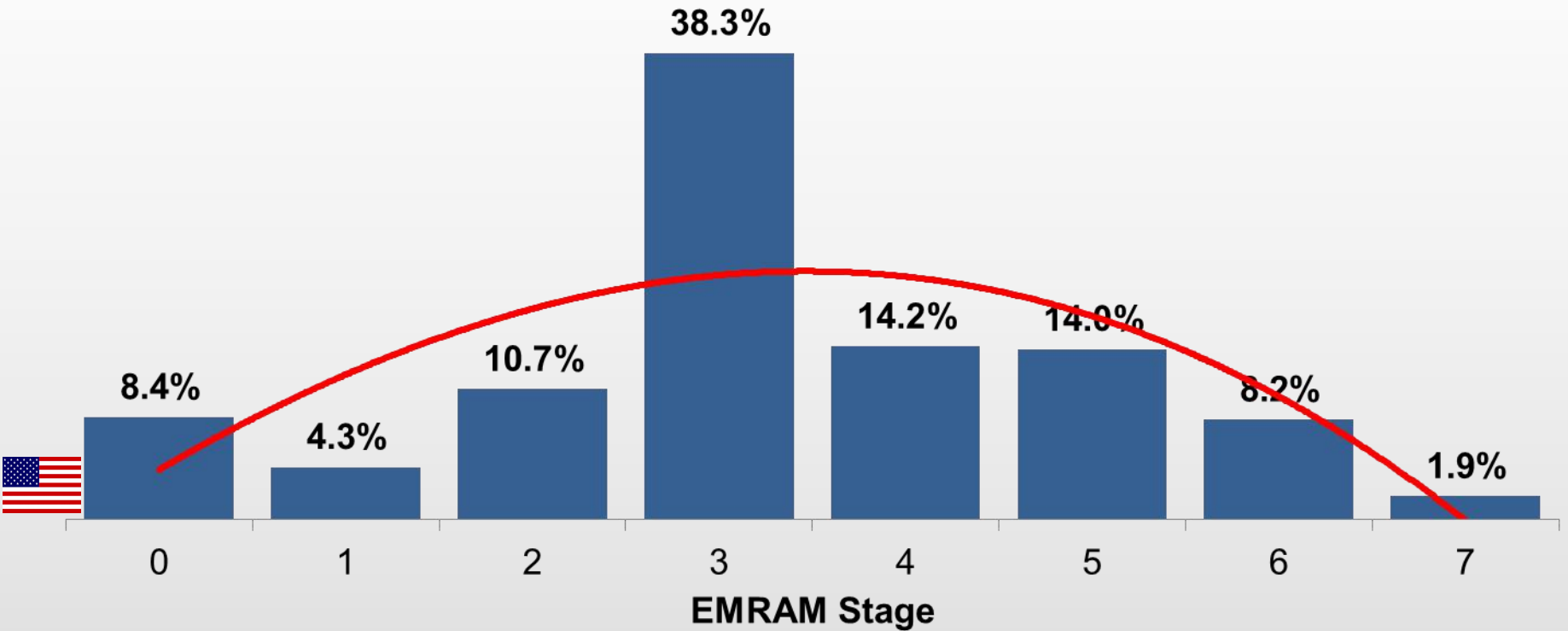
2010 (introduction of federal Meaningful Use program Stage 1 in Oct)



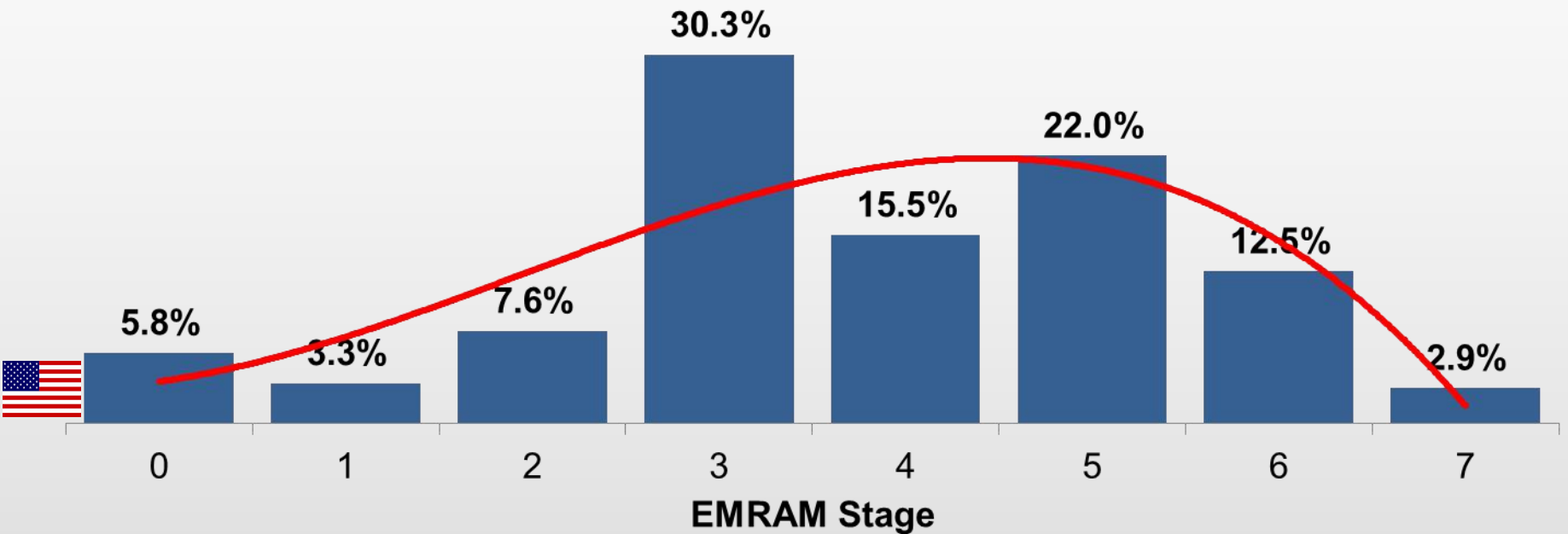
2011



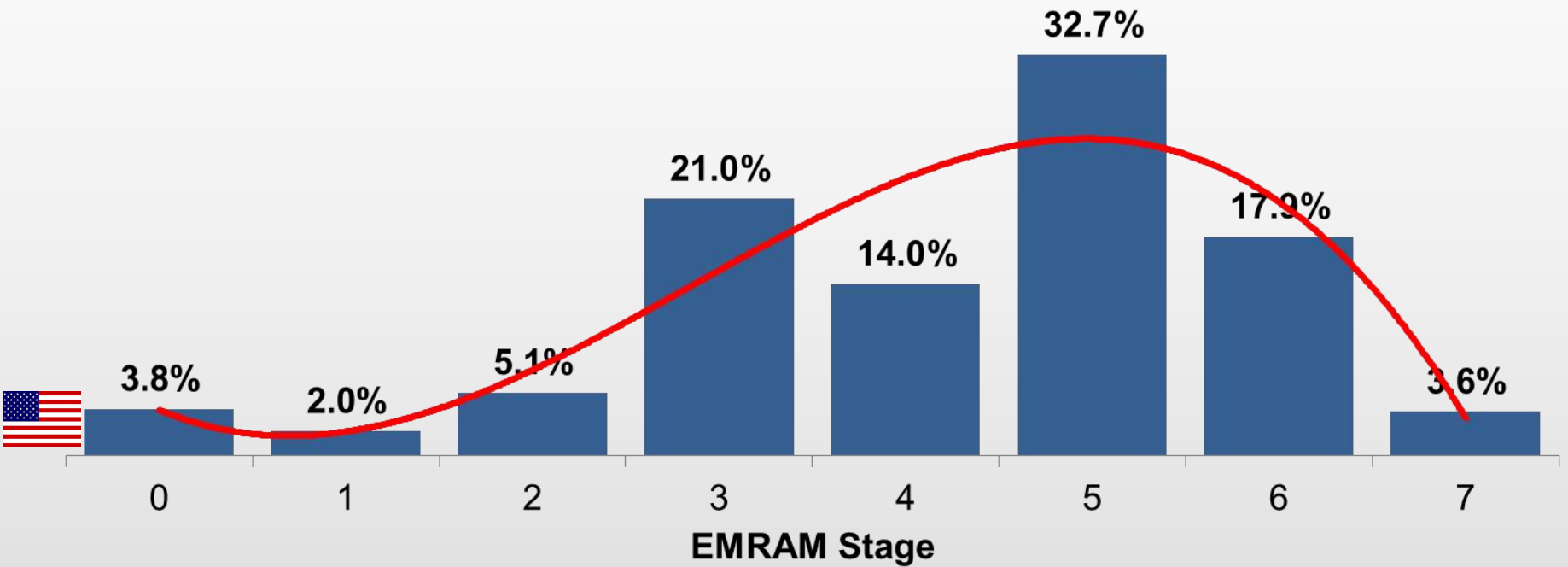
2012



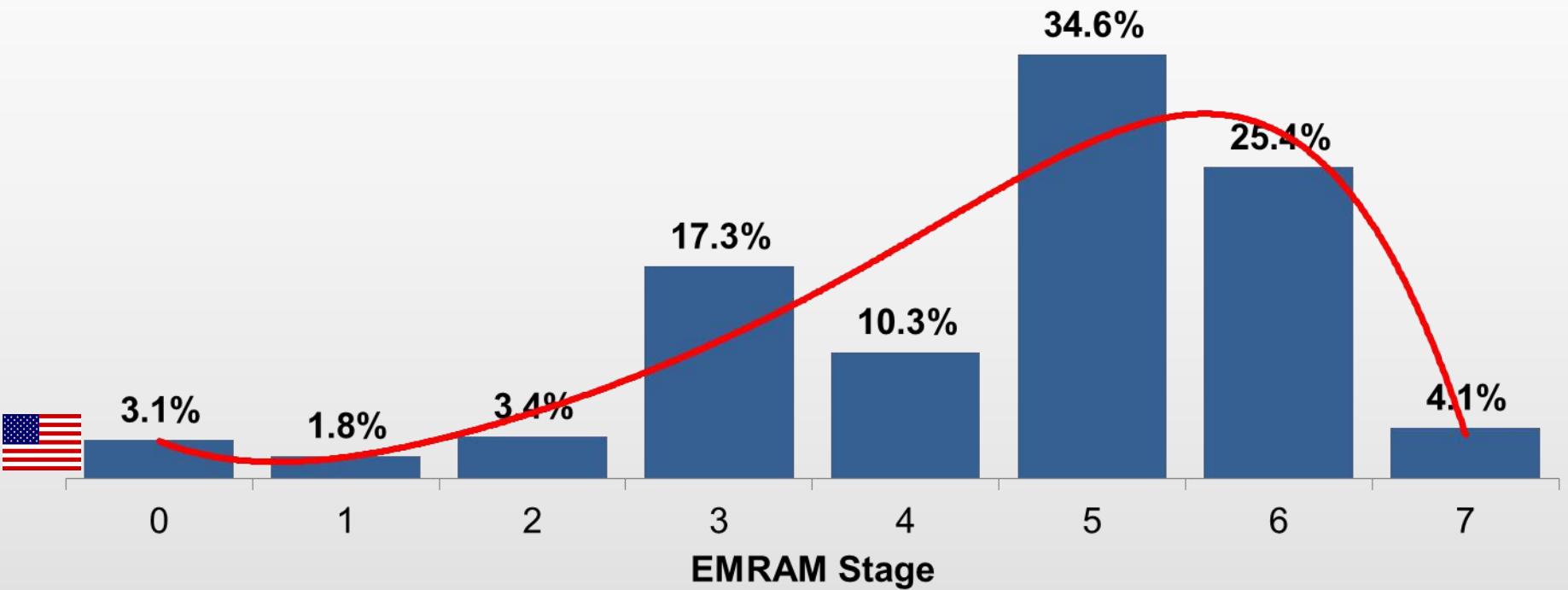
2013 (Meaningful Use Stage 2 in Oct)



2014



Q3 2015



EMR Adoption ModelSM (2006-2014) United States

**This is how long it takes to make
"significant" national progress**

Stage	2006	2007	2008	2009	2010	2011	2012	2013	2014
Stage 7	0.0%	0.0%	0.3%	0.7%	1.0%	1.2%	1.9%	2.9%	3.6%
Stage 6	0.1%	0.8%	0.5%	1.6%	3.2%	5.2%	8.2%	12.5%	17.9%
Stage 5	0.5%	1.4%	2.5%	3.8%	4.5%	8.4%	14.0%	22.0%	32.8%
Stage 4	3.1%	2.2%	2.5%	7.4%	10.5%	13.2%	14.2%	15.5%	14.0%
Stage 3	18.7%	25.1%	35.7%	50.9%	49.0%	44.9%	38.3%	30.3%	21.0%
Stage 2	40.0%	37.2%	31.4%	16.9%	14.6%	12.4%	10.7%	7.6%	5.1%
Stage 1	17.4%	14.0%	11.5%	7.2%	7.1%	5.7%	4.3%	3.3%	2.0%
Stage 0	20.4%	19.3%	15.6%	11.5%	10.1%	9.0%	8.4%	5.8%	3.7%

N = 4,237

N = 5,073

N = 5,166

N = 5,281

N = 5,337

N = 5,458

N = 5,458

N = 5,449

N = 5,467

Profile of a Stage 7 Organization

- **Use data to drive improved outcomes related to ...**
 - Process, Financial, Clinical, Quality & Safety
- **Are paperless, or near paperless (create no paper)**
 - All clinically relevant data is in the EMR
- **Are fully committed to continuous process improvement through collaboration**
 - Strong IT leadership and executive champions
 - Clinician / end-user champions

互联互通，闭环，学习、反馈



移动的核心在于

- ✓ 连接人
- ✓ 链接物
- ✓ 连接数据
- ✓ 连接计算&学习能力

它不局限于某种设备

- ✓ 不仅仅是手机
- ✓ 可以是移动PC、PAD、PDA
- ✓ 各种可穿戴设备
- ✓

Ultimate Goal

Ensure the *most relevant* information is available to the decision maker at the *right place* and at the *right time*

Domains of IT in Healthcare



Automation

- Perform Repeatable Tasks

Connectivity/Interoperability

- Between sites, between systems



Decision Support

- Provision of information to clinicians facilitate decision making about care

Data Mining Capabilities

- Uncover relationships, patterns etc.

截至2014年第3季度
全球EMRAM评级参评医院总数

8323

全球各地区EMRAM评级分布：医院比例（截至2014第3季度）

Cross Regional EMRAM Score Distribution					
Stage	Asia Pacific	Middle East	United States	Canada	Europe
Stage 7	0.1%	0.0%	3.1%	0.0%	0.1%
Stage 6	2.8%	11.7%	13.3%	0.6%	2.2%
Stage 5	5.7%	16.7%	24.2%	0.5%	16.3%
Stage 4	2.2%	4.2%	15.7%	3.6%	3.2%
Stage 3	0.4%	19.2%	27.7%	32.5%	3.6%
Stage 2	29.1%	19.2%	7.2%	28.9%	30.0%
Stage 1	5.4%	13.7%	3.2%	14.5%	16.7%
Stage 0	54.3%	11.7%	5.6%	19.4%	27.9%
	N = 687	N = 120	N = 5,449	N = 640	N = 1427



中国有哪些医院获得了HimSS认证？

HIMSS EMRAM Stage 6 Hospitals

Greater China Region

(by Dec 2015)

- **14 hospitals:**

- 首都医科大学宣武医院
- 河南省洛阳正骨医院、河南省骨科医院（郑州院区）
- 新疆医科大学第一附属医院
- 浙江大学医学院附属邵逸夫医院
- 广州市妇女儿童医疗中心

HIMSS EMRAM Stage 6 Hospitals

Greater China Region

(Continued)

- 复旦大学附属中山医院
- 大连大学附属中山医院
- 天津市宁河县医院
- 长安医院
- 烟台毓璜顶医院
- 高雄醫學大學附設中和紀念醫院
- 臺北醫學大學附設醫院
- 衛生福利部雙和醫院
- 臺北市立萬芳醫院

HIMSS EMRAM Stage 7 Hospitals

Greater China Region

(by Dec 2015)

➤ 北京大学人民医院

- People's Hospital of Peking University
 - 中国医科大学附属盛京医院
- Shengjing Hospital of China Medical University
 - 泰达国际心血管病医院
- TEDA International Cardiovascular Hospital

向临床系统要效益

“Hard costs”

Reduction of duplicate medical orders

Reduction in paper based costs

Reduction of Adverse Drug Events (ADEs)

Reduction in length of stay, preventable readmissions

Shift to outpatient and Home Care

Health Plan savings

“Soft costs and benefits”

Reduction in errors, reduces potential losses

Will eventually reduce liability insurance costs, including Medical Staff’s

Increase in employee staff satisfaction reduces turnover costs

Increase in direct patient care time is a staff “satisfier”

Increase in medical staff satisfaction*

“ED exit cycle time” improvement

Increase in family and patient satisfaction with CLMA

Hard to quantify “confidence”

实施电子病历所带来的经济回报：

- 微生物自动监控节省：7,000,000美元/年
- 电子病历功能自动化节省：4,000万美元/年
- 后端语音识别功能应用第一年节省：1,800,000美元
- 突发心跳骤停预警节省：162小时人工筛选时间

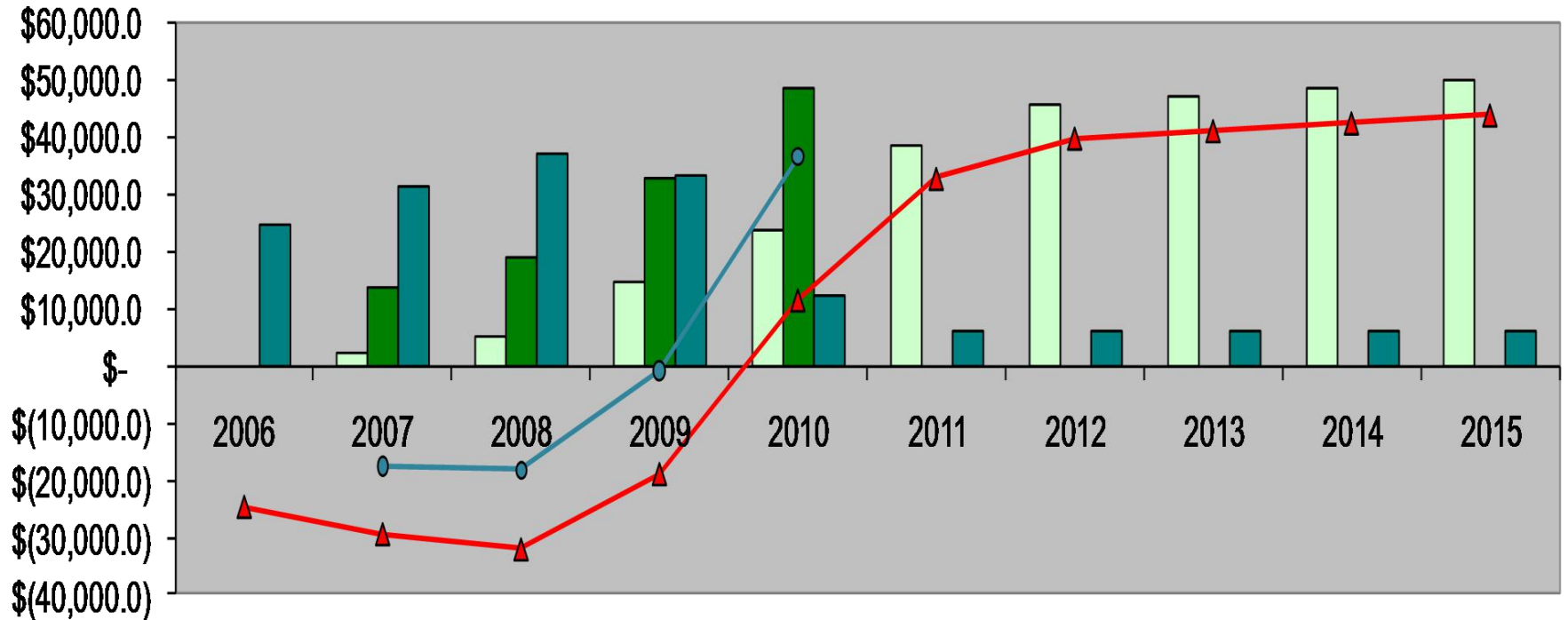
What we found

Hospitals that adopted EMR between 1996 and 2009 did not experience a reduction in operating costs. This average masks important variation:

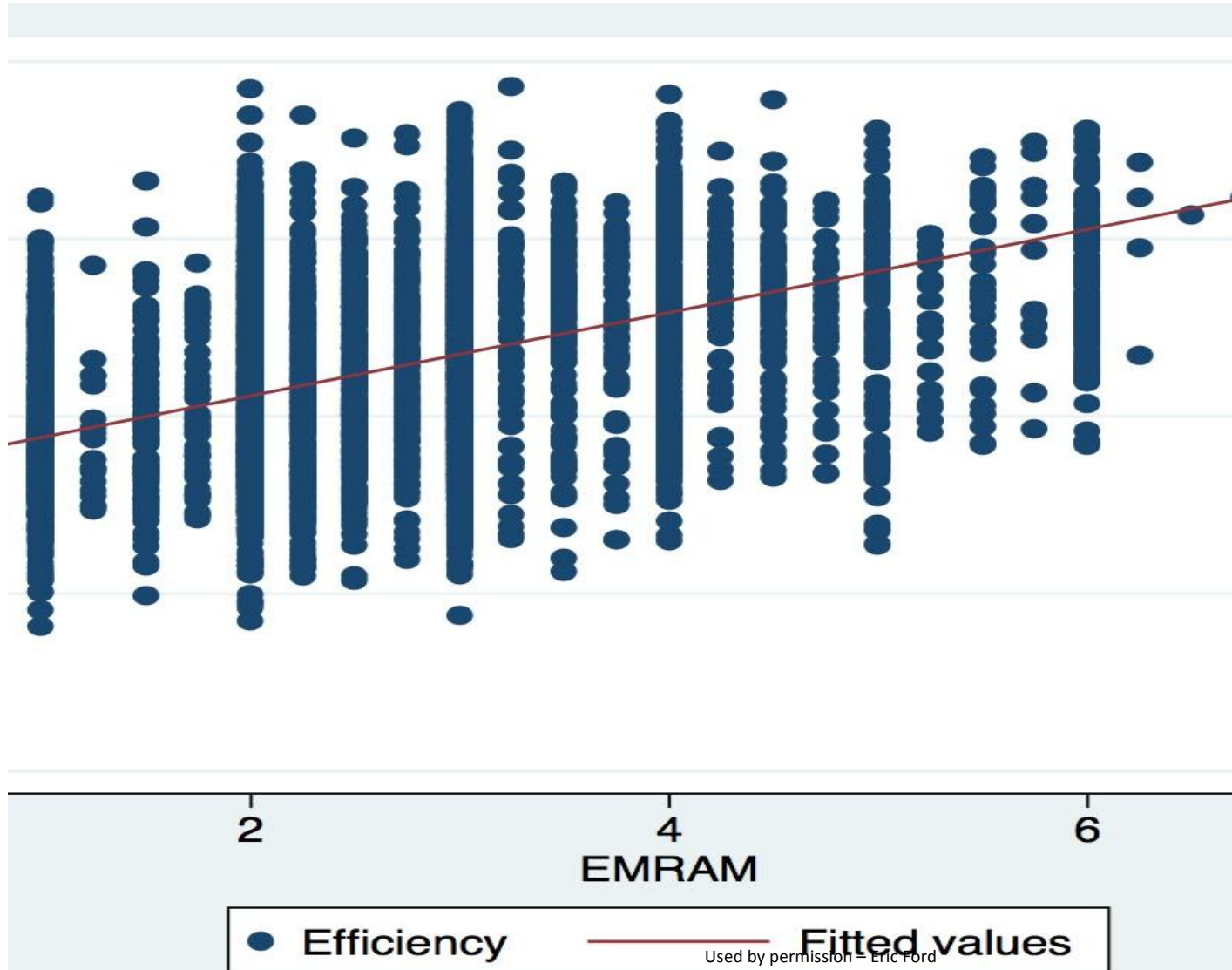
1. Costs **rise** immediately following adoption (particularly for the more advanced technologies), and then fall back to pre-adoption levels
2. Hospitals in locations with IT-intensive industry enjoyed a significant **reduction** in costs after 3 years
3. Hospitals in other locations faced a significant **increase** in costs
4. The initial cost increase was smaller for hospitals with IT experience



年度成本效益

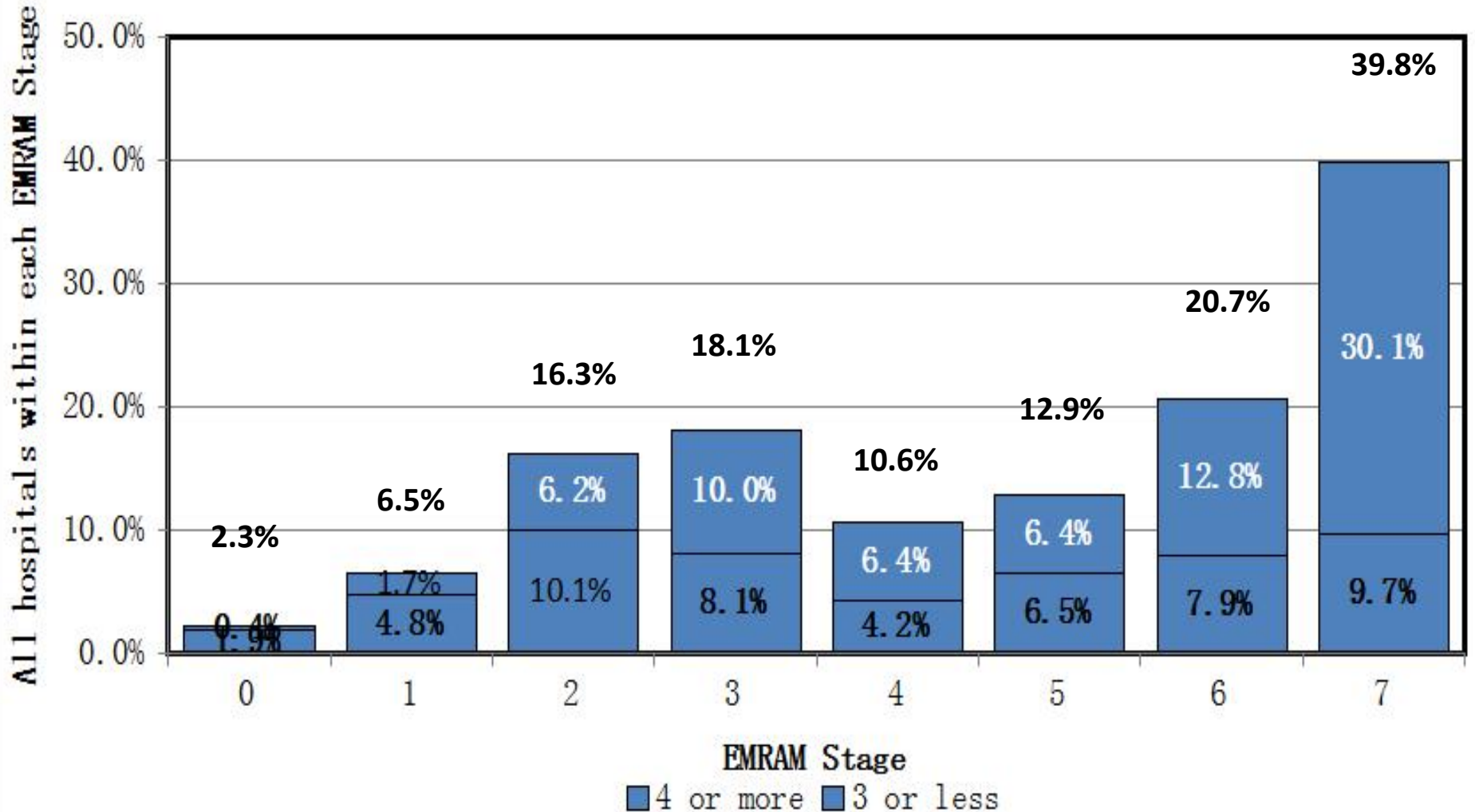


不同EMRAM级别医院的成本效率

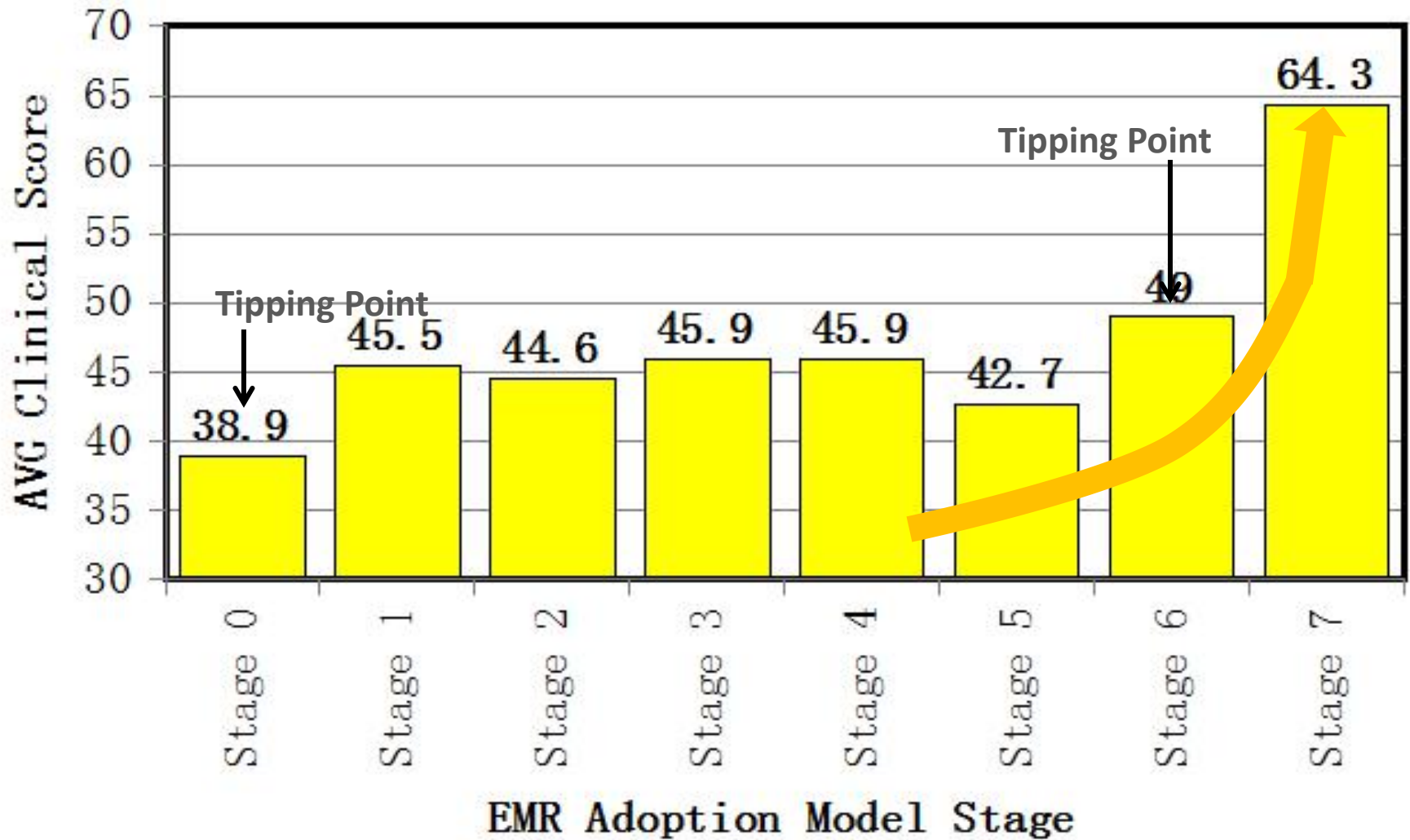




EMRAM各级别中JCI最佳医院的比例 (质量评分为优)



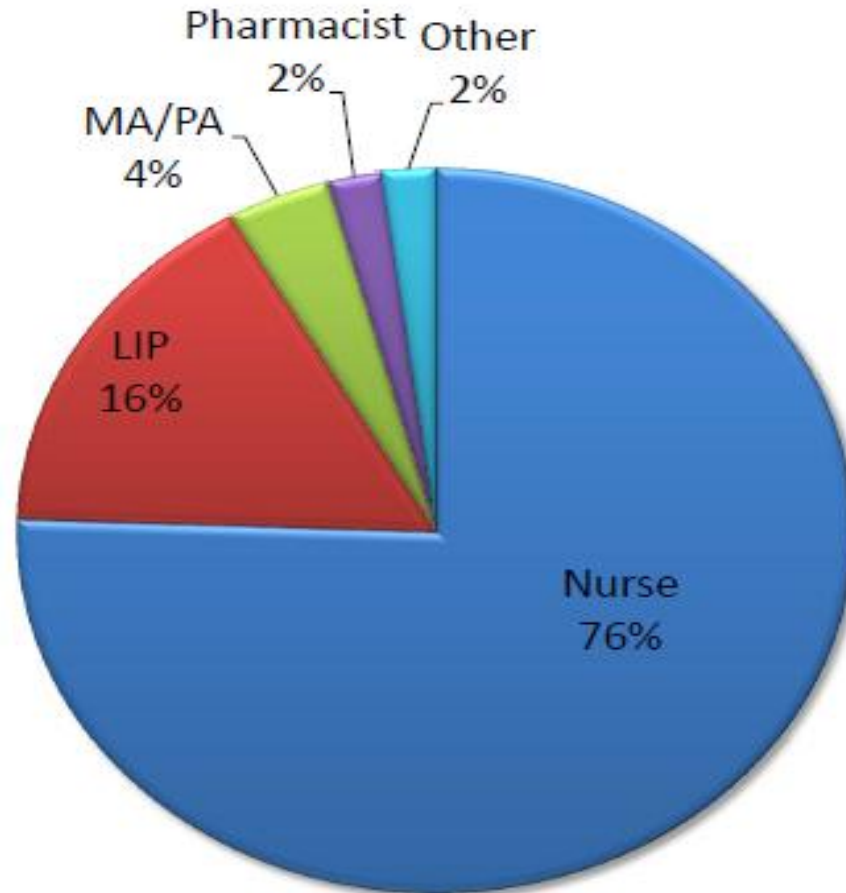
基于价值的采购（VBP）临床得分



以规则和警告驱动最佳实践

Best Practice Advisories – by Provider Type

April 2013
n = 1,046,393



Three Stages of Health Care Information

ice
ment



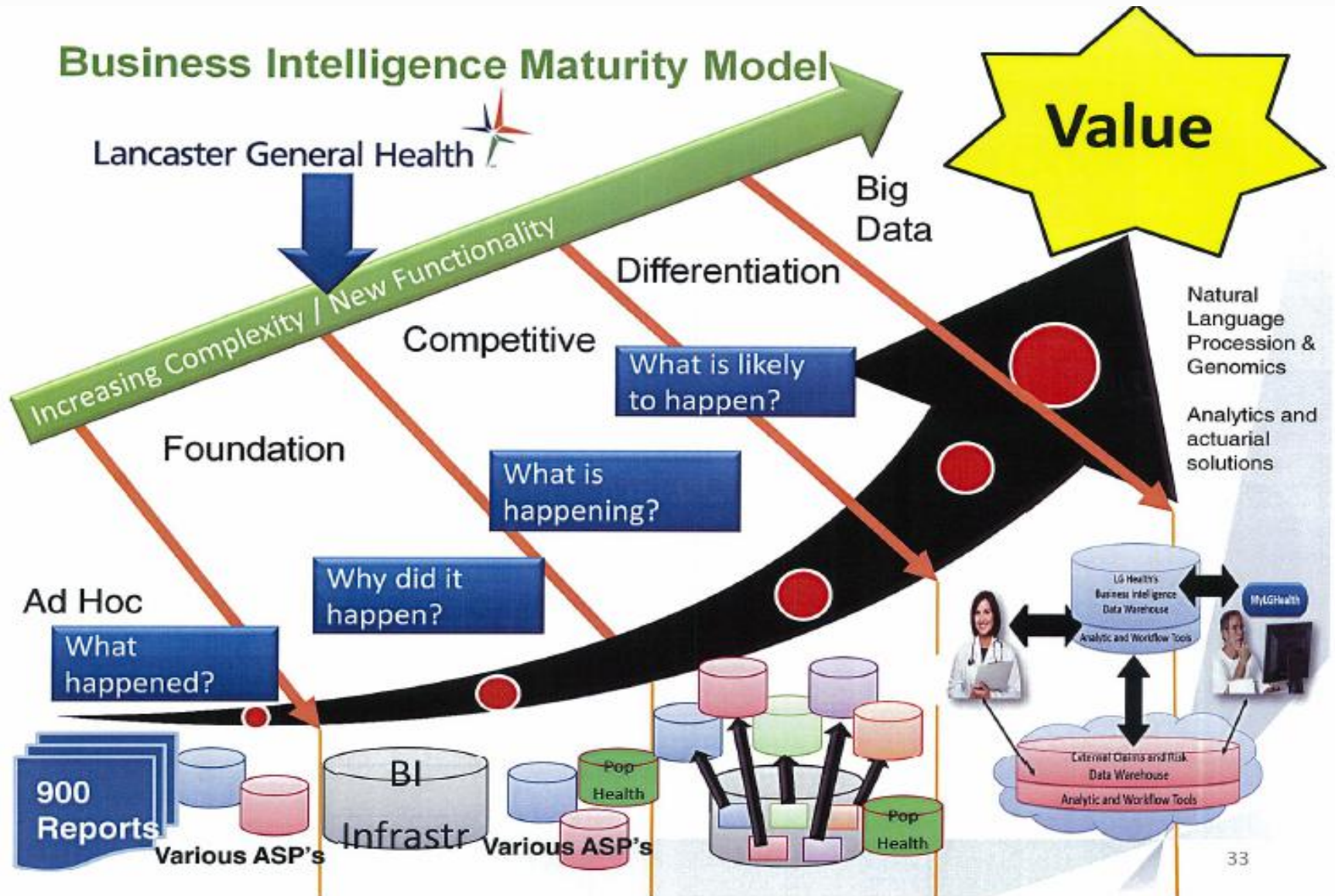
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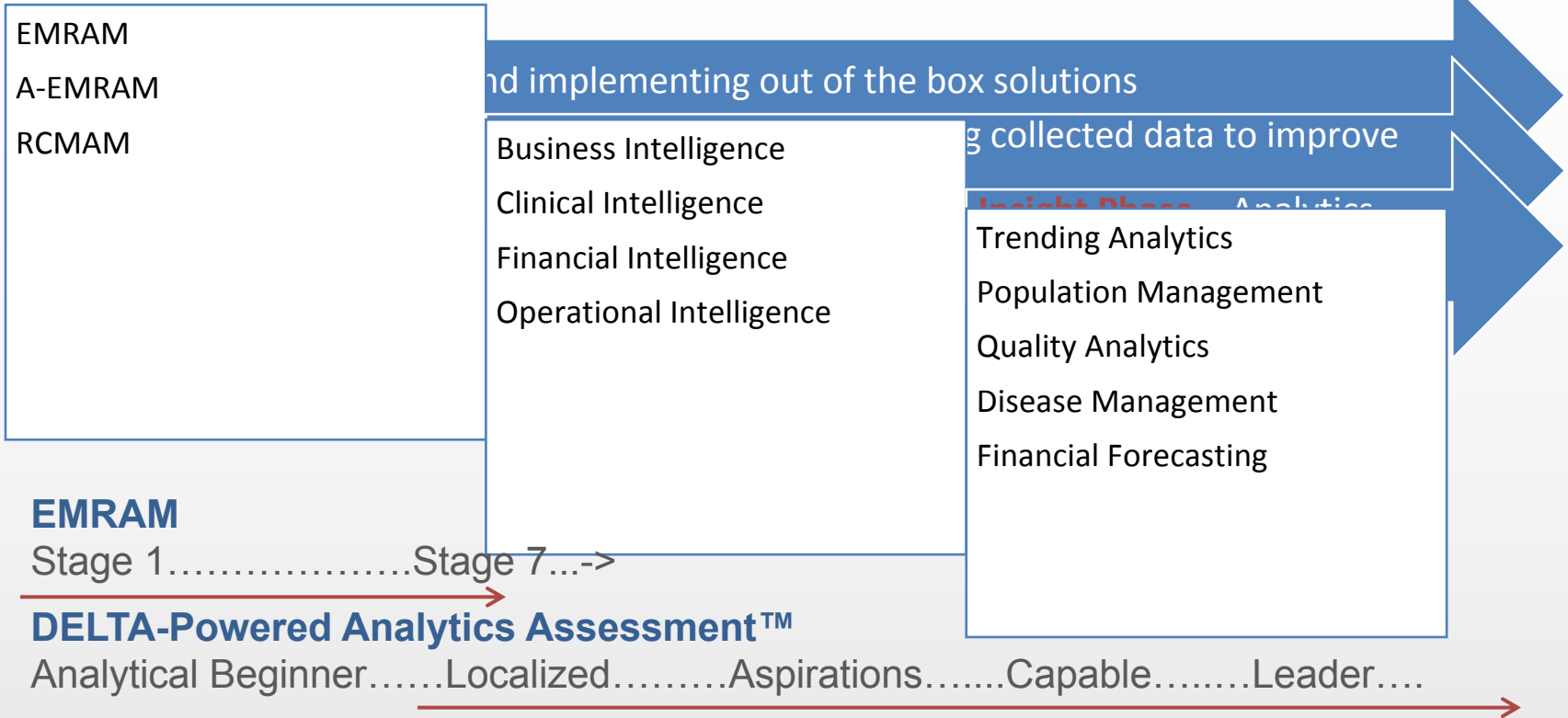
tion
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迈向下一个目标



HOW HIMSS ANALYTICS MATURITY MODELS WORK TOGETHER



Organizational Capability and Sophistication

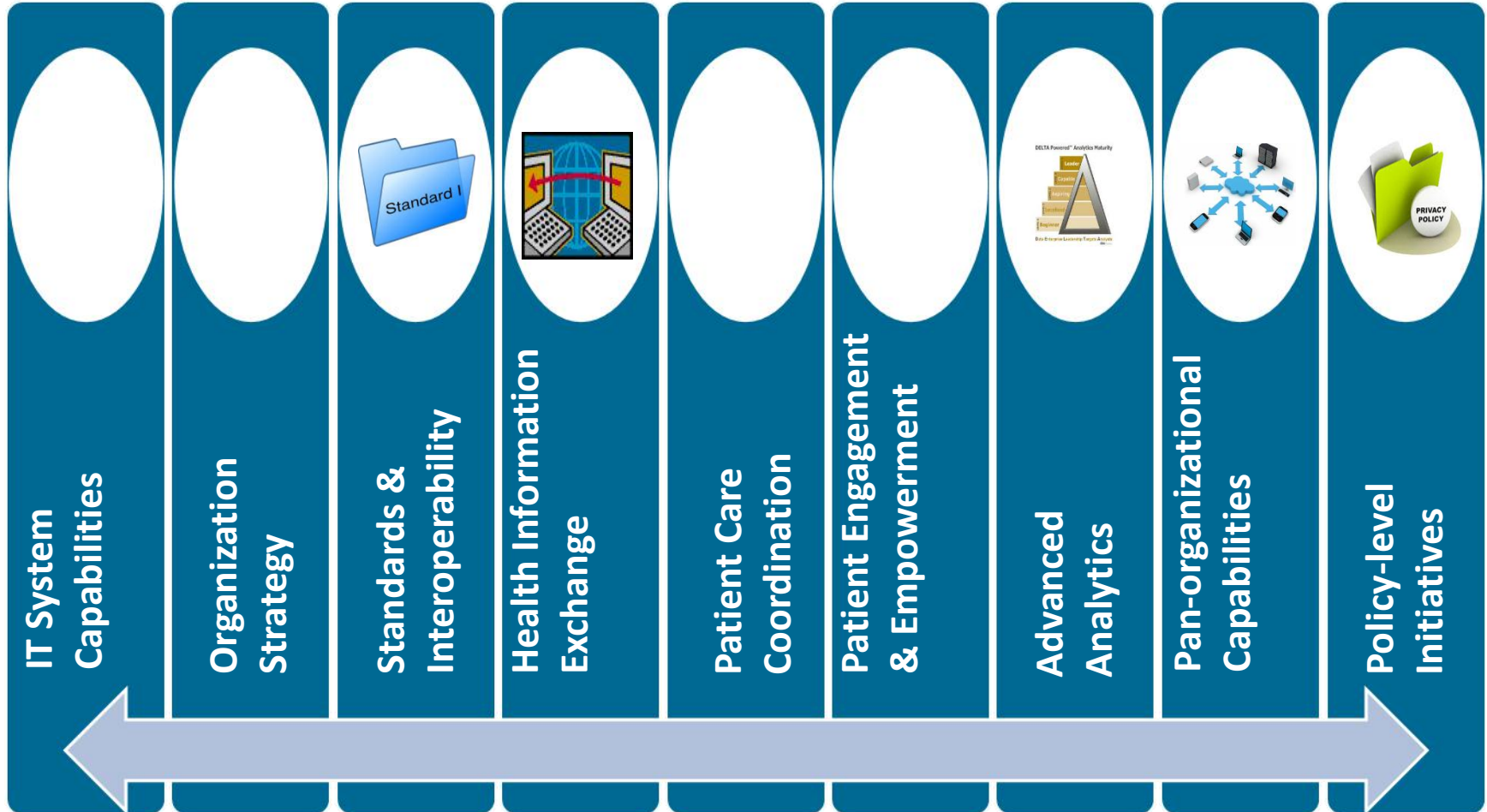
Basic healthcare services.....Care & Quality Management.....Advanced Models
(Clinic, Inpatient, ED, transport) (Partnerships, Registries, Quality Msrs) (ACO, HMO, Carve outs)

DELTA Model levels of maturity



Continuum of Care Maturity Model

9 Key Pillars of Focus



患者安全：医疗质量的中心问题



Joint Commission ©
INTERNATIONAL

做该做的事情

- 决策的合理性
- 效果

质量

HimSS®

把该做的事情做好

- 适用性 安全性
- 连续性 时效性
- 有效性 尊重
- 效率

Conclusion

- HIT is a tool that can foster the creation of integrated, patient centric, quality care delivery system
- It is all of our jobs to create an environment where it is very hard to not deliver quality care

病人流管理-广州妇女儿童医学中心



JCI评审前



JCI评审后



HMISS实施后

措施：多种预约、二次分诊、规范抗菌药物

措施：移动支付、非急诊全面预约



- 眼界决定境界
- 思路决定出路
- 定位决定地位

- 理念决定道路
- 性格决定命运
- 细节决定成败





目标非常明确

我们通常能够看到“洞”在哪，但问题是如何挥最少的杆，让球掉进洞里。

谢谢!

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