HIMSS Analytics
Advisory Solutions

HiMSS *Analytics*®

The Industry's Most Comprehensive Market Intelligence Resources & Advisory Solutions

Essentials Briefs
Maturation Model Edu/Cert
Voice of Customer (VOC)
Enhanced Win / Loss
Executive Training

HIMSS Analytics®

The Industry's Most Comprehensive Market Intelligence Resources	Research Services	Customized Consulting

| **HIMSS Analytics® Database** HIT Adoption Market Opportunity Market Share Contacts Benchmarking	**CapSite™ Database** Pricing Packaging Positioning Contract Terms	Maturation Models Essentials Report Strategic Industry Reports White Papers Market Research	Voice of Customer (VOC) Diagnostic Benchmarking (Win / Loss) Executive Training

2014 Research

1 — 2 — 3 — 4 — **5** — 6 — 7 — 8

- To gauge the level of Ambulatory PM system and EHR adoption
  - Hospital-owned clinics
  - Free standing physician practices
- 563 Participants
  - From ambulatory organizations of various size, ownership and specialty

HIMSS *Analytics*

6th Annual Ambulatory PM & EHR Study

HIMSS Analytics

August 2014
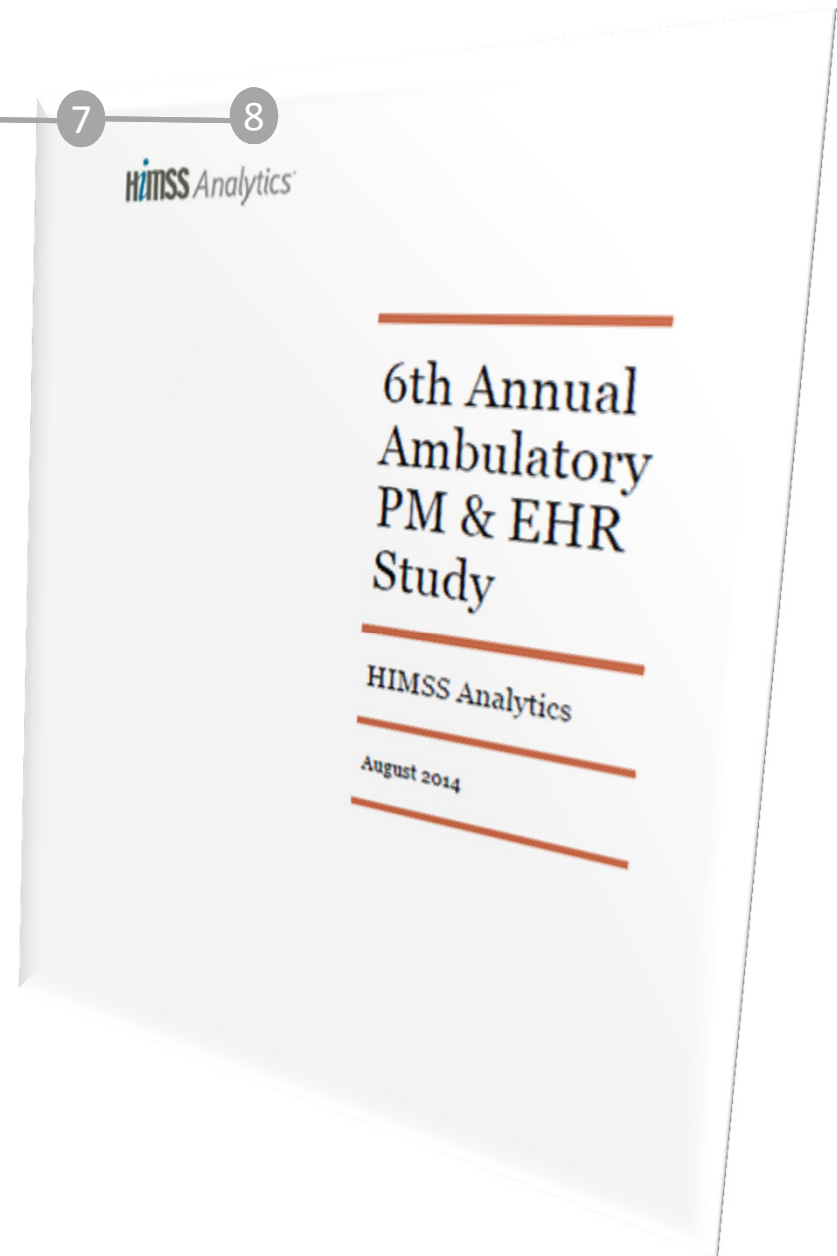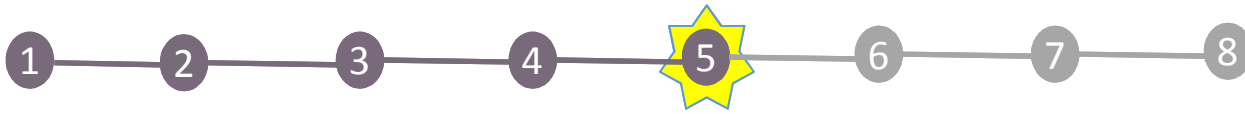
Focus on EMR has presented a need to provide providers with guidance around their EMR strategy

HIMSS Analytics Ambulatory EMR Adoption Model^{SM} (A-EMRAM)
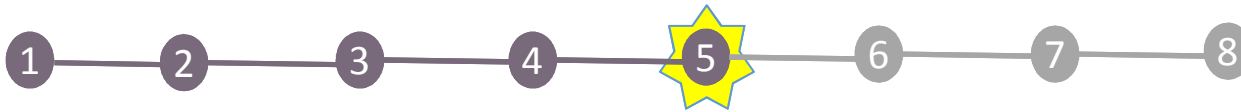
- Developed to guide IT leaders in applications to acquire in order to achieve a desired end state
- While the vast majority of ambulatory facilities have low EMR capabilities, approximately 10 percent of tethered ambulatories are Stage 6 or 7

United States EMRAM	Canada EMRAM	NEW! United States Ambulatory EMRAM

US Ambulatory EMR Adoption Model ^{SM}

Stage	Cumulative Capabilities	2014 Q2
Stage 7	HIE capable, sharing of data between the EMR and community based EHR, business and clinical intelligence	4.30%
Stage 6	Advanced clinical decision support, proactive care management, structured messaging	5.83%
Stage 5	Personal health record, online tethered patient portal	5.56%
Stage 4	CPOE, Use of structured data for accessibility in EMR and internal and external sharing of data	1.23%
Stage 3	Electronic messaging, computers have replaced the paper chart, clinical documentation and clinical decision support	11.42%
Stage 2	Beginning of a CDR with orders and results, computers may be at point-of-care, access to results from outside facilities	30.74%
Stage 1	Desktop access to clinical information, unstructured data, multiple data sources, intra-office/informal messaging	34.29%
Stage 0	Paper chart based	6.63%

Data from HIMSS Analytics® Database ©2014   N = 26,008

Ambulatory EMR Adoption Model[SM]

Stage	Cumulative Capabilities	2012 Q2	2014 Q2
Stage 7	HIE capable, sharing of data between the EMR and community based EHR, business and clinical intelligence	0.00%	4.30%
Stage 6	Advanced clinical decision support, proactive care management, structured messaging	1.20%	5.83%
Stage 5	Personal health record, online tethered patient portal	0.04%	5.56%
Stage 4	CPOE, Use of structured data for accessibility in EMR and internal and external sharing of data	0.41%	1.23%
Stage 3	Electronic messaging, computers have replaced the paper chart, clinical documentation and clinical decision support	10.92%	11.42%
Stage 2	Beginning of a CDR with orders and results, computers may be at point-of-care, access to results from outside facilities	34.10%	30.74%
Stage 1	Desktop access to clinical information, unstructured data, multiple data sources, intra-office/informal messaging	5.29%	34.29%
Stage 0	Paper chart based	48.04%	6.63%

Data from HIMSS Analytics® Database © 2014 HIMSS Analytics

N = 9,247   N = 26,008

Ambulatory EMRAM Vision
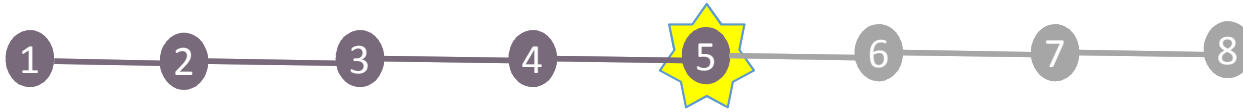
- **Thought leadership**
  - Quality, Safety, Efficiency improvements
- **To reflect the market**
  - Where is the market heading
- **To inform government policy**
  - Contributor to architecture of Meaningful Use program
  - Used around the world to gather data for policy formulation
- **To "drive the market"**
  - A useful roadmap for CIOs, governance boards, public policy

Ambulatory EMR Adoption Model^{SM}

Stage	Cumulative Capabilities	2012 Q2	2014 Q2	
Stage 7	HIE capable, sharing of data between the EMR and community based EHR, business and clinical intelligence	0.00%	4.30%	**MU Stage 3***
Stage 6	Advanced clinical decision support, proactive care management, structured messaging	1.20%	5.83%	
Stage 5	Personal health record, online tethered patient portal	0.04%	5.56%	**MU Stage 2**
Stage 4	CPOE, Use of structured data for accessibility in EMR and internal and external sharing of data	0.41%	1.23%	**MU Stage 1**
Stage 3	Electronic messaging, computers have replaced the paper chart, clinical documentation and clinical decision support	10.92%	11.42%	
Stage 2	Beginning of a CDR with orders and results, computers may be at point-of-care, access to results from outside facilities	34.10%	30.74%	
Stage 1	Desktop access to clinical information, unstructured data, multiple data sources, intra-office/informal messaging	5.29%	34.29%	
Stage 0	Paper chart based	48.04%	6.63%	

Data from HIMSS Analytics® Database © 2014 HIMSS Analytics   N = 9,247   N = 26,008

*Anticipates MU Stage 3 Emphasis on Information Exchange

Summary Profile of a
Stage 6 and 7 Organization

1 — 2 — 3 — 4 — 5 — 6 — 7 — 8

- **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

- **Have embraced their technology supplier as a partner**

Stage 6 Validation Process

Stage 6 Validation Process

1 — 2 — 3 — 4 — 5 — **6** — 7 — 8
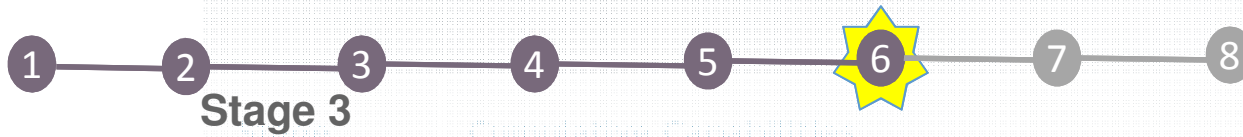
Stage 3

- Order entry & clinical documentation L&O? Physicians generating electronic problem list from EMR & ePrescribing?

Stage 2 –

- CDR in place storing all orders and results?

Stage 3	Electronic messaging, computers have replaced the paper chart, clinical documentation and clinical decision support	10.92%	11.42%
Stage 2	Beginning of a CDR with orders and results, computers may be at point-of-care, access to results from outside facilities	34.10%	30.74%
Stage 1	Desktop access to clinical information, unstructured data, multiple data sources, intra-office/informal messaging	5.29%	34.29%

Stage 1 – Access to online reference material, eligibility information, lab results, etc.?

Stage 6 Validation Process
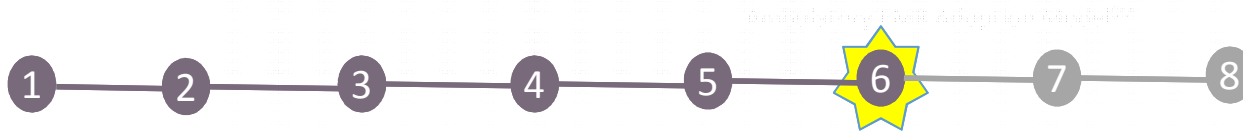
Stage 5 – Patient Portal

– **Support / maintain personal health information (e.g., clinical summaries)**

– **Pay bill, request an appointment, schedule an appointment, etc**

Stage 5	Personal health record, online tethered patient portal	0.04%	5.56%
Stage 4	CPOE, Use of structured data for accessibility in EMR and internal and external sharing of data	0.41%	1.23%

Stage 4 – CPOE & physician documentation L&O; clinical documentation at POC?

– **Lab results (incl. outsourced) imported / stored as discrete data?**

– **Reporting data to registries?**

– **Ability to manage drug recalls?**

Stage 6 Validation Process

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1 — 2 — 3 — 4 — 5 — 6 — 7 — 8
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Stage 6	Advanced clinical decision support, proactive care management, structured messaging	1.20%	5.83%

Stage 6 – CDS with physician documentation?

- Patient follow-up flags can be set by provider?

- CDS triggered by diagnostic results & office-based diagnostic devices?

Stage 7 Validation Process

Stage 7 Validation Process

1 — 2 — 3 — 4 — 5 — **6** — 7 — 8

On-site visit (about 6 hours)

- Opening Session w/ presentations by staff (60-90 min)

- Clinic Visits (40-45 min each)

- Medical Imaging, if in-house (20 min)

- HIM (30 min)

- Deliberation (30 min)

- Closing Session and results presentation (30 min)

EMR ADOPTION IN THE U.S. MARKET – DRIVEN BY NATIONAL STRATEGY

Trended 2006 – 2013

	2006	2007	2008	2009	2010	2011	2012	2013
Stage 7	0.0%	0.0%	0.3%	0.7%	1.0%	1.2%	1.8%	**2.9%**
Stage 6	0.1%	0.8%	0.5%	1.6%	3.2%	5.2%	7.3%	**12.5%**
Stage 5	0.5%	1.4%	2.5%	3.8%	4.5%	8.4%	11.5%	**22.0%**
Stage 4	3.1%	2.2%	2.5%	7.4%	10.5%	13.2%	14.0%	**15.5%**
Stage 3	18.7%	25.1%	35.7%	50.9%	49.0%	44.9%	41.7%	**30.3%**
Stage 2	40.0%	37.2%	31.4%	16.9%	14.6%	12.4%	11.4%	**7.6%**
Stage 1	17.4%	14.0%	11.5%	7.2%	7.1%	5.7%	4.8%	**3.3%**
Stage 0	20.4%	19.3%	15.6%	11.5%	10.1%	9.0%	7.5%	**5.8%**
# of Hospitals	n = 4,237	n = 5,073	n = 5,166	n = 5,235	n = 5,281	n = 5,337	n = 5,310	n = 5,458

Source: HIMSS Analytics® Database

This is how long it takes to make "significant" national progress fuelled by national incentives starting in 2008

US EMR Adoption Model℠

Stage	Cumulative Capabilities	2011 Q2	2014 Q2	
Stage 7	Complete EMR, CCDA transactions; Data Analytics to Improve Care	1.1%	3.2%	+191%
Stage 6	Physician documentation (structured templates), full CDSS, full R-PACS	4.0%	15.0%	+275%
Stage 5	Closed loop medication administration	6.1%	27.5%	+351%
Stage 4	CPOE, Clinical Decision Support (clinical protocols)	12.3%	15.3%	
Stage 3	Clinical documentation, CDSS (error checking)	46.3%	25.4%	
Stage 2	CDR, Controlled Medical Vocabulary, CDS, HIE capable	13.7%	5.9%	-57%
Stage 1	Ancillaries - Lab, Rad, Pharmacy - All Installed	6.6%	2.8%	-58%
Stage 0	All Three Ancillaries Not Installed	10.0%	4.9%	-51%

Data from HIMSS Analytics® Database © 2014 HIMSS Analytics

N = 5439   N = 5449

Suggested Timeline

1 — 2 — 3 — 4 — 5 — 6 — **7** — 8
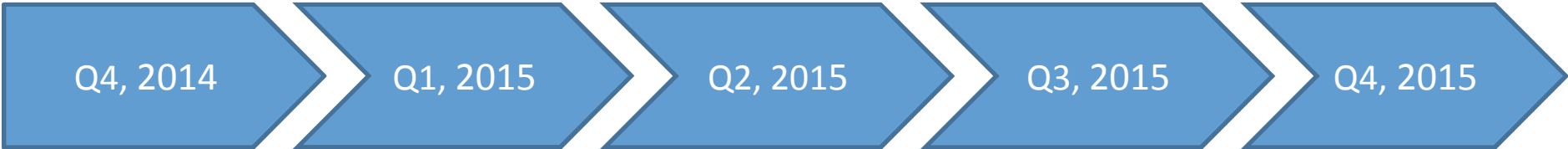
Q4, 2014	Q1, 2015	Q2, 2015	Q3, 2015	Q4, 2015
2014 MU Stage 1 /2 + 2014 PQRS	**Optimization Gap Analysis + Participate in P4P/RBC Programs**	**Implement recommended workflows + ICD-10 content update**	**ICD-10 testing & sign off + ICD-10 Boot Camp**	**ICD-10 mandated**

# Parting Questions

1 — 2 — 3 — 4 — 5 — 6 — 7 — 8

- When will providers and staff be trained on Version 10?

- Are you planning on meeting Meaningful Use this year?

- How do you plan to avoid the PQRS penalty this year?

- When will providers and staff be trained on your ICD-10 strategy?

- How can you optimize and automate your revenue cycle workflows?

- Do you just wonder where to start?

- Get HIMSS A-EMRAM recognition along the way!

HIMSS Analytics' Maturity Models

United States EMR Adoption Model

Stage	Cumulative Capabilities	2013 Q3	2013 Q4
Stage 7	Complete EMR; CCD transactions to share data; Data warehousing; Data continuity with ED, ambulatory, OP	2.2%	2.9%
Stage 6	Physician documentation (structured templates), full CDSS (variance & compliance), full R-PACS	11.1%	12.5%
Stage 5	Closed loop medication administration	20.9%	22.0%
Stage 4	CPOE, Clinical Decision Support (clinical protocols)	15.1%	15.5%
Stage 3	Nursing/clinical documentation (flow sheets), CDSS (error checking), PACS available outside Radiology	31.9%	30.3%
Stage 2	CDR, Controlled Medical Vocabulary, CDS, may have Document Imaging; HIE capable	8.4%	7.6%
Stage 1	Ancillaries - Lab, Rad, Pharmacy - All Installed	3.5%	3.3%
Stage 0	All Three Ancillaries Not Installed	6.9%	5.8%

DELTA Powered™ Analytics Maturity
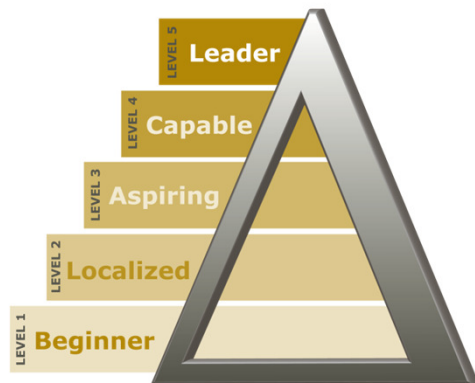
- EMR Adoption Model (EMRAM) (2004)
- Ambulatory EMR Adoption Model (aEMRAM) (2009)
- DELTA-powered Analytics Assessment (DPAA) (2013)
- EMR Adoption Model (EMRAM) (2004)
- Continuity of Care Maturity Model (CCMM) (2014)

HIMSS Analytics
Consulting Solutions

and HIMSS Media

HIMSS Analytics
From insight to engagement

Allow HIMSS Analytics and HIMSS Media to enable you to better understand your audience and marketing opportunities, and then help you create and deploy a strategic marketing campaign.

HIMSS Analytics:
Better Understand Your Market.

Conduct custom qualitative and quantitative research to deliver vital insights, regardless of where you are in the product lifecycle. Our Voice of Customer (VOC) survey and interview results allow you to make strategic decisions around product ideation, launch, awareness, and more.

HIMSS Media:
Create & Deploy a Strategic Marketing Plan.

HIMSS Media helps you reach your target audience, understand their information needs. Then you can create and execute a marketing plan that includes compelling content placed in relevant editorial environments — whether your goals are lead generation, awareness or thought leadership.

HIMSS Insight to Engagement Approach

Research
- Voice of Customer
- Product Positioning
- Market Opportunity
- Competitive Intelligence

Strategy
- Consumer Insights
- Market Strategy
- Brand Position
- Audience Identification

Execution
- Custom Content
- Media Placements
- Live Events
- Social Media