



A Roadmap for EMR Adoption: Ensuring Meaningful Use

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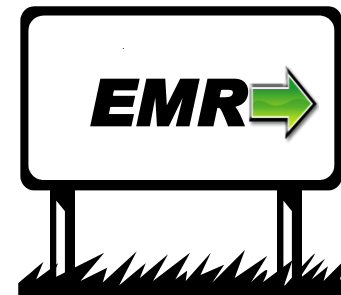


A Roadmap For EMR Adoption

1. Build a vision, consensus and strategic plan at the executive/board level for a business initiative to transform care delivery.
2. Build a governance structure to facilitate decision-making, prioritization, management, and accountability that includes a comprehensive user-focused change management plan (i.e., teaching people how to deal with change).
3. Build the IT infrastructure to support an EMR, including a disaster recovery/business continuity plan.
4. Measure business processes to be impacted and expected to improve to provide ROI for investment.
5. Make supplier/consulting decisions.
6. Implement the technologies in the right order.
7. Keep measuring, managing change, achieving adoption of technology in day-to-day work.

1. Build Vision, Engage Executives

1. Build vision, consensus and strategic plan at the executive/board level for a business initiative to transform care delivery.
 - Leadership needs to understand the extent to which “business as usual just left the building.”
 - There’s nothing as transformative in an HCO as this, and it requires courage, leadership, patience and steadfastness. And money for multiple years.
 - Establish benefits to be achieved and accountability for realization.
 - CEO and leadership team owns it. “Launch and leave” is NOT sponsorship.
 - Now’s the time to identify the clinician (especially physician) champions. Don’t pick nerds.
 - Identify required roles (CMIO, CNIO).



2. Build a Governance Structure

2. Build a governance structure to facilitate decision-making, prioritization, management, and accountability that includes a comprehensive user-focused change management plan.
 - Take the mandate from the executive team and board and translate it into a functioning governance structure.
 - Get a functional steering committee established.
 - It's much more than technology; there has to be a comprehensive plan (and budget) to deal with the people side of the project.
 - “You have to teach people how to deal with change and adopt dramatic shifts in the clinical environments.” The plan includes inclusion and cultivation of the medical staff and unions, communications, training, process mapping and redesign, and workforce planning.



3. Build an IT Infrastructure

3. Build the IT infrastructure to support an EMR, including a disaster recovery/business continuity plan.
 - An “IT infrastructure” is more than computers, peripherals and networks. It includes applications that provide support for the business, interconnectivity with suppliers and business partners, and a services/support organization to make it work.
 - Disaster recovery plan responsibility of CIO and IS staff; business continuity plan responsibility of business units.
 - You’ll also need an operational infrastructure to support ongoing optimization efforts of both the applications and workflow processes, as well as alerts and decision support.
 - Include an ongoing training infrastructure, particularly as the system changes, training continues.



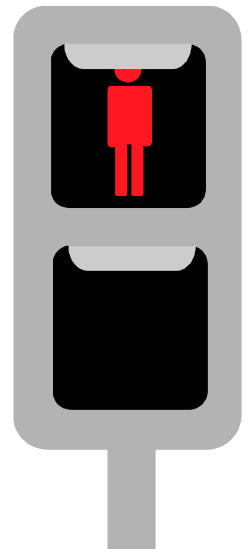
4. Measure Business Processes

4. Measure business processes to be impacted and expected to improve to provide ROI for investment.
 - Review current processes and incorporate best practices.
 - What to change?



4. Measure Business Processes

“Where the art is in all of this – enough change to matter, change focused on the right things with high economic or strategic value, and not so much change that risk increases exponentially. We humans can only tolerate so much. Needs to be balanced. Stretch goals, but not fantasy. EMRs are the start of a very long journey. Constant change and improvement to follow. The idea is to land far enough out upon activation so as to be doable and begin a long journey forward from a significant advance, but not so far that you have to change jobs....”



4. Measure Business Processes

4. Measure business processes to be impacted and expected to improve to provide ROI for investment.
 - Review current processes and incorporate best practices.
 - What to change?
 - “Benefits should be quantifiable (not just dollars, but other measures), someone (maybe the whole executive team through their incentive comp) should be accountable for achieving them, and the business value of those benefits should outweigh the cost of both the implementation as well as the increasing IT operating expense that will follow.”



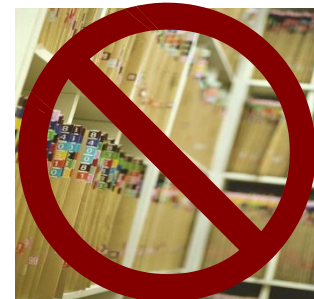
5. Make Supplier/Consultant Decisions

5. Make decisions on supplier/consulting help.
 - Buy from a supplier whose culture and leadership you respect.
 - Engage their executives and listen to their advice.
 - Create a contract that's fair and spells out both parties' responsibilities. Provide incentives for good performance.
 - “Be biased toward self-sufficiency. Develop your staff. Don't be dependent on consultants long-term. Get a few really, really good experts to mentor your staff and steer around the landmines that are largely only known with experience.”
 - Identify your internal experts, incorporate them into the implementation process and educate them.



6. Implement the Technologies

6. Implement the technologies in the right order.
- “Right order” means the three main ancillary systems, lab, radiology, and pharmacy, need to be installed prior to the clinical data repository so that the database has those systems to feed it with results. It means nursing documentation before CPOE so that physicians have all the information they need to make decisions when they’re issuing orders.
 - “Organizations should plan to use the EMR to demonstrate data agility throughout the implementation process...stakeholders must see incremental benefits of views into data as a result of their EMR data entry; otherwise, they may get disenchanted before the EMR rollout is complete. Physicians won’t treat it like a slot machine where they will keep playing and wait for the big payout; they want more instant gratification from their efforts, even if the early benefits are small.”



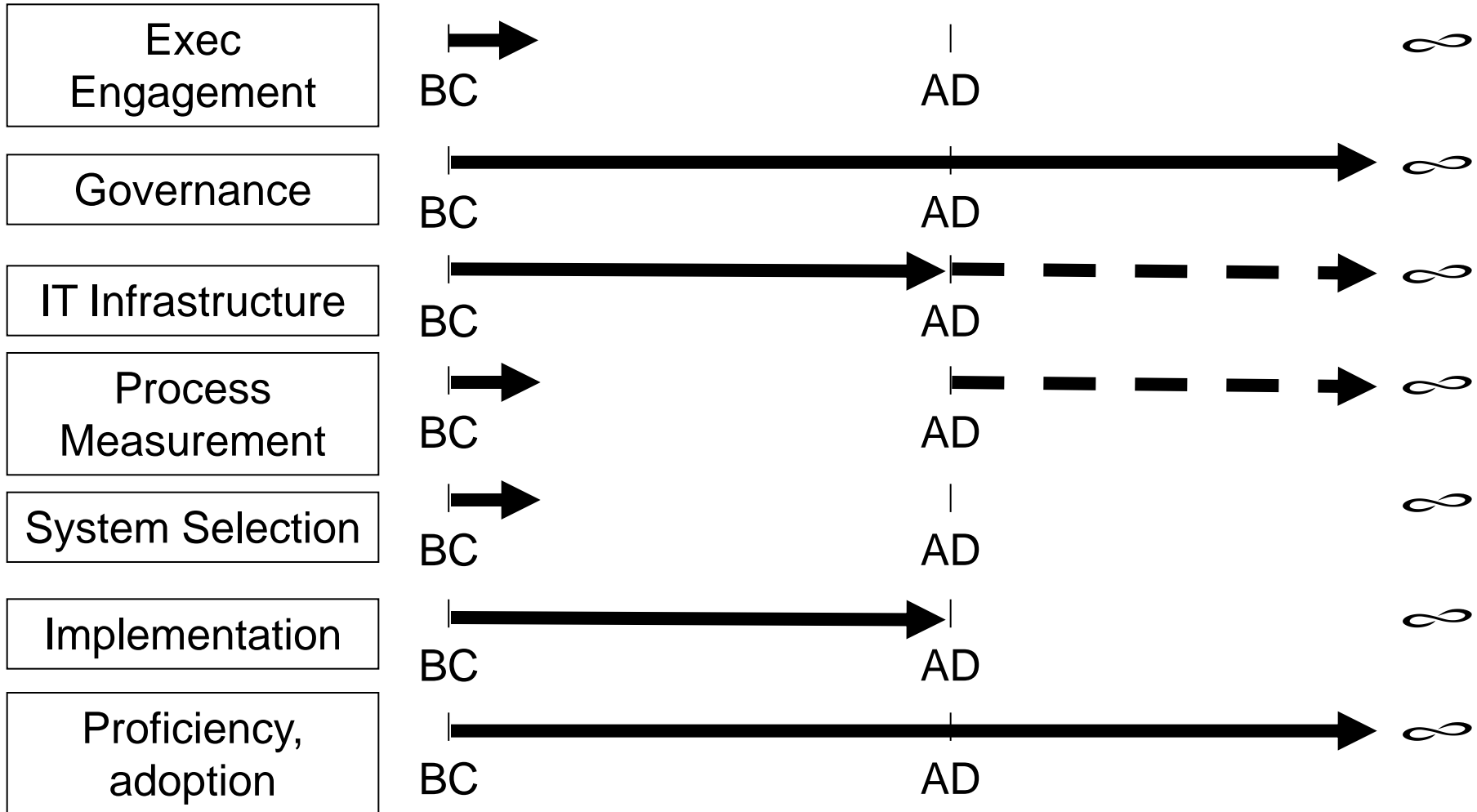
7. Keep Measuring, Managing Change

7. Keep measuring, managing change, developing proficiency, achieving adoption of technology in day-to-day work.
 - Make sure that written policies and procedures are in place for the new environment.
 - Clinicians must operationalize the use of the EMR....adapt it into their workflow and optimize workflow based on advantages presented by the technology.
 - “This process must be transformational as a mere exchange of paper for electronic processes will be disappointing and possibly hinder sustainability of the EMR.”
 - “...communicate, communicate, communicate.”





These “steps” are not linear



Failure shouldn't be an option...

- If you're in the middle and have missed one, go back and make sure you've covered it.
- This is a road for which there are on-ramps and no off-ramps.
- The major failures are due to:
 - Lack of executive ownership
 - Lack of medical staff engagement early on
 - Weak governance structure
 - Lack of competent, experienced help
 - Intellectual property that walks out the door at the end of the engagement
 - Lack of benefits realization
 - Lack of technology adoption by clinicians





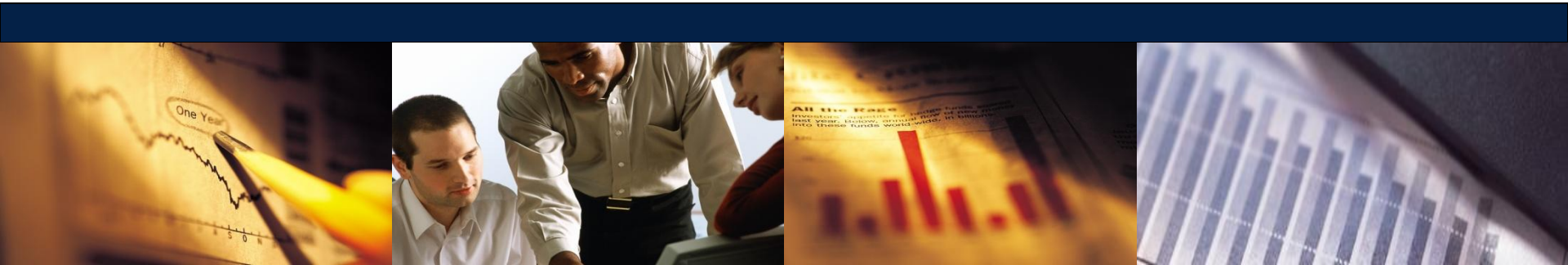
2008- 2009 EMR Adoption Model Trends

		2008 Final	2009 Q3
Stage 7	Complete EMR; CCD transactions to share data; Data warehousing; Data continuity with ED, ambulatory, OP	0.3%	0.5%
Stage 6	Physician documentation (structured templates), full CDSS (variance & compliance), full R-PACS	0.5%	1.2%
Stage 5	Closed loop medication administration	2.5%	4.8%
Stage 4	CPOE, Clinical Decision Support (clinical protocols)	2.5%	4.1%
Stage 3	Nursing/clinical documentation (flow sheets), CDSS (error checking), PACS available outside Radiology	35.7%	40.4%
Stage 2	CDR, Controlled Medical Vocabulary, CDS, may have Document Imaging; HIE capable	31.5%	29.8%
Stage 1	Ancillaries – Lab, Rad, Pharmacy – All Installed	11.5%	7.1%
Stage 0	All Three Ancillaries Not Installed	15.6%	12.1%



Getting to Meaningful Use

		2008 Final	2009 Q3	
Stage 7	Complete EMR; CCD transactions to share data; Data warehousing; Data continuity with ED, ambulatory, OP	0.3%	0.5%	← 2015
Stage 6	Physician documentation (structured templates), full CDSS (variance & compliance), full R-PACS	0.5%	1.2%	
Stage 5	Closed loop medication administration	2.5%	4.8%	← 2013
Stage 4	CPOE, Clinical Decision Support (clinical protocols)	2.5%	4.1%	
Stage 3	Nursing/clinical documentation (flow sheets), CDSS (error checking), PACS available outside Radiology	35.7%	40.4%	← 2011
Stage 2	CDR, Controlled Medical Vocabulary, CDS, may have Document Imaging; HIE capable	31.5%	29.8%	
Stage 1	Ancillaries – Lab, Rad, Pharmacy – All Installed	11.5%	7.1%	
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Thanks!

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