Swords into plowshares

Course agenda and session topics

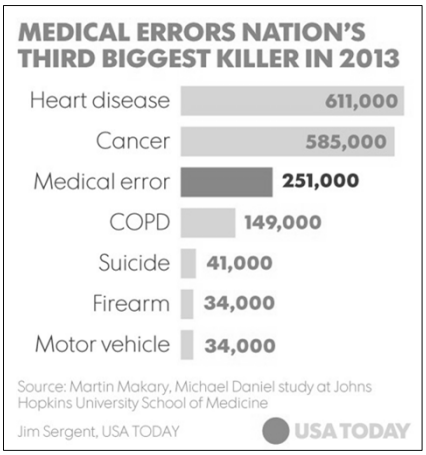
Topic	Speakers	Time
Introduction and course objectives	All	1:30 p.m. – 1:35 p.m.
Why we need to start treating clinical data like financial data. A case study from Johns Hopkins, the value of data. Leveraging high reliability principles and financial management concept.	Dr. Peter Pronovost	1:35 p.m. – 2:20 p.m.
How do you begin to think about clinical data transactions like financial data transactions and governance: a quick overview of COSO, due diligence and ERM. How to begin to applying these concepts to clinical data quality and reporting integrity	Aloha McBride/ Marc Schulman/ Tamil Chellaiah	2:20 p.m. – 3:15 p.m.
Break	–	3:15 p.m. – 3:30 p.m.
Leveraging data mining/analytics to improve quality of care through the automated generation and distribution of actionable exception reports	David Hoffman	3:30 p.m. – 4:30 p.m.

Setting the stage on data — the never-ending struggle to determine the signal through noise

- Patient safety indicators are derived from administrative codes in billing and are broadly used in hospital ranking programs and pay-for-quality programs.
- Patient safety indicators are frequently inaccurate — missing many harms while also reporting false positives.
- Too often, hospital ratings and rankings reflect how well a hospital codes rather than how a hospital provides care.
- For instance, Johns Hopkins reduced the number of patient safety indicator (PSI) incidents it reported to CMS by 75%, thereby reducing its penalties.
- ***However — only 10%*** of the improvement resulted from ***changes in clinical care***. The other ***90% resulted from documentation and coding*** that was more thorough and accurate.

Instead of using PSIs, there is an enormous need for valid and reliable measures that can be tested, controlled and audited, similar to financial transactions and measures.

Medical errors – why they occur and the role of clinical data integrity



Why do errors occur?

Commonly, errors are caused by systemic problems, including a lack of integrated process, technologies and governance that drive unwarranted variation.

What is at stake when clinical data contains errors?

- A patient's life and livelihood
- Misdiagnosis/delayed diagnosis
- Medication errors
- Performance measurement calculation errors
- Reimbursement errors
- **Trust** in your organization's ability to provide safe care

The problem with bad data

- Can result in inappropriate clinical decision-making and creates significant patient safety risk
- Impairs evidence-based medicine and coordination across the care continuum
- Increases the risk of beneficiaries not having access to covered services
- Can result in billing, payment and performance inaccuracies
- Produces inaccurate stakeholder reporting
- Erodes consumer trust and increases legal risk

How does good data become bad information?

- Methods by which it is captured and stored — manual, incomplete, etc.
- Data and system architecture lacks interoperability, resulting in blind spots.
- Cultural roadblocks across the health system prevent collaboration.
- Integrity of systems is not adequately protected, allowing for vulnerabilities and workarounds.
- Clinicians and data scientists operate in silos so reporting is not relevant or actionable in the clinical setting.
- Lack of structure and controls in underlying clinical process to manage quality data inputs.

What is High Reliability Organizing (HRO) and how can it help us to improve clinical data integrity?

Safety culture

System integration

Zero-harm focus

High reliability engineering

HRO is the pursuit of flawless performance under complex, dynamic and oftentimes, potentially catastrophic conditions.*

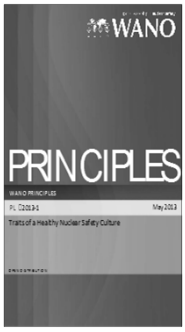
Core characteristics

1. **Sensitivity to operations**
2. **Deference to expertise**
3. **Reluctance to simplify**
4. **Preoccupation with failure**
5. **Commitment to resilience**

*Source: Karl E. Weick and Kathleen M. Sutcliffe, *Managing the Unexpected: Resilient Performance in an Age of Uncertainty*

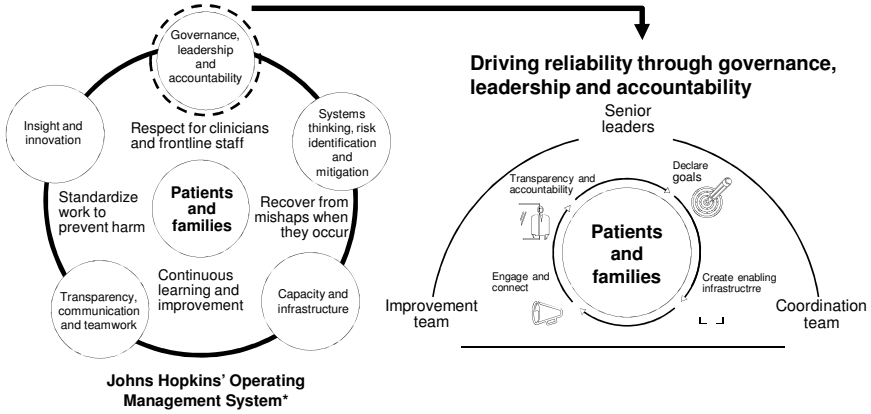
How have HROs organized for success? The advent of the *Operating Management System*

Unifying framework for structured assurance of safety, quality and reliability and an integrated approach for continuous organizational learning, innovation and improvement



For critical data, this means the utmost control, monitoring and testing to certify that all data sets are complete, accurate, interoperable, accessible, relevant and auditable.

What are the core components of an HRO operating model — a lesson from Johns Hopkins Medicine



Johns Hopkins' Operating Management System*

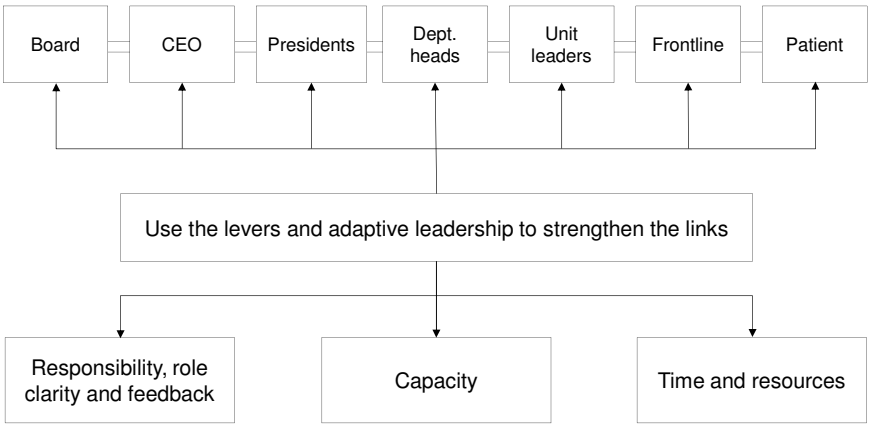
*Johns Hopkins Medicine, Armstrong Institute for Patient Safety and Quality: Proprietary

Governance supports a committee structure at every level of the organization — similar to a board finance and audit committee — the clinical quality committee has fiduciary duties to confirm clinical quality and safety — inclusive of clinical data integrity

Johns Hopkins Medicine – governance, leadership and accountability

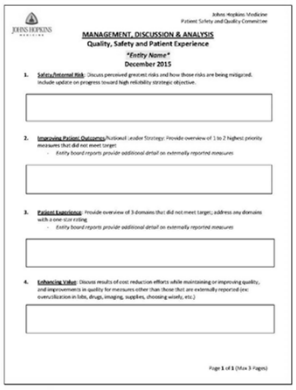
- Board of Trustees (Board) confirms oversight for quality and safety
- Applies the same rigor as applied to finance
- High reliability is a specific strategic objective
- Strategic objectives flow consistently throughout the health system
- Quality, safety and service are key components of strategic objectives
- Each clinical area is accountable for performance in four standard domains (patient safety, experience, value and external reporting)
- Leaders create shared accountability that cascades from Board to bedside

Shared leadership accountability



Source: Weaver; J Healthcare Management In press

Rigorous reporting and monitoring of core quality and safety measures



Johns Hopkins Medicine
Patient Safety and Quality Committee

MANAGEMENT, DISCUSSION & ANALYSIS
Quality, Safety and Patient Experience
"Entity Name"
December 2015

1. Safety/Internal Risk: Discuss perceived greatest risks and how those risks are being mitigated. Include update on progress toward high reliability strategic objective.
2. Improving Patient Outcomes/Balanced Leader Strategy: Provide overview of 1 to 2 highest priority measures that did not meet target.
   - *Entity board reports provide additional detail on externally reported measures*
3. Patient Experience: Provide overview of 3 domains that did not meet target; address any domains with a one star rating.
   - *Entity board reports provide additional detail on externally reported measures*
4. Enhancing Value: Discuss results of cost reduction efforts while maintaining or improving quality; and improvements in quality for measures other than those that are externally reported (ex: overutilization in labs, drugs, imaging, supplies, choosing wisely, etc.)

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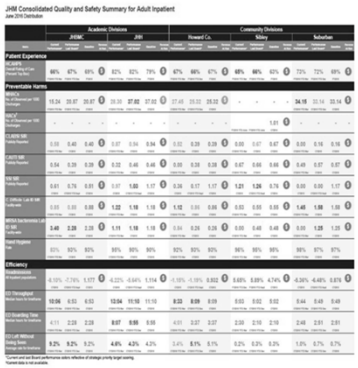


JHM Consolidated Quality and Safety Summary for Adult Inpatient
June 2016 Distribution

Source: Johns Hopkins Medicine, Armstrong Institute for Patient Safety and Quality: Proprietary

The Board confirms that a framework for reporting quality and safety of care mirrors the rigor and comprehensiveness of a consolidated financial statement.

Driving accountability through proactive monthly and quarterly reporting and oversight

1	**Performance below target for one month or one performance period (ex: one quarter)**	► Local champions to form performance improvement team ► Review data and investigate defects ► Identify barriers and implement targeted interventions
2	**Performance below target for two months or two performance periods**	► PI team presents to local Hospital Quality Council and President/CEO ► President meets with appropriate clinical director and PI team ► President presents plan with timelines to JHM QSS executive committee
3	**Performance below target for three months**	► Department Director/MD champion present to local hospital Quality and Safety Board (trustee chair and President sign QI plan) ► President presents to JHM Quality Safety Board Committee ► AI conducts peer-to-peer review

By monitoring clinical quality and safety, any small change in clinical pathway performance is noted, investigated and remediated thoughtfully and quickly — individuals are rewarded for anticipating, identifying and remediating clinical risks.

So – why are we concerned with clinical data quality and controls?

Health care organizations require complete, accurate, relevant and reliable patient safety, quality and performance data in order to make sound clinical decisions, support reimbursement documentation and meet their internal and external reporting requirements.

Questions to ponder…

- Do you have a "Board to the Bedside" governance structure for clinical quality and patient safety measures and risks?
- Are you managing and overseeing your clinical data with the same level of rigor as your financial data?
- Do you have risk and internal control(s) owners over your clinical processes, systems and data?
- How confident are you that the clinical data residing in your systems is complete, accurate, interoperable, accessible, relevant and auditable?
- Do you understand how each clinical data element traverses though all of your systems into clinical diagnosis decisions, revenue cycle and performance reporting?
- Are you regularly testing and independently auditing clinical data, diagnosis and coding to identify control gaps, compliance gaps and training gaps?

Health systems must proactively *identify, understand* and *manage* clinical risks … robust effective internal controls, monitoring and governance activities are crucial

Health care risk themes					
Significant cost pressures	Increased regulatory requirements	Patient safety and quality concerns	Competitive market – new business models	Growth of health insurance exchanges	Digital health/access to performance data

Health care emerging risks

- Increased focus by consumers on safety/quality and patient experience
- Increasing move toward evidence-based treatments and protocols and related reimbursement issues
- The need to demonstrate efficiency, leading practice and continuous improvement
- Emerging market-driven delivery models (ACOs)
- Increased regulations, government intervention and heightened compliance obligations
- The need to demonstrate ROI for technologies — that support safety, quality and patient care
- Increasing vertical integration throughout the health care value chain across traditional boundaries to deliver integrated care models
- Increased demand on IT systems for analytics, business intelligence and reporting
- Heightened focus on privacy and security lapses with the advent of mobile and digital platforms
- Consumer-driven demand for performance information and consumer-driven performance feedback

Health care top issues					
Quality	Health data/accuracy, security and use	CMS compliance	Regulatory adherence	Maximize revenue from activity	Meaningful use
Safety	Clinical innovation/ evidence-based care	Cost management and efficiency	Technology Investments and value	Resource capacity/capability	Health insurance exchanges

Health care external forces					
Economic	Regulatory	Demographic	Political	Societal	Technology

To enable high reliability of clinical data, health systems must treat clinical data with the same rigor as financial data

Enterprise Risk Management (ERM)

ERM is a discipline that addresses the full spectrum of an organization's risks, including challenges and opportunities, and integrates them into an enterprise-wide, strategically aligned portfolio view. ERM contributes to improved decision-making and performance management and supports the achievement of an organization's mission, goals and objectives.

Internal Controls Management (ICM)

ICM is a process for promoting achievement of an organization's objectives in operational effectiveness and efficiency: reliable clinical performance reporting; and complying with laws, regulations and policies.

How do we quantify enterprise risks and design internal controls that matter?

The impact of a risk is quantified in terms of existing performance measures and is evaluated by gauging the potential volatility the risk has on strategic goals and related business outcomes. Internal controls are designed, monitored and tested against those key clinical processes that drive critical performance and compliance measures.

Why are ERM and ICM critical to HROs?

HROs must anticipate risk and mitigate harm in order to achieve mission success. In order to anticipate risk, health systems must have early warning and continuous monitoring systems in place to proactively address potential harms. ERM and ICM provide this capability and prescribe disciplined activities to root out data quality issues and test the reliability of performance and compliance reporting measures.

The basics – incorporating HRO into risk management and internal controls using the COSO internal controls framework to drive clinical quality and reporting integrity

- Leveraging the principles of enterprise risk management, internal controls and HROs can identify potential harms while improving clinical data quality and reporting
- Start by asking the simple question …

How might we manage the integrity of clinical data as if it were financial data in order to reduce errors in diagnoses and potential patient harm?

As health care compliance and risk professionals — you understand the level of rigor and scrutiny applied to ticking and tying every invoice in order to maintain financial transparency and solvency — might we well do the same when someone's life is at risk?

COSO Internal Controls Framework

+

Core HRO tenets

=

Integrating the five components of internal control with the five tenets of HRO enables organizations to action and adopt High reliability behaviors that drive toward zero harm.

High quality, auditable, clinical information to support patient care

COSO and HRO aligned – COSO provides a structured framework to assess the internal controls environment to identify potential risk which clearly is aligned to HRO

Components of internal control	Principles of internal control	Alignment to high reliability tenets
1. Control environment	1. Demonstrates commitment to integrity and ethical values 2. Board of Directors demonstrates independence from management and exercises oversight responsibility 3. Management, with board oversight, establishes structure, authority and responsibility 4. The organization demonstrates commitment to competence 5. The organization establishes and enforces accountability	Commitment to resilience Preoccupation with failure Deference to expertise Reluctance to simplify Sensitivity to operations
2. Risk assessment	6. Specifies objectives with sufficient clarity to enable identification of risks 7. Identifies and assesses risk 8. Considers the potential for fraud in assessing risk 9. Identifies/assesses significant change that could impact system of internal control	Preoccupation with failure Sensitivity to operations Reluctance to simplify
3. Control activities	10. Selects and develops control activities 11. Selects and develops general controls over technology 12. Deploys through policies and procedures	Preoccupation with failure Sensitivity to operations Deference to expertise
4. Information and communication	13. Obtains or generates relevant, quality information 14. Communicates internally 15. Communicates externally	Preoccupation with failure Commitment to resilience Reluctance to simplify
5. Monitoring	16. Selects, develops and performs ongoing and separate evaluations 17. Evaluates and communicates deficiencies	Preoccupation with failure Deference to expertise Commitment to resilience

What does an ERM- and ICM-enabled health care organization look like?

Patient

Patients receive predictable, safe, evidence-based care. They are not over- or under-treated and their expectations are met. The patient feels respected and engaged in his or her care and has not been harmed.

Environment

The organization is interested in and has the ability to assimilate external measures and market data to guide its performance and actions, e.g., social media and patient ratings.

Governance

The nature and amount of risk the organization is willing to tolerate are clearly articulated and understood and are utilized to drive allocation of capital.

Owners

Boards are provided with auditable, quality, meaningful data to guide investment and strategy decisions. They have "Board to Bedside" visibility of patient care outcomes.

Plan

Uncertainty, clinical variation and complexity are measured and used to plan.

Operate

Decision-making and trade-offs specifically consider patient care, quality and safety.

Measure

Independent monitoring of performance and analytics to identify uncertainty in outcomes.

Suppliers

The organization understands its suppliers, and where the risk to patient safety and quality is within that supply chain. This is used to optimize a tailed supplier and supplies base.

People

A culture of "Zero Harm," and a focus on patient risk and proven controls is embraced organization-wide.

Processes

All clinical processes consider the risk on patient outcomes.

Technology

Identification of clinical risk and management is embedded in the use of technology.

Regulators

The organization understand its reporting requirements, and confirms it is providing correct auditable quality safety, quality and performance data in line with compliance requirements.

Competitors

The organization scans the competitor landscape to understand any threats to market or performance. The focus is always on delivery of care and how emerging competitors may impact the organization's ability to continue to provide quality services.

The Three Lines of Defense Model for clinical data

The Three LOD model — a standard approach in financial management — can be applied to clinical, safety and quality data. Such an approach sets the structure for clinical data to be treated with just as much rigor as financial data

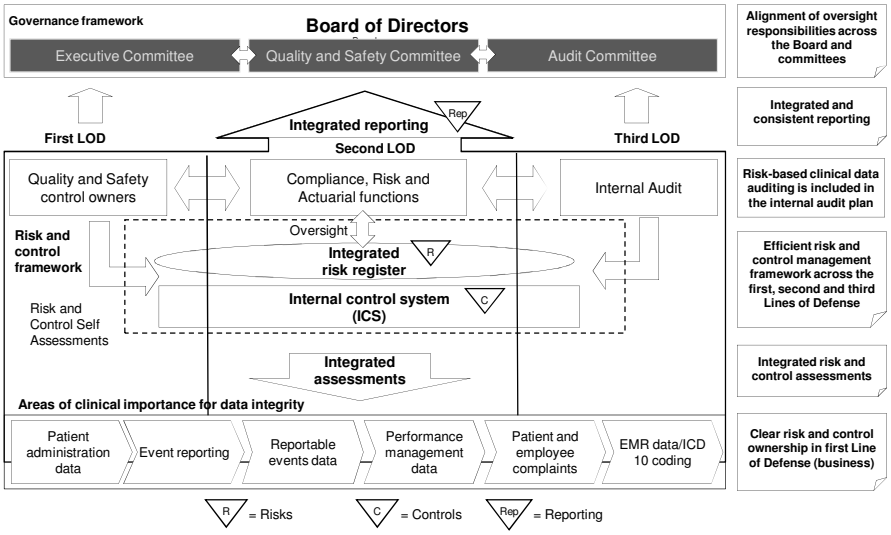
The Three Lines of Defense model confirms there is segregation between direct accountability for risk decisions**,** independent oversight and independent assurance on the effectiveness of risk management, control and governance processes.

Board

Sets the strategy and risk appetite of the organization

First line risk ownership	Second line oversight and monitoring	Third line independent assurance and validation
Risk taking business units	**Compliance and risk functions**	**Internal audit function**
Are responsible for owning and managing risks in the business: ► Develop and implement the strategy ► Measure business performance ► Implement internal control and risk management framework ► Confirm that the business is managed within the agreed risk appetite	Provides objective oversight of the management of risks by the business: ► Design and deploy the overall risk management framework across the organization ► Monitor adherence of the business to risk framework policies and procedures ► Support and challenge the business on its management of risks and controls	Provides independent assurance: ► Independently assess and report on effectiveness of design and operation of the risk management framework ► Carry out testing of key controls ► Review activities performed by first and second LOD so that they are appropriately meeting their responsibilities

HRO's aim to have clinical data and integrity auditing as standard activities using a similar LOD assessment and reporting model



Leveraging an HRO-enabled risk and controls approach to drive clinical data integrity

HRO-enabled enterprise risk and controls-based approach – stepwise approach

1 Understand the operating environment

- **Understand current state performance, strategic objectives and HRO initiatives**
- **What is the strategy to pursue zero harm — how effective are our initiatives?**
- **Which clinical pathways are key to success?**

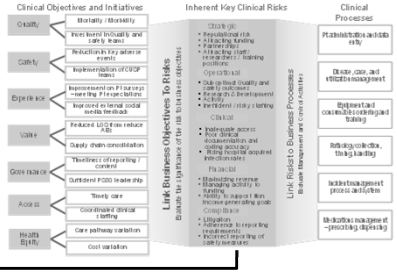
2 Customize Risk Universe™ and inherent risk profile

Define inherent industry risks to achievement of goals

- Strategic
- Operational
- Financial
- Compliance
- Clinical

3 Identify significant inherent risks

4 Map objectives to inherent risks and clinical processes



5 Assess internal controls design

Assess the maturity and completeness of the internal controls design for those processes selected during the risk workshop through process walk-throughs with process owners.

6 Plan and implement future state controls environment

Collaborate with stakeholders to develop a revised risk and control matrix and finalize governance, roles, responsibilities, cadence for monitoring activities and reporting.

Develop and implement future state risk and control operating model.

Source: EY/Johns Hopkins Medicine Proprietary Methodology

Step 1 – Understand the operating environment

1

- Understand current state performance, strategic objectives and HRO initiatives
- What is the strategy to pursue zero harm — how effective are our initiatives?
- Which clinical pathways are key to success?

HRO strategy and purpose

- Where is the organization on the HRO journey?
- What are the goals and objectives?
- What are the risk tolerance and appetite?
- What is the current level of reporting maturity?

Operating model

- Governance
- Decision-making
- Performance management
- Structure
- Technology
- Process integration
- Accountability

- How are the audit committee and other governance bodies structured?
- Which metrics are reported?
- Who receives key reports?
- Which systems are relied upon for this data and what is the chain of custodianship?

Supporting structures

- Quality and safety policies and procedures
- Safety and quality training
- Supporting documentation
- Current controls and audit
- Automated and manual control monitoring
- Remediation and action plans
- Continuous process improvement

- Are the supporting structures in place and do they align with the strategy?
- What are they doing now to promote data quality?
- Are there obvious weaknesses in these processes and controls?

Source: EY/Johns Hopkins Medicine: Proprietary

Step 2 – Customize the inherent risk universe

2

Strategic	Operational	Clinical	Compliance	Financial
Governance: ▸ Board performance ▸ Tone at the top ▸ Control environment ▸ Corporate social responsibility **Planning and resource allocation:** ▸ Organizational structure ▸ Third-party relationships ▸ Strategic planning ▸ Capital and surplus planning ▸ Annual budgeting ▸ Forecasting ▸ JV's/alliances and partnerships ▸ Outsourcing arrangements ▸ Special purpose entities ▸ Tax planning **Major initiatives:** ▸ Vision and direction ▸ Planning and execution ▸ Measurement and monitoring ▸ Technology implementations ▸ Technology support ▸ Business acceptance ▸ Identifying opportunities **Mergers, acquisition and divesture:** ▸ Valuation, pricing and due diligence ▸ Planning, execution and integration ▸ Outsourcing **Market dynamics:** ▸ Competition ▸ Macro-economic factors ▸ Lifestyle trends ▸ Socio-political issues **Communication and investor relations:** ▸ Media Relations ▸ Crisis Communications ▸ Rating Agencies ▸ Regulators ▸ Employee and Agent Comms	**Gain New Business:** ▸ Clinical focus/centers of excellence ▸ Increasing activity/local/ interstate/international ▸ Opportunities for additional services/primary care ▸ Service consolidation ▸ Clinical focus/partnerships ▸ Policies and processes ▸ Premiums billing **People/Human Resources:** ▸ Safety culture ▸ Recruiting and retention – attractiveness ▸ Development and performance – training ▸ Succession planning ▸ Compensation and benefits ▸ Labor relations **Information technology:** ▸ IT management and change control ▸ IT integration – safety and quality ▸ IT security/access ▸ IT availability/continuity ▸ IT spend and ROI ▸ IT integrity ▸ IT infrastructure **Hazards:** ▸ Natural and national disasters ▸ Business continuity planning ▸ Outages **Physical assets:** ▸ Real estate ▸ Property plant and equipment ▸ Inventory/equipment/installation **Tax operations:** ▸ Tax technology and knowledge management ▸ Tax department operations ▸ Tax status	**Patient engagement:** ▸ Patient satisfaction ▸ Patient complaints ▸ Social media chatter **Medical management:** ▸ Population health ▸ Referrals ▸ Case management/care coordination ▸ Utilization management ▸ Disease management **Coding and diagnosis management:** ▸ Clinical documentation ▸ Diagnosis ▸ Coding **Access:** ▸ Appointing ▸ Patient flow ▸ Bed management ▸ Unscheduled/scheduled demand management **Health equity:** ▸ Provider diversity ▸ Patient outcome variance **Clinical quality and patient safety:** ▸ Adverse events/near-miss management ▸ Infection management ▸ Governance, accountability and teamwork ▸ Provider practice/# of procedures per year ▸ Employee turnover, open vacancies, time to fill staffed positions ▸ Employee complaints ▸ Continuous improvement	**Code of Conduct:** ▸ Ethics ▸ Fraud **Legal:** ▸ Contract ▸ Liability ▸ Intellectual property ▸ Corruption ▸ Money laundering ▸ Licensing and filing ▸ Malpractice **Regulatory:** ▸ Labor ▸ Securities ▸ State/Local and country-specific compliance ▸ Data protection and privacy ▸ International dealings ▸ Health and safety ▸ Competitive practices/anti-trade ▸ Discriminatory practices ▸ Tax compliance and tax authority examination management ▸ Sales and marketing	**Market:** ▸ Income streams/public and private ▸ Opportunities to increase services **Liquidity risk management:** ▸ Cash Management ▸ Credit and collections ▸ Insurance **Accounting and reporting:** ▸ Maximizing revenue ▸ Reimbursement **Capital structure:** ▸ Debt ▸ Equity

Perform a thorough risk inventory to identify those risks that are important to the objectives of the organization.

Source: EY/Johns Hopkins: Proprietary

Step 3 – Identify areas of significant clinical quality and safety risk — sample risk areas and categorize across a threat matrix

3 Review the risk assessment to review and validate supporting and relevant data. Assess the key risk indicators and variance to compile a qualitative and quantitative assessment of the key risk areas.

Clinical

- Variations in service delivery related to demographic
- Incident database incomplete, inaccurate — potential for underreporting of events
- EMR incomplete, incorrect: misdiagnosis or incorrect treatment
- Errors in receipt of medications
- Delayed identification of service quality errors — i.e., undetected shifts in mortality/morbidity

IT

- Systems disparate: linkages are unstable
- Data entry predominately manual and by low-skilled teams
- Lack of clarity concerning the underlying analytics
- Insufficient cybersecurity measures – potential for safety and security breaches
- Underdeveloped business continuity planning for system shutdown

Compliance

- Risk of non-compliance with mandatory reporting resulting from poor data control
- Delayed action in addressing undiscovered issues

Safety and Quality

- Errors to patient laboratory data — slow/inaccurate reporting
- Primary care referral database out of date affecting patient handover and communication
- Incident reporting lag — three month turnaround; May result in repeat issues
- Medical record process manual — increased opportunity for errors

Governance

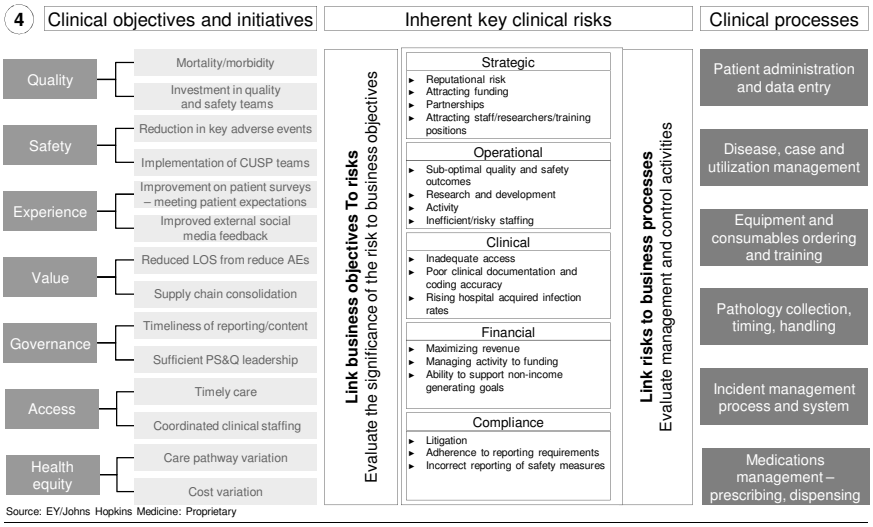
- Performance reporting is static: consolidate three month – limited predictive value
- Unclear reporting and accountability structures in key areas

Workforce

- Rostering occurs separately from planned activity
- Significant churn in the administrative department resulting in operational disruption

EY/Johns Hopkins Medicine Proprietary

Step 4 – Link risk to clinical objectives and processes



Source: EY/Johns Hopkins Medicine: Proprietary

Step 5 – Assessment of internal controls design

5 Clinical process and control documentation

Process

- Conduct risk-based process understanding interviews and walk-throughs for in-scope clinical processes
- Document clinical process risks, controls, gaps and relevant control information (owner, frequency, evidence, IT systems, etc.) in narratives, flowcharts and the Risk and Control Matrix (RCM)
- Develop remediation plans to address control gaps and other process and control design recommendations

Output

- Process narratives and/or flowcharts
- Risk and Control Matrix – i.e., controls to be implemented to address the identified risks
- Summary report of finding themes and recommendations, including organizational maturity in managing risk

Document process flows to visualize a process entirely. Aim to fully understand the process and pinpoint where risks, controls and gaps exist.

This also enables greater coordination with the process owners when validating understanding, and agreement.

Step 6 – Future state internal controls design

6 Develop and deliver an action plan that mitigates any uncontrolled risks, while respecting the context in which the process operates

Process

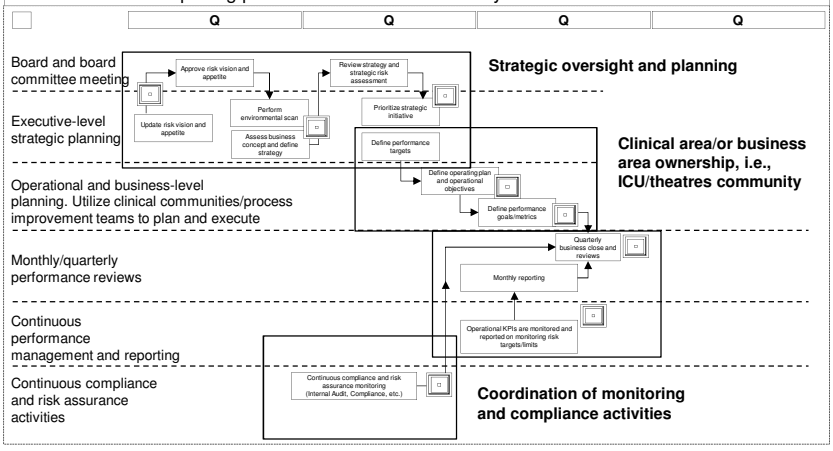
- The RCM developed in the previous phase will serve as a tool to evaluate current controls, to perform a gap analysis and to make recommendations regarding the design of new controls, where applicable.
- Controls are assessed so they are not excessive, in order to make the process as lean as possible. Any proposed improvements are aligned to the HRO principles and the organization's objectives.
- Action plans are drafted then validated with the organization and refined.
- New controls are implemented. Assistance is provided to the organization to build the capability to implement controls.

Output

- Recommendations on the design of new controls and on the possible reduction of redundant controls
- Action plan including improvement opportunities in case of structural deficiencies we have identified
- A list of opportunities for simplification of controls where appropriate
- Assistance and guidance with the design/enhancement of controls, using the RCM as tracking tool
- Actions are performed in alignment with stakeholders, such as the process owners, in order for them to support and accept changes
- Development of longer-term test and audit program

Step 6 – Controls become the "day-to-day" process for managing data integrity risks

6 Risk management activities are embedded within the existing planning, analysis and reporting processes … known as the "rhythm of the business"

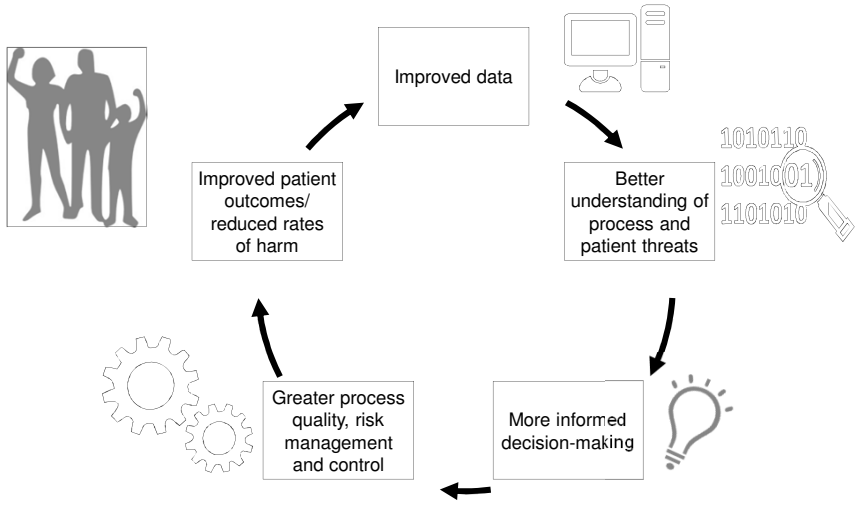


Where to go from here?

Potential next steps to consider for your organization

- Review your governance structure relative to clinical quality and patient safety performance metric ownership – do you have alignment from the "Board to the Bedside?"
- Understand your environment – select a critical care pathway (high demand, high revenue, clinically complex) and perform a clinical data element flow review and audit – where are your control gaps and what are your most frequent data errors?
- Start with your event reporting database and spot audit clinical data element flow and integrity across a near miss event.
- Interview your clinicians to understand where their clinical data pain points, concerns and workarounds relative to clinical data capture and analysis.

Opportunity awaits!



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15-minute break

What you will learn

- The solution is hiding in the record.
- Metadata is your friend.

But first, for some context

- First rule of corporate compliance:
  - Don't bill for care you didn't provide.
  - That's stealing.

Some more context

- Second rule of corporate compliance:
  - Don't bill for care you provided that wasn't necessary.
  - That's stealing.

And

- Third rule of corporate compliance:
  - Don't bill for care you provided that was necessary but was of poor quality.
  - That's_____?

"Quality care" did not mean the patient got "all better."

Doctors couldn't and were not expected to guarantee outcomes.

With *Value-based purchasing*,

all that has changed.

Acronyms that have ruled our lives

HCAHPS

Hospital **C**onsumer **A**ssessment of **H**ealthcare **P**roviders and **S**ystems

CAHPS

Consumer **A**ssessment of **H**ealthcare **P**roviders and **S**ystems

DSRIP(P)

Delivery **S**ystem **R**eform **I**ncentive
Payment **P**rogram

And now

VBP

(a very special acronym)

VBP

Value **B**ased **P**urchasing

MACRA

Medicare **A**ccess and **C**HIP (**C**hild Health Insurance Program) **Reauthorization A**ct of 2015

What is MACRA?

- The Medicare Access and CHIP Reauthorization Act of 2015 (MACRA) is a bipartisan legislation signed into law on April 16, 2015:
- What does Title I of MACRA do?
  - Repeals the Sustainable Growth Rate (SGR) Formula
  - Changes the way that Medicare rewards clinicians for value of volume
  - Streamlines multiple quality programs under the new Merit-Based Incentive Payments System (MIPS)
  - Provides bonus payments for participation in eligible alternative payment models (APMs)

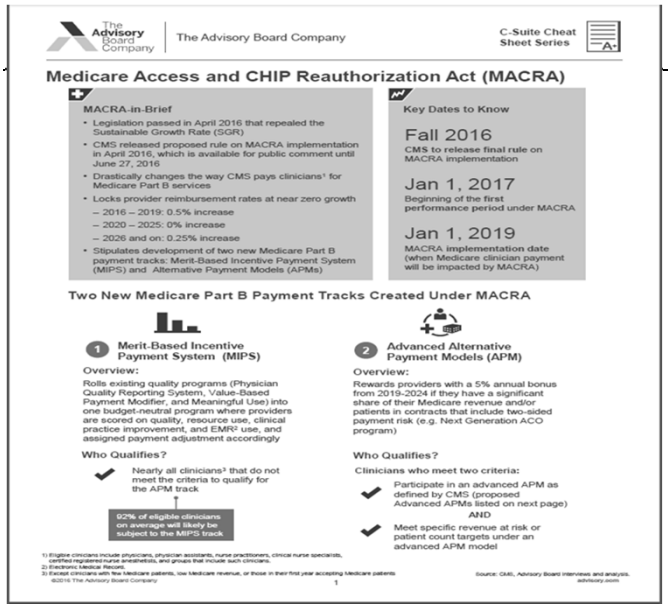
MIPS changes how Medicare links performance to payment

There are currently multiple individual quality and value programs for Medicare physicians and practitioners:

Physician Quality Reporting Program (PQRS)	Value-Based Payment Modifier	Medicare HER Incentive Program

MACRA streamlines those programs into MIPS

Merit-Based Incentive Payment System (MIPS)



The Advisory Board Company | C-Suite Cheat Sheet Series

Medicare Access and CHIP Reauthorization Act (MACRA)

MACRA-in-Brief

- Legislation passed in April 2016 that repealed the Sustainable Growth Rate (SGR)
- CMS released proposed rule on MACRA implementation in April 2016, which is available for public comment until June 27, 2016
- Drastically changes the way CMS pays clinicians[1] for Medicare Part B services
- Locks provider reimbursement rates at near zero growth
  - 2016 – 2019: 0.5% increase
  - 2020 – 2025: 0% increase
  - 2026 and on: 0.25% increase
- Stipulates development of two new Medicare Part B payment tracks: Merit-Based Incentive Payment System (MIPS) and Alternative Payment Models (APMs)

Key Dates to Know

Fall 2016
CMS to release final rule on MACRA implementation

Jan 1, 2017
Beginning of the first performance period under MACRA

Jan 1, 2019
MACRA implementation date (when Medicare clinician payment will be impacted by MACRA)

Two New Medicare Part B Payment Tracks Created Under MACRA

1 Merit-Based Incentive Payment System (MIPS)

Overview:
Rolls existing quality programs (Physician Quality Reporting System, Value-Based Payment Modifier, and Meaningful Use) into one budget-neutral program where providers are scored on quality, resource use, clinical practice improvement, and EMR[2] use, and assigned payment adjustment accordingly

Who Qualifies?
- Nearly all clinicians[3] that do not meet the criteria to qualify for the APM track

92% of eligible clinicians on average will likely be subject to the MIPS track

2 Advanced Alternative Payment Models (APM)

Overview:
Rewards providers with a 5% annual bonus from 2019-2024 if they have a significant share of their Medicare revenue and/or patients in contracts that include two-aided payment risk (e.g. Next Generation ACO program)

Who Qualifies?
Clinicians who meet two criteria:
- Participate in an advanced APM as defined by CMS (proposed Advanced APMs listed on next page)
- AND
- Meet specific revenue at risk or patient count targets under an advanced APM model

1) Eligible clinicians include physicians, physician assistants, nurse practitioners, clinical nurse specialists, certified registered nurse anesthetists, and groups that include such clinicians.
2) Electronic Medical Record.
3) Except clinicians with few Medicare patients, low Medicare revenue, or those in their first year accepting Medicare patients

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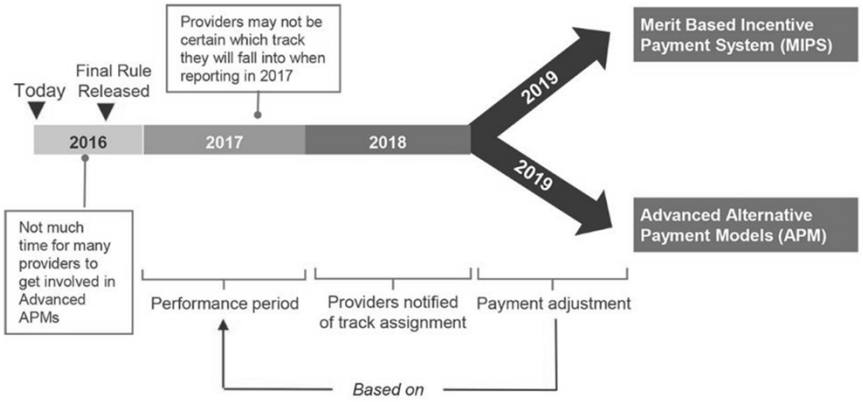
Source: CMS; Advisory Board interviews and analysis.

MACRA implementation timeline



Merit-Based Incentive Payment System (MIPS)

Proposed Reporting Requirements Under Four Performance Categories

Quality
- Adopted from PQRS
- Requires clinicians to report six quality measures to CMS
- Over 200 measures to choose from, 80% tailored to specialists

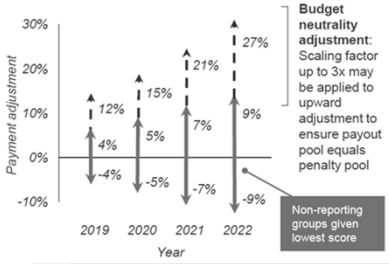
Resource Use
- Adopted from VBPM
- No reporting requirement
- Assesses clinician cost performance based on Medicare claims data

Clinical Practice Improvement Activities
- New performance category for clinicians
- Measures performance by assessing clinical practice improvement activities such as activities focused on care coordination, beneficiary engagement, and patient safety

Advancing Care Information
- Adopted from the Medicare EHR Incentive Program (Meaningful Use)
- Measures clinicians certified EHR use
- Applies to all clinicians[1] and no longer requires all-or-nothing measure reporting

Financial Implications

Maximum Provider Penalties and Bonuses



Annual Update for MIPS Track

0.25% Annual update to physician fee schedule from 2026 onwards

1) Eligible clinicians include physicians, physician assistants, nurse practitioners, clinical nurse specialists, certified registered nurse anesthetists, and groups that include such clinicians.

Source: CMS, Advisory Board interviews and analysis.

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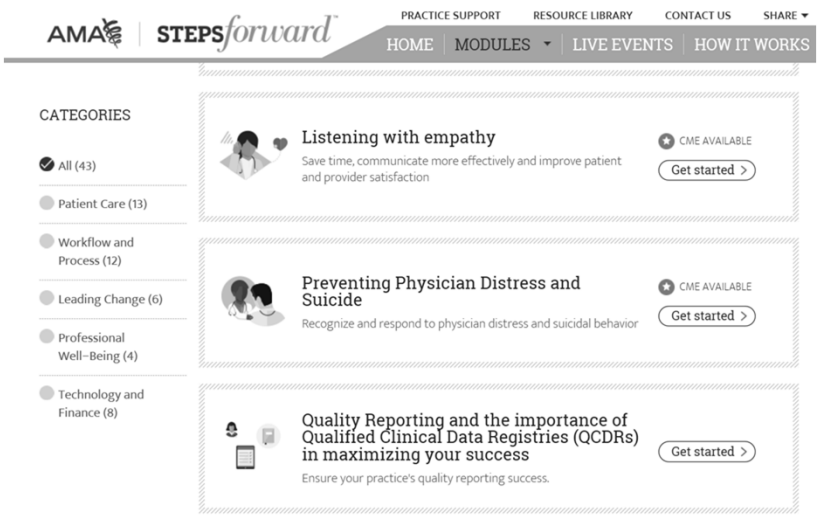

AMA | Payment Model Evaluator

What is MACRA?

The Medicare Access and CHIP Reauthorization Act of 2015 (MACRA) repealed the sustainable growth rate formula replacing a broken, frustrating and needlessly unpredictable system. This transition stabilizes Medicare payments and has the potential to reward physicians for what they do best— providing quality, high-value care. From education materials to customized practice insights, we'll help you get a clear view of your payment model options and your practice's financial wellness throughout the payment and care delivery reform process.

Learn About MACRA

Take MACRA Assessment

↓ How Will MACRA Affect Me

Page 56 Swords into plowshares

Now back to metadata

Page 57 Swords into plowshares

Two keys to survival

1. Data mining
2. Exception reports

Metadata as sword

Detection…

Metadata as sword

Detection…
Followed by extrapolation…

Metadata as sword

Detection…
Followed by extrapolation…
And then,

Repayment!

Metadata as tool

Surveillance,
Followed by intervention,
Followed by corrective action.

A simple example

Unread lab results,

Or PAP smears.

A not-so-simple example

DVT prophylaxis

What does the future hold?

Electronic medical records (EMR)

Friend or Foe?

Electronic medical records (EMR)

- Friend or Foe?
- It doesn't matter.

EMR as a term paper

- Citation, not Plagiarism.

EMR as a term paper

- “Copy and Paste”
- Is a dangerous tool we actually don’t need

A wonderful challenge

Changing a flat tire on a bus …

… while the bus is moving.

Thank you!

- (Please complete your evaluation)