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***Top Healthcare Risks:
How Information
Technologies & Controls
Can Help Mitigate
Organizational Risk***

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Introductions



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Agenda

#	Focus
1	Current Market Landscape: Emerging Trends
2	Evolving Audit & Compliance Programs: Data Analytics, Managed Monitoring & Testing & Technology
3	Health Care: Transforming Skills Sets & Career Opportunities
4	Final Remarks
5	Q&A

Current Market Landscape: Emerging Trends

The emergence of a new health economy

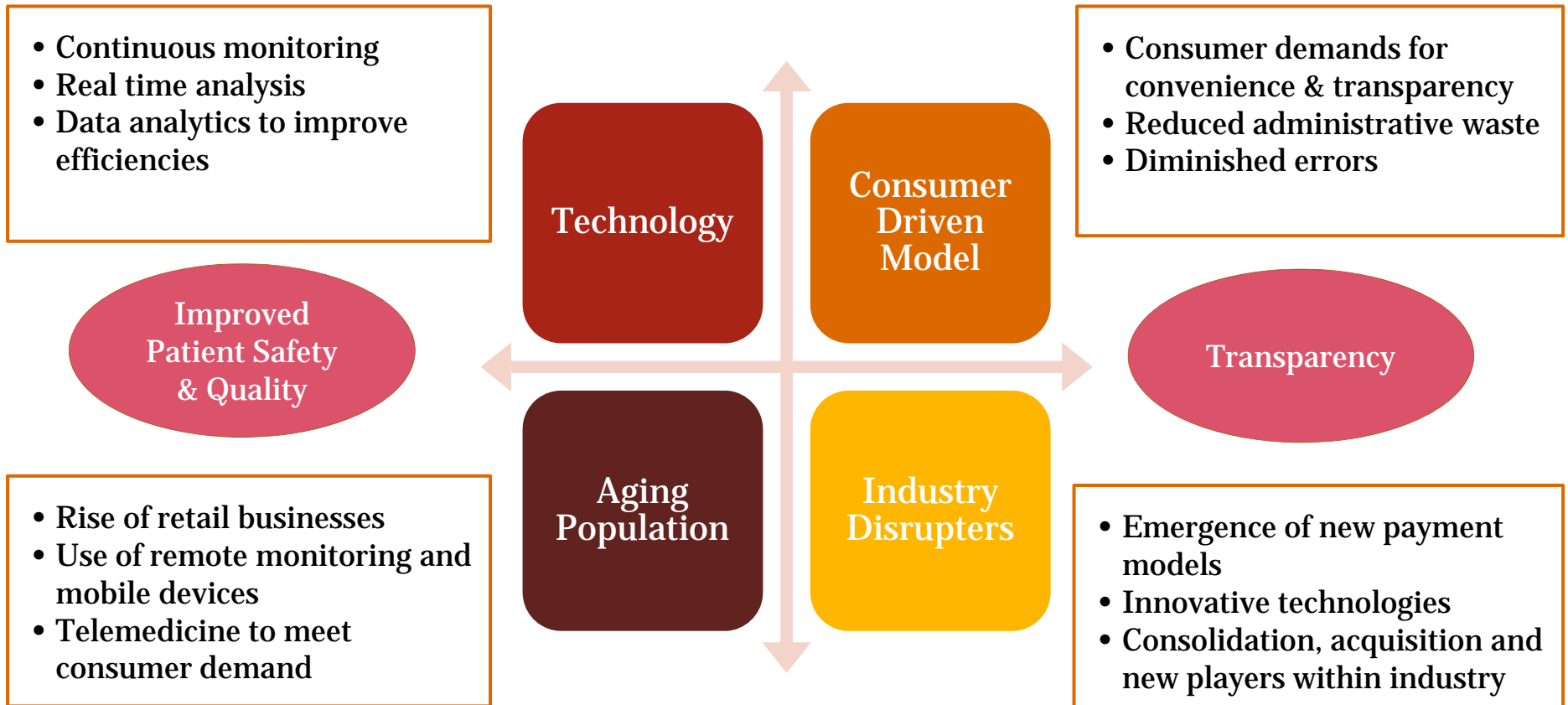
The US healthcare system is facing unprecedented market disruption, as market and policy forces are propelling a new health economy

Altered Funds Flow	<ul style="list-style-type: none">• Individuals' behavior is driving value• New financiers and partnerships are forming• Rapidly evolving reimbursement (e.g., pay for performance)• Money will follow the risk• Managing the rising cost of care
New Care Delivery Models	<ul style="list-style-type: none">• Clients are challenged to articulate value in an outcomes-driven world• Strategies should consider alternative settings, new talent models and shortage of physicians (e.g., physician extenders)• Technologic advances expand consumer access (e.g., health information technology (HIT)/ electronic health records (EHR)/ electronic medical records (EMR), Cyberspace-enabled apps, Virtual health solutions, telemedicine, etc.)
Realignment of Existing Players	<ul style="list-style-type: none">• Collaboration and convergence promote higher "health" return on investment (ROI) (e.g., leveraging clinical and research data on which drugs work and why)• Transparency of price and quality• Baby boomers aging into Medicare• Growth of consumerism
New Industry Entrants	<ul style="list-style-type: none">• Consumer trust of tech companies and retailers (and distrust of employers and insurers)• Opportunity to translate retail and consumer packaged goods (CPG) insights into healthcare• Emerging entrants create a new competitive industry landscape, market consolidation and partnerships

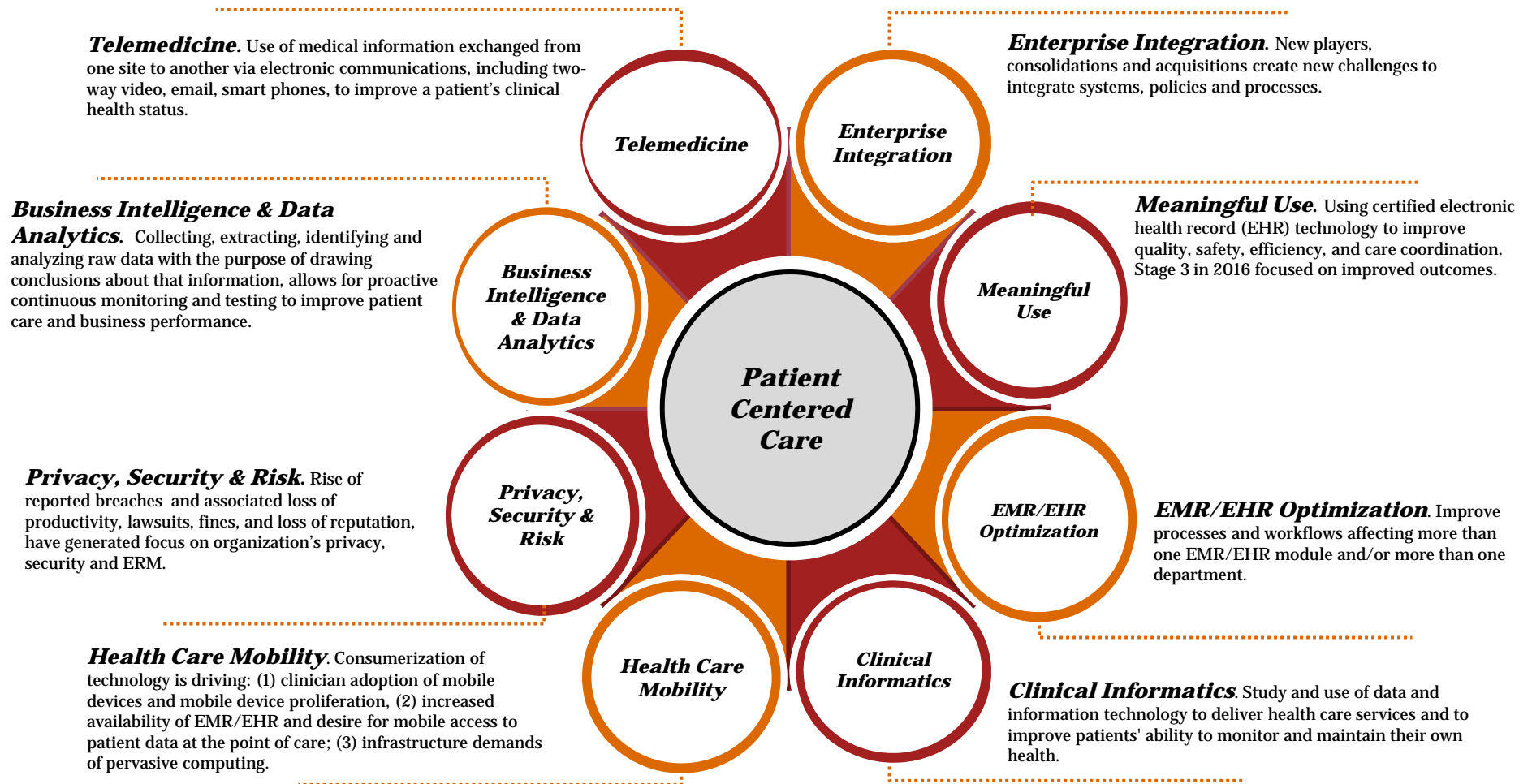


**New
Health
Economy**

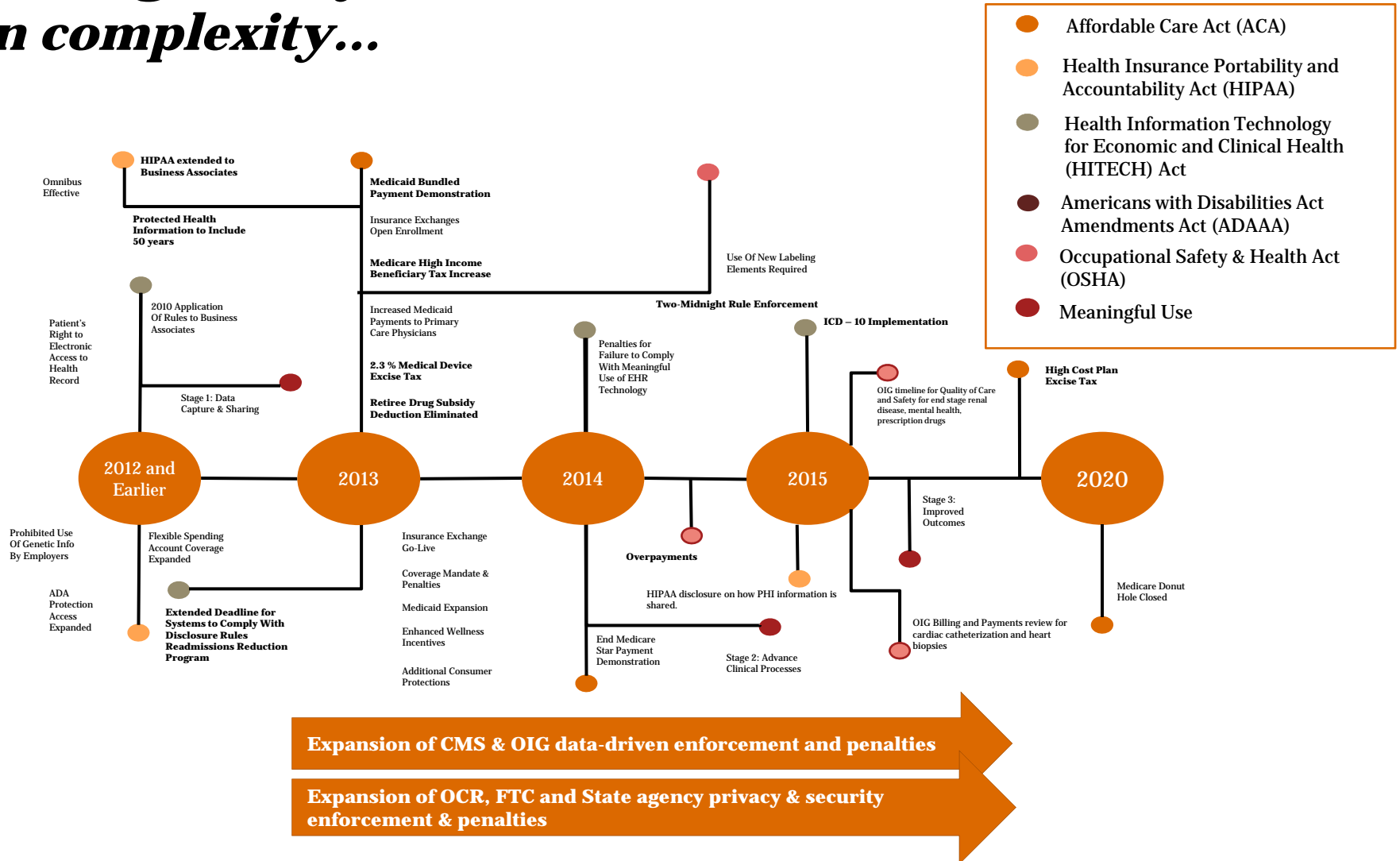
Mega trends driving a new health economy



Key Health Care IT Trends



The regulatory environment continues to increase in complexity...



HIPAA/HITECH

The HITECH Act of 2009 and the Omnibus Rule of 2013 implementing many of the HITECH provisions that strengthened the privacy and security protections for health information established under HIPAA.



2013 Omnibus Rule:

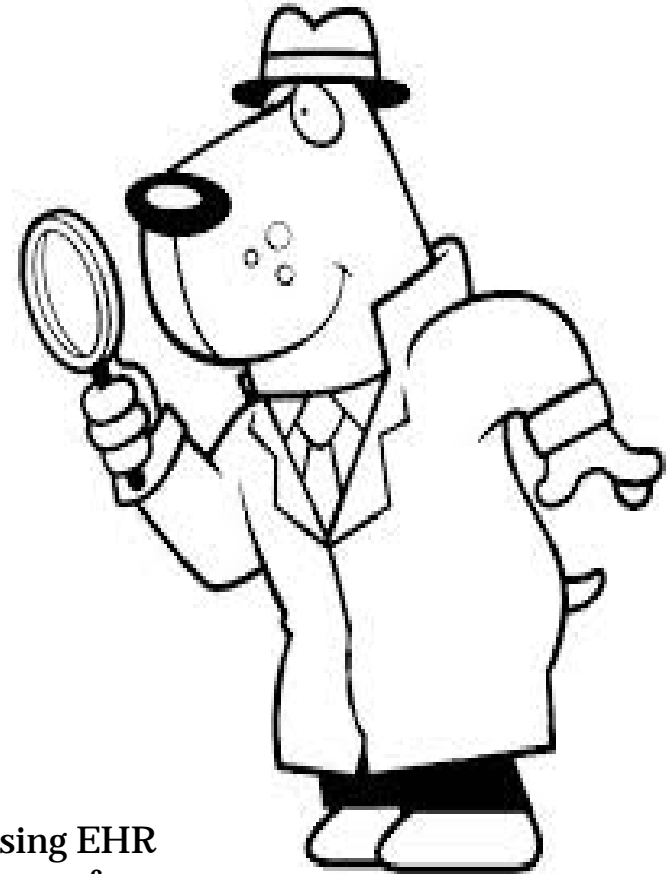
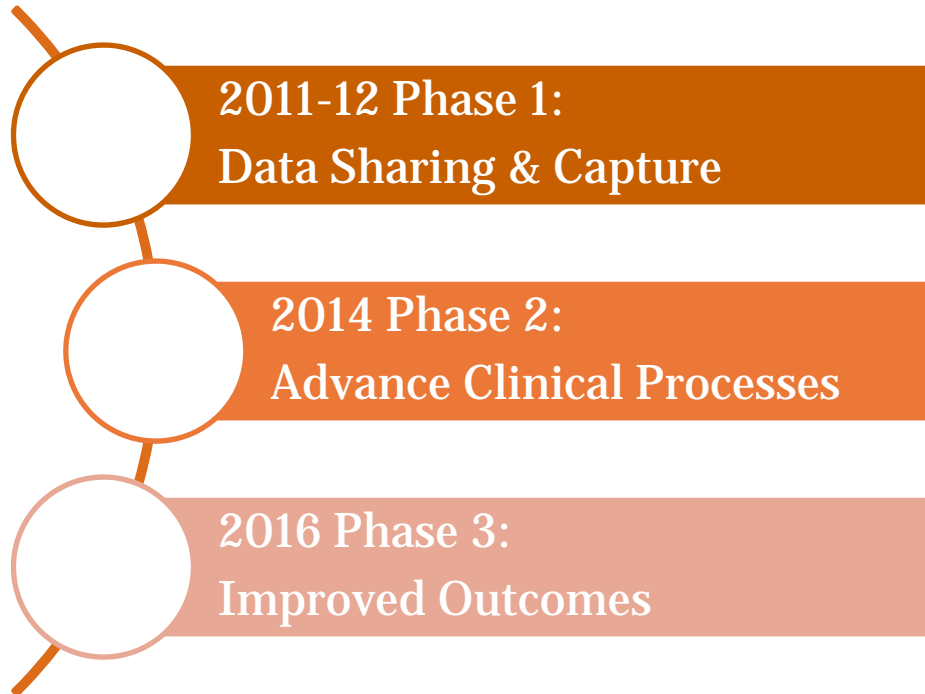
- HIPAA Privacy, Security & Breach Notification Rules extended to Business Associates
- Increased penalties
- Patient's right to electronic access to health record
- Changed breach notification standard
- Office for Civil Rights (OCR) Audits

Implications

- Risk assessments, Health Information Trust Alliance (HiTrust) & Service Organization Controls 2 (SOC2) requirements imposed on Business Associates
- More scrutiny on business associates by regulators
- Increased volume of reportable breaches

Meaningful Use

The Center for Medicare & Medicaid (CMS) provides financial incentives to health care providers that show that they are “meaningfully using” their certified EHR technology.



Eligible professionals and hospitals must attest to using EHR and meeting certain measurement thresholds that range from recording patient information as structured data to exchanging summary care records.

Health Information Exchanges

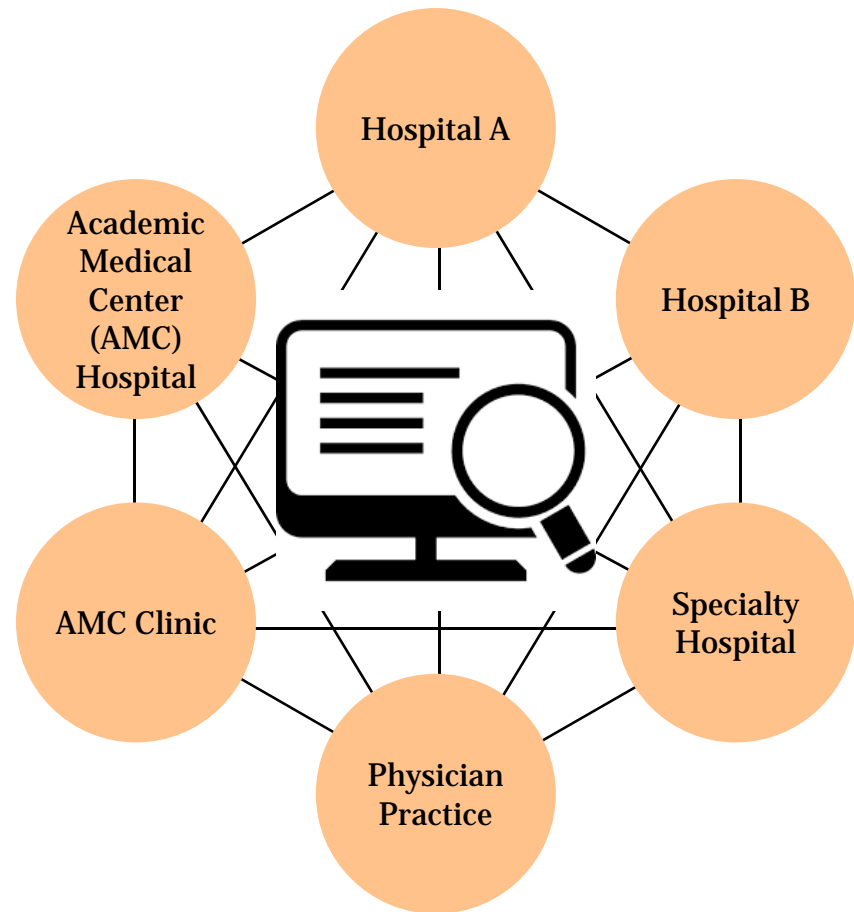
Health Information Exchange (HIE) allows health care professionals and patients to appropriately access and securely share a patient's vital medical information electronically.

HIE Benefits

- Sharing updated, electronic patient information with other providers
- Increases efficiency
- Reduces redundancies and errors
- Provides safer, more effective care tailored to a patient's unique medical needs

HIE Cons

- Costly infrastructure
- Ineffective if patient seeks care outside enterprise
- Data security risks



Federal Regulatory Agencies



NIST

Federal Communications Commission—regulates broadcast/mobile devices

National Institute of Standards & Technology, U.S. Dept. of Commerce—guidance on securing electronic medical records on mobile devices; computer security and encryption standards (Special Publication 800 series guidance).



Office for Civil Rights (HHS)—audits/ conducts breach investigations of covered entities and business associates

Federal Trade Commission—protects consumers from unfair/deceptive acts or practices as well as false or misleading claims



FDA

Food & Drug Administration—regulates medical apps that are medical devices

Center for Medicare & Medicaid Services—enforces ICD-10; performs Meaningful Use audits; Stark Law violations; provider and payer oversight



Department of Justice—anti-trust investigations, criminal HIPAA violations; fraud, waste & abuse investigations; false claims act

Office of Inspector General (HHS)—Anti-Kickback violations; civil monetary penalties

Trends in recent regulatory actions

*Regulators are using inter-agency coordination across federal and state levels to **drive process improvement and operational (performance) consistency**, with a distinct focus on assessing delivery of care and quality outcomes*

Quality of Care Emphasis. Heightening focus on impacts to consumers with a specific focus on quality outcomes and delivery of care.

Outcomes Monitoring & Auditing. Using expansive data sets to conduct performance-focused outcomes monitoring and auditing.

Coordinated Enforcement. Increasing Federal and State coordination including partnering among regulatory agencies

Antitrust Actions. Increased antitrust investigations by government of hospital, group practice and payer mergers and acquisitions.

Vendor Enforcement. Heightened focus on third-parties and vendor management (e.g., OCR, CMS) to generate additional return on enforcement investment.

Self-Reporting. Relying on organizational self-reporting (e.g., HIPAA privacy/security breach, Stark, Anti-Kickback) to uncover additional violations and organizational resource and process gaps.

Evolving Audit & Compliance Programs: Data Analytics, Managed Monitoring & Testing & Technology

The Importance of Data

An increased focus on risk, compliance, and transparency has required healthcare organizations to develop a deeper understanding of its data.

- Many health care initiative programs require collection and production of data -- meaningful use, accountable care organizations, health information exchanges, and patient consumerism -- all require a robust level of reporting to measure the quality of clinical data and provide clinical decision support tools to physicians and hospitals.
- To meet demands, health care organizations must evaluate a wealth of information to identify patterns, trends, anomalous behavior, and ways to improve the value proposition to the rest of the organization.





The potential uses of data in support of health care compliance programs are countless:

- Allows for real-time exchange of information
- Improves compliance and business efficiencies
- Fuels innovation
- Predicts behavior
- Monitors activities
- Focuses on proactive solutions to identify and prevent risk

Of course, analysis of data is only as good as the data upon which it's based and the technical skills and experience level of the individuals performing the analysis.

Turning data into information

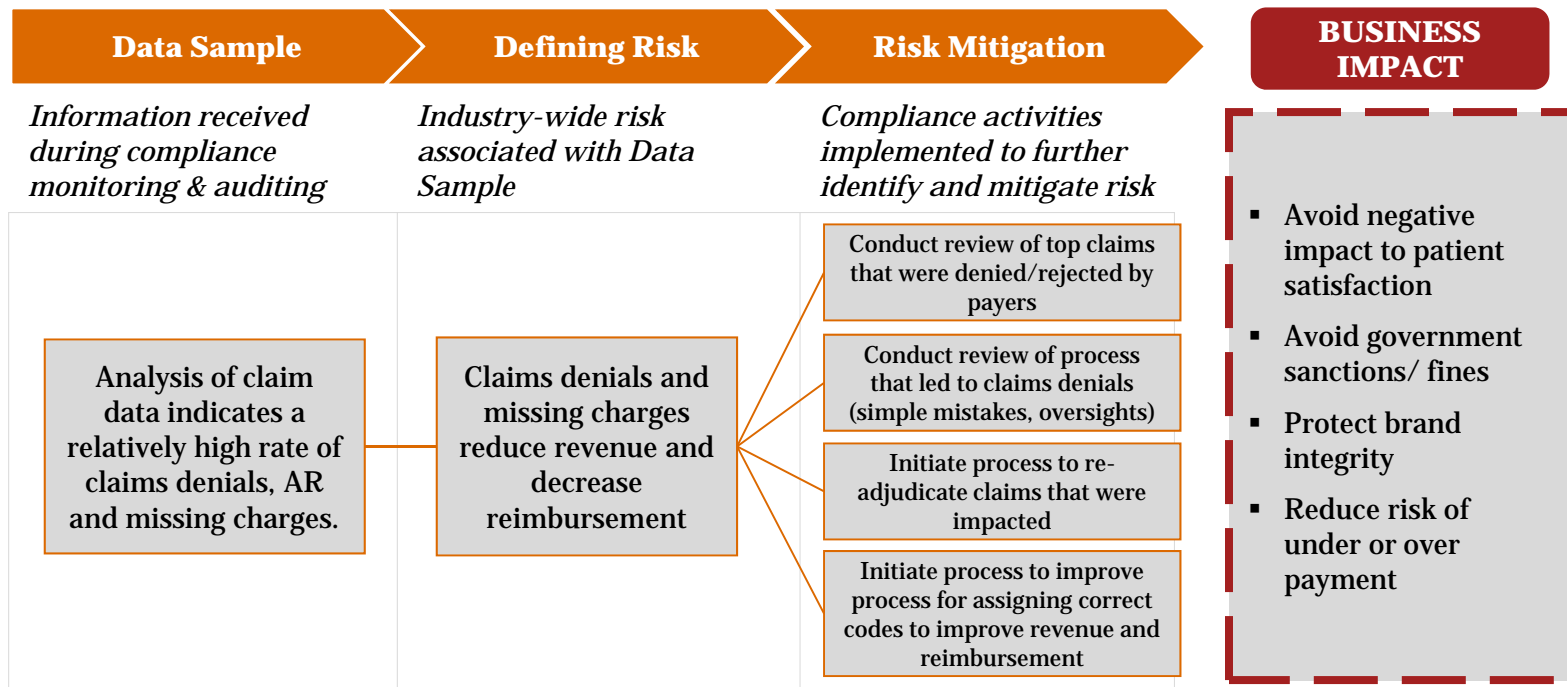
Leading healthcare organizations are making significant investments in enhancing tools and methodologies to turn data into information

Focus Area	Description	Results Achieved
<i>Integration of regulatory / compliance requirements into operational performance reporting</i>	Organizations are re-designing operational reports to ensure that how they manage their business is coupled with how they meet regulatory and compliance requirements	 <ul style="list-style-type: none">▪ Improved operational performance▪ Increased regulatory compliance▪ Reduced level of effort related to organizational compliance
<i>Transformation of management and executive-level dashboards</i>	Organizations are evolving dashboards to implement more “predictive” capabilities to trend compliance and integrate “indicator flags” to detect operational or compliance failures	 <ul style="list-style-type: none">▪ Implemented proactive approach to managing both compliance and operational performance▪ Increased regulatory compliance
<i>Evolving analytics for compliance-related audits and reviews</i>	More advanced organizations are using targeted sampling methodology aligned with that of CMS, as opposed to random sampling	 <ul style="list-style-type: none">▪ Reduced effort by business areas to conduct audits▪ Enhanced value to the business in streamlining remediation and prevention efforts
<i>Profiling of providers to link compliance, care management and quality together</i>	Companies are comparing quality measures across providers with relevant data sets (external and internal) to look at the end-to-end care management value chain	 <ul style="list-style-type: none">▪ Enhanced view into the linkage of quality performance to outcomes, down to provider level▪ Remaining on pace with direction regulators are headed

Data analytics applied to operational reporting

Leading healthcare organizations utilize data analytics in their reporting tools to transform data into information that can help decision-makers focus on the appropriate areas warranting their attention

- Leading organizations are able to use operational data analytics to obtain real-time results for producing compliance monitoring results.
- Proactive analysis of data enables organizations to assess current operations against predetermined measurement bands and to detect trends that may indicate the potential for non-compliance.
- When used appropriately, data analytics offers organizations the ability to maintain and/or course-correct operations in alignment with regulatory requirements, and in turn, the power to drive health outcomes.



Data analytics applied to targeted auditing

Leading healthcare organizations utilize data analytics to inform targeted auditing efforts, which in turn, allows for additional benefits to be realized

While risk assessments drive monitoring and auditing plans, data analytics can be used to inform auditing efforts by identifying the areas of highest risk warranting further investigation and testing.

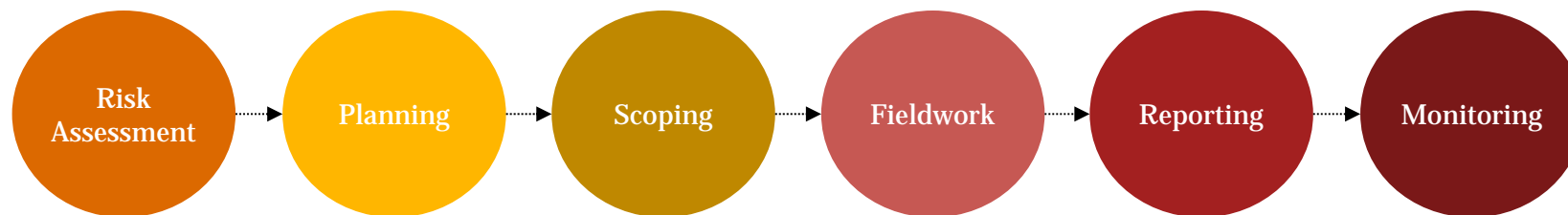
Applied Data Analytics Defined

- Methodology based on targeted sampling (similar to that of regulators), as opposed to random, statistically valid sampling.
- Analysis of data sets to identify specific cases indicative of non-compliant processes and areas that are expected to fail audits.
- Identification of highest risk areas representing functional-level processes and activities to be further tested against regulations.
- Foundation for validating and/or identifying the appropriate operational metrics moving forward.

Benefits Realized

- Focuses on problem areas from the start rather than relying on statistically valid samples.
- Decreases dramatically the level of effort required of the business and Compliance/Internal Audit to perform audits (driven by decreased sample size).
- Increases the number of reviews that can be performed during the year without increasing staff headcount.
- Provides real-time feedback to the business on areas for improvement with specific considerations identified.

Embedding analytics across the audit lifecycle



Risk Assessment, Planning, & Scoping

- Develop Risk Metrics, Models & Profiles
- Widen Audit Coverage & Optimize Resource Allocation

Data Integration & Risk Metrics

Execution & Fieldwork

- Risk-Based Approach to Sampling & Dynamic Testing
- Extrapolate Findings Across all Relevant Data

Drill-Down Analytics & Dashboards

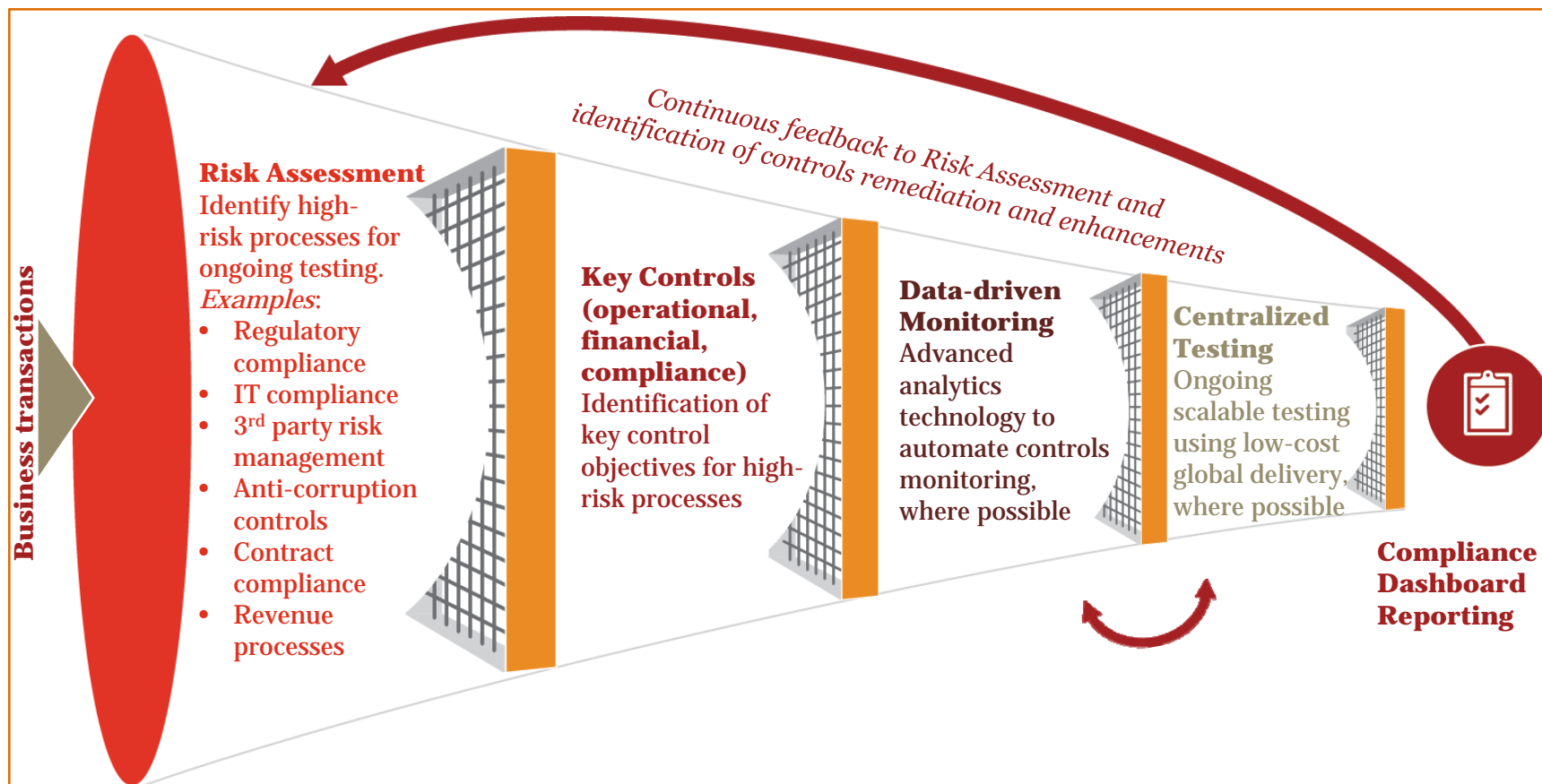
Continuous Monitoring & Control Testing

- Apply Risk Models & Thresholds
- Exception Reporting & Rule-Based Alert Generation

Real-Time Insight

Advanced managed monitoring and testing model

Bringing the right tools to create a targeted, consistent, scalable, and cost-efficient program



Process supported by enabling technology

Data analytics unlocks intelligence around compliance/controls performance

How does analytics enhance managed monitoring and testing?



Framework for evaluating areas for increased **automated testing** where feasible, increasing speed, effectiveness, and efficiency of testing



Manual testing executed with analytics, improving efficiency, and coverage



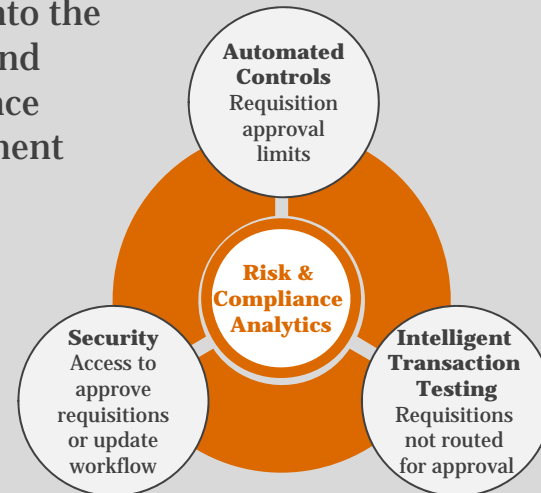
Mechanism for **intelligent sampling**/testing



Intuitive dashboards enable continuous monitoring and real-time insight – using risk factors to slice, dice and **visualize** data to hone in on meaningful follow up activities

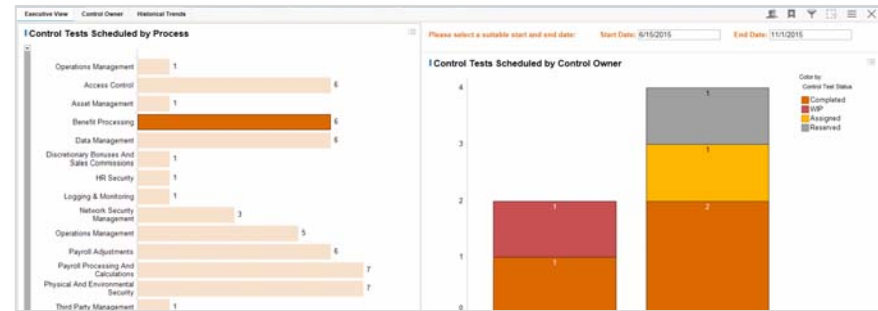
Example - Aligning access, configuration, and transaction analytics for a comprehensive view can help you:

- Reduce and manage risk
- Identify operational efficiencies
- Enable real-time insight into the control and compliance environment



Technology-driven monitoring and testing drives the sustainability of audit & compliance programs

A **technology tool** to support ongoing monitoring and testing should include the following key **elements** to provide efficiency and sustainability:



- Incorporates Compliance and Regulatory Requirements – sector and industry expertise**
- Risks**
- Establish Control Repository and Related Monitoring/Testing Procedures**

- Automated Workflow**
- Coordination Across Geographies**
- Test Performance**

- Reporting – customized based on role**
- Results Dashboards**
- Visualization**

Data analytics use in executive-level reporting

Leading healthcare organizations blend operational reporting, data analytics and targeted auditing into quality information for decision-making

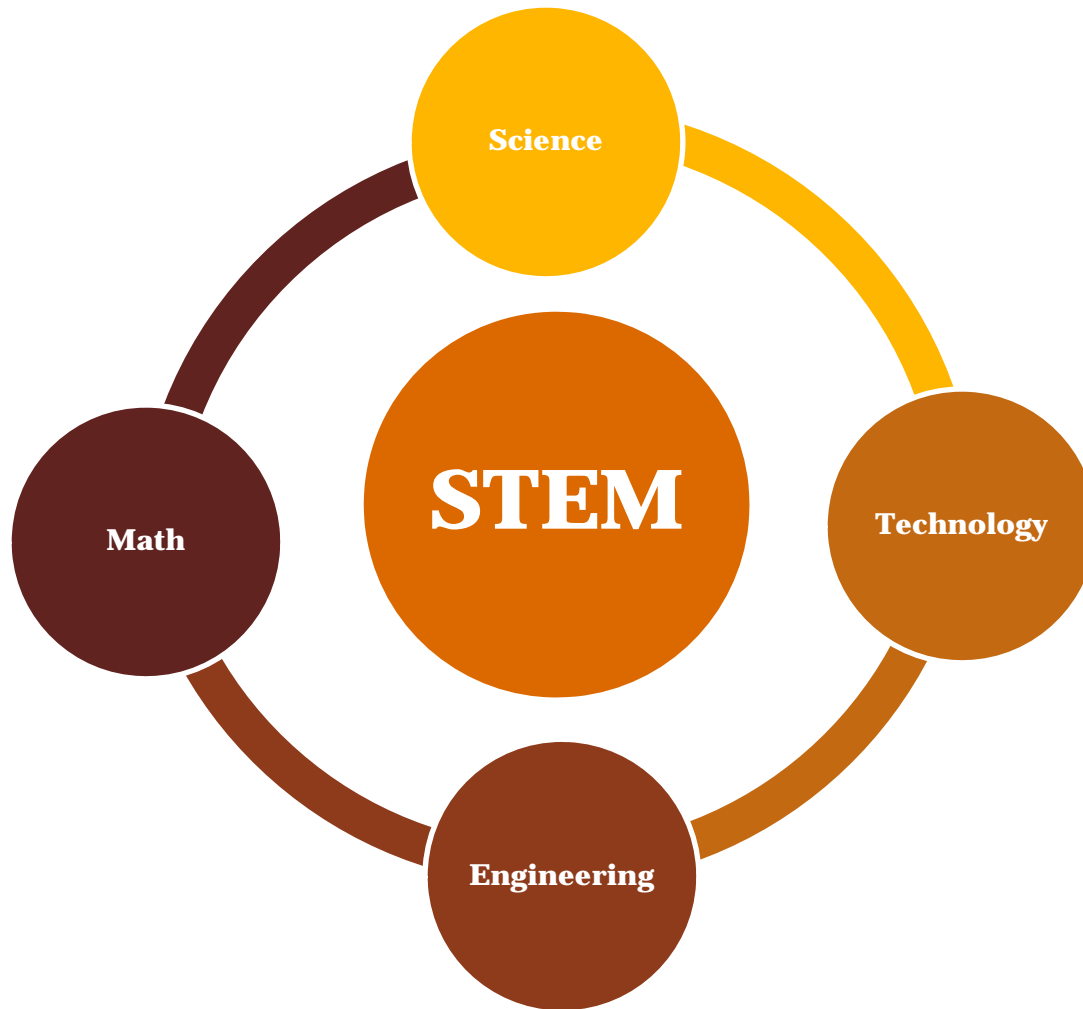


This illustrative example of a compliance dashboard provides an overview of key enterprise risk and compliance issues of concern for board members

- Effective dashboards turn data into information.
- An effective visual dashboard report can provide a real-time picture of an organization's compliance activities and their relevance to business operations as a whole.
- Dashboards provide a visual overview of the core results stemming from data analytics, including compliance metrics and potential risks that should be top of mind for board members (e.g., enumeration of current and anticipated internal, regulatory and emergent risk issues).
- New data analytics and visualization tools are changing the nature of reporting by providing dynamic, drill-down capabilities that enable a more interactive relationship with data.

Health Care: Transforming Skill Sets & Career Opportunities

Transforming Skill Sets



- An aging population, a shift towards consumer-driven health care models and an increased emphasis on technological innovation and solutions has created a high demand for individuals with technical backgrounds to fill critical skill gaps.
- Demand for STEM skills are projected to outpace the supply of trained workers and professionals.

Health Care IT Skills

- Knowledge of electronic health record (EHR) software (e.g., Epic, Cerner)
- Knowledge of structured query language (SQL)-data maintenance, and auditing and data queries
- Well-versed in programming languages (e.g., C, C++, C#) used in EHRs/EMRs and hospital information systems
- Well-versed in web programming languages (e.g., Java, JavaScript, HTML5, XML), and web-based applications showcasing out-of-the-box imaginative thinking
- Familiarity with Privacy & Security Rules (HIPAA)—everything must be in compliance with these government guidelines



Health Care IT Career Opportunities

**Regulatory
Compliance**

Data Analytics

**GRC
Technologies**

**Systems/Network
Engineers**

Internal Audit

**Continuous
Monitoring &
Testing**

Project Assurance

**Professional
Services**

**Information
Security**

Final Remarks

Key Takeaways

- The ***new health economy is driving major changes*** to the way organizations deliver care and services to patients / beneficiaries and to the approaches they take to compete in the marketplace and ultimately how Compliance departments need to be nimble.
- Increasing sophistication and rising expectations of regulators of healthcare organizations.
- Health care organizations are ***harnessing technology and data*** to proactively address emerging risk and regulatory requirements.
- To keep pace with regulator-adoption of data-driven enforcement, health care providers are embracing ***analytics and continuous monitoring***.
- Analytics is providing management with ***deeper understanding of organizational risks***, the business and key drivers that impact performance.
- Health care organizations are:
 - ***Hiring individuals with enhanced technical skill sets;***
 - ***Adopting innovative tools and technology to monitor compliance activities;***
 - ***Using outputs from tools and technology to identify risks and update risk profile; and***
 - ***Informing executives about the evolving compliance risk profile.***

Questions?

Thank You!

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