BILLING AUDITING AND MONITORING EFFECTIVELY:
MEASURE TO MANAGE RISK!

Presentation
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  – Data Analysis/Mining and Data Prospecting
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Introduction – The Need.

• OIG on A&M/Enforcement Landscape
The seven basic elements of a compliance program:

1. Designation of a compliance officer and compliance committee;
2. development of compliance policies and procedures, including standards of conduct;
3. development of open lines of communication;
4. appropriate training and education;
5. response to detected offenses;
6. **internal monitoring and auditing**; and
7. enforcement

**Issues:**

- Responsibility for Revenue Integrity Monitoring
- Data Orientation
- Changes in Enforcement Environment
How is the Board kept apprised of significant regulatory and industry developments affecting the organization’s risk?

How are “at risk” operations assessed from a compliance perspective?

• “Monitoring and auditing provide early identification of program or operational weaknesses and may substantially reduce exposure to government or whistleblower claims. Although many assessment techniques are available, one effective tool is the performance of regular, periodic compliance audits by internal or external auditors.”

  See [http://oig.hhs.gov/compliance/compliance-guidance/docs/Health_Care_Directors_Compliance_Duties.pdf](http://oig.hhs.gov/compliance/compliance-guidance/docs/Health_Care_Directors_Compliance_Duties.pdf)

• “Monitoring techniques may include sampling protocols that permit the compliance officer to identify and review variations from an established baseline. Significant variations from the baseline should trigger a reasonable inquiry to determine the cause of the deviation.”

  See [http://oig.hhs.gov/authorities/docs/cpghosp.pdf](http://oig.hhs.gov/authorities/docs/cpghosp.pdf)

Do you know whether risk is managed well? How do you know?
Presentation – The Way.

- Need to Use Data and Measure Better in Light of Enforcement Landscape – Data, Data, Data
- Billing Monitoring and Risk Management
- Routine versus Non-Routine Monitoring
- Statistical and Non-Statistical Approaches
- Audit Scoring/Metrics
- Randomizing/Sampling
- Data Analysis/Analytics and Data Prospecting
CMS Contractor Reform and Data Focus – Threat

• **ZPIC** – consolidation of Medicare integrity contractors
• **MIC** – national Medicaid integrity contractors
• **RAC** – national Medicare recovery audit contractors
• **Medicaid RACs** – mimicking Medicare RACs
• **MAC MMA 935 audits** – Overpayment recoupment process in Medicare
• **HEAT** - 2009, HHS and DOJ created the Health Care Fraud Prevention and Enforcement Action Team (HEAT). Fight against Medicare fraud became a Cabinet-level priority.
• **One-PI** -system is to establish an enterprise resource as a single source of information for all CMS fraud, waste, and abuse activities. Centralized access and analysis for standardized Medicaid data across multiple states, integrated with data from Medicare Parts A, B, and D.
• **UPIC** – further consolidation of Medicare and Medicaid integrity contractors, integrate audit/investigation to come

Data centric enforcement - Vulnerability

• **Knowing vs. Not Knowing your Data** - Data -> Information -> Knowledge
• **Measuring of Your Organization is Already Going On!**
Measuring and Managing.

- If we can measure billing processes, we:
  - can manage and hold people accountable.
  - can manage change for the better.
  - will leverage our own data better.

- If we don’t know our billing process risks (well),
  - we cannot manage effectively,
  - we need to find out through:
    - auditing, development of metrics, and monitoring
    - using sophisticated analytic techniques

- If we can measure we can manage effectively!
Presentation – The Way

- Billing Auditing & Monitoring and Risk Management
- Routine versus Non-Routine Monitoring
- Statistical and Non-Statistical Approaches
- Audit Scoring/Metrics
- Randomizing/Sampling
- Data Analysis/Analytics and Data Prospecting
Presentation – The Way
Billing Monitoring and Risk Management
Billing Auditing & Monitoring Program
Auditing & Monitoring (A&M) is a Shared Responsibility:

A&M responsibility cuts across the entire organization. However, “compliance lives in operations” and operations execute the mission and vision set forth by the Board.

**Board** provides oversight (risk tolerance, receives assurances of proper risk management).

**Management** runs operations and is primarily responsible for monitoring. Monitoring is a management function and conducted in the operational units. Especially ongoing monitoring, see also quality assurance (QA) functions.

**Compliance** (as well as Internal Audit)’s role is to help management establish continuous monitoring, i.e., controls and metrics, while staying independent and objective.

Assesses if management’s monitoring procedures are effective.

**Internal Audit** conducts audits, including risk based audits; checks if monitoring is working effectively and controls adopted are adequate.
Auditing versus Monitoring for Revenue Integrity.

**Auditing** – Testing **Output**/Transactions/Items generated by a process.

**Monitoring** – Analyze the **Flow**/ business process, if it is controlled.
- Quality Assurance.
- Metrics /control measures (within bounds).

Commonality: degree of independence and external to ongoing workflow!
Program Success Factors - Hints.

What Makes an Effective Billing Auditing & Monitoring Program?

- Leadership
- Planning
- Engagement/Buy-in
- Communication
- Standardization
- Written Procedures
- Consistency/Aggregation
- Repeatability
- Transparency
- Simplicity
- Internal Controls

- Skills & Techniques
- Metrics/Triggers
- Phasing/Escalation
  - routine
  - Focused
  - privileged
- Logging
- Sampling
  - Judgmental
  - Random
  - Phasing
- Refunds/Reporting
- Data Analytics/Data Mining/Prospecting
Billing Auditing & Monitoring Program integrated into ongoing Risk Management:

1. Risk Identification
2. Risk Analysis
3. Risk Response
4. Risk Control
5. Reporting/Communication
6. Risk Monitoring/Verification Auditing
Risk Identification & Risk Areas

- Physician date & signature
- Copy & paste in EMR
- Physician compensation and arrangements
- High E/M levels, Point Of Service, New versus Established, 99223, 99214
- High RUGs
- Use of Modifiers 25 and 59
- Observation Stay vs Admission
- Supervision of mid-levels
- ICD-10
- Encryption
- HIPAA/BAA and downstream entities monitoring
- Excluded Providers
- Separation of Duties
- Lack of standard operating procedures (SOP)
- No Data Analytics – Surprise!
Risk Analysis

- Considering *probability* (L=likelihood) and *severity* (I=impact) as a basis for determining how they should be managed.
- Basic idea is that risk exposure is measured as a combination of I and P in some form.
- Needs buy-in from management.
- Should be applied to billing risks.
Risk Management and Billing Auditing & Monitoring.

Risk Level Scoring

The Risk Exposure then determines whether the risk is grouped into high, medium, or low Risk Levels.

- Red = High Risk Level (15)
- Orange = Medium Risk Level (5-10)
- Green = Low Risk Level (1-3)

Risk Exposure = (P*I)

Qualitative/Semi-quantitative Methods

3x3 Risk Matrix

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<td>P=L, I=H</td>
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</table>

Range 1 to 15

Strategic Management
Risk Response

- Management selects risk responses – **avoiding, accepting, reducing, or sharing risk**
- **Criticality measures** applied to prioritized risks.
- **Corrective Action Plans (CAPs)** focus on top priority first, and ensure strong and tight controls are implemented. Depends on risk tolerance levels, budget, and context.
- Transparency is key.
  - A “risk calculus” and reasonable approach justify accepting some risks.
- Board can develop confidence in how risks are assessed.
- Areas with high Risk Levels can be subject to **focused monitoring**.
Risk Control

• Management implements policies and procedures to help ensure the risk responses are effectively carried out. Internal controls get developed or updated/tightened.

• Metrics are developed/modified to allow for ongoing monitoring of a better controlled process.

• Control updates usually involve a mix of policies/written guidance, technical and application configurations, and training and education of users/work force.

• Quality assurance (QA) processes further strengthen control.

• QA process often conceived of concurrent or ongoing monitoring or internal monitoring through auditing by operational units. Self-policing.

• CAPs (corrective action plans) being executed, as outcomes of risk assessments and findings in audits, usually involve both tightening or adding controls but also improving a side-queue process, e.g., the quality assurance process.
  – CP Work Plan
  – Standardized reporting & Logging supports accountability
Risk Monitoring (incl. Verification Auditing)

- Billing monitoring accomplished through ongoing management activities in operations (patient financial services, billing or business office, HIM for coding/medical documentation, etc.).
- CAPs may have to be updated, risk control strategies may need to change.
- Risk metrics help “gauge” whether the organization is at risk or within tolerance level. Compliance should receive periodic reports from QA units and internal monitoring groups whether metrics are developed/met, and whether CAPs are completed.
- Oversight role of compliance.
- Formalized types of report are helpful.

Reporting

- Standardized reports for Compliance Committee and Board.
- Outcomes of audits and metrics met/variances /deviations
- Lessons Learned process.
Presentation – The Way

• Phasing / Escalation
• Metrics
Billing Monitoring Program – Routine vs Non-Routine.

Phased Approaches and Escalation

– Running a parallel routine and non-routine monitoring program.
– Escalation approach that moves target or risk areas from routine to focused monitoring.
– Metrics defining when targets come on/off focused or targeted monitoring.
– Keeping metrics simple and standardized so that they can be applied across the whole organization.
– Approving/vetting set of compliance metrics that will be used for monitoring for the year.
Billing Monitoring Program – Metrics and Escalation.

Phased Approaches and Escalation cont’d.

- **Metrics:** Error, Accuracy & Compliance Rates, Rates of Change, such as:
  - OIG - 5% *financial* error rate in discovery samples for single claims audits.
  - Company internal % error rate ranges that trigger deeper dive, focus.
  - Coding Accuracy of 95% (e.g., AHIMA).
  - Claims Compliance Rate for Physician
    - Level of Care (initial and subsequent hospital care, high level office visit).
    - Signature & Date on Order.
  - Copy Paste in EMR, audit logs metric.
  - Billing Office compliance training participation rates 90%.
  - E/M Profiles of physicians and outlier definition, by specialty.
  - Length of Stay (e.g., hospice threshold)
  - RUG Level percentage (high/ultrahigh). Profiling.
  - High dollar claims e.g., IP $125,000 & OP $25,000 – triggers review.
  - Patient Status change percentage. Observation Service/Inpatient Admission Ratio.
  - Sanction screening compliance rate for employees, vendors.
  - Risk level of a high risk area – declare a focus area until they improve.
Phased Approaches and Escalation cont’d.

– Have a procedure for escalation.
– Consecutive failures in reviews of a sample series or transactions series.
– Use sampling techniques and strategies:
  • Judgmental
  • Statistical (Probe, Discovery, Full)
  • Regular or privileged
– Use well defined step up procedures to support a Billing Monitoring Program and when claims error rates lead to escalation with potential extrapolation and disclosure.
– Ad hoc decisions can be problematic. It is best to have an escalation procedure and process in place.
– If CAPs and milestones are missed repeatedly, graduate from routine to focused monitoring, targeted verification auditing & increased scrutiny.
Presentation – The Way

• Sampling
• Reporting/Refunding
Billing Auditing & Monitoring Program – Sampling.

Using Sampling for Efficiency

– Sampling:
  • Effective and efficient way to conserve resources in reviews.
  • Billing Office/Business Office and oversight entities (e.g., Compliance Office) have a wide reach in ongoing monitoring.
  • Validation auditing.

– Types of samples:
  • Judgmental .
  • Probability/Statistical .
  • Simple, Stratified, Systematic.

  Only statistical sample is objective and can be used in extrapolation.

– Not every sample needs to be extrapolated!

– Not every:
  • Failed control in monitoring should trigger a full blown audit.
  • Audit should start full scale, make it progressive.
  • Month -> quarter -> years.

– Avoid unnecessary risk by overreaching.
Using Sampling for Efficiency

- What sample size makes the sample valid?
  - Validity versus size
  - Role of Probe Samples (30)

-What sample size should I use?
  - HHS OIG: 100+
  - IRO: 50 and Full Sample (90% confidence/25% precision)
  - You: depends

-What sampling unit should I use?
  - Uniqueness
  - Claim, Claim line, DOS, Beneficiary or member, Payment transaction, etc
Using Sampling for Efficiency

– When should I stratify?
  • Heterogeneity.

– What is a simple way to randomize?
  • Systematic Sampling
    – Make an ordered list of N items (Sample Frame ordered with numbers 1 to N).
    – Pick a random start, count out intervals.

– What about extrapolation?
  • Error rate versus financial error rate in Discovery Samples.
  • Financial error rate matters.
  • Difference estimator /Point Estimate.
Reporting and Refunding

— FCA/FERA and 60-day clock under PPACA
— Medicare and Medicaid Program Integrity Provisions

42 U.S.C. §1320a-7k(d) – REPORTING AND RETURNING OF OVERPAYMENTS

“(1) IN GENERAL.— If a person has received an overpayment, the person shall (A) report and return the overpayment to the Secretary, the State, an intermediary, a carrier, or a contractor, as appropriate, at the correct address; and (B) notify the Secretary, State, intermediary, carrier, or contractor to whom the overpayment was returned in writing of the reason for the overpayment.”

(2) DEADLINE FOR REPORTING AND RETURNING OVERPAYMENTS.— An overpayment must be reported and returned under paragraph (1) by the later of - (A) the date which is 60 days after the date on which the overpayment was identified; or (B) the date any corresponding cost report is due, if applicable.

(3) ENFORCEMENT.— Any overpayment retained by a person after the deadline for reporting and returning the overpayment under paragraph (2) is an obligation (as defined in section 3729(b)(3) of title 31, United States Code) for purposes of section 3729 of such title.”

— When is overpayment identified?
— Report and refund strategies
Using Systematic Sampling

“Systematic sampling requires that the frame of sampling units be numbered [1 to N], in order, starting with the number one (1) and ending with a number equal to the size of the frame [N]. Using a random start, the first sampling unit is selected according to that random number, and the remaining sampling units that comprise the sample are selected using a fixed interval thereafter.

For example, if a systematic sample with size one-tenth of the frame size is desired, select a random number between one and ten, say that it is “6”, and then select every tenth unit thereafter, i.e., “16, 26, 36, ...etc.” until the maximum unit number in the frame has been exceeded. “

See: CMS Medicare Program Integrity Manual, Chapter 8
How to pick the random start. Toss a coin. Better, use Excel!
Using MS Excel to Generate a Random Number

Enter one of the following formulas into any cell:

Enter =RAND() if you want the random number to be between 0 and 1.
Enter =RAND() * n into a cell if you want the number to be between 0 and n.
For example, if you want a random number generated that is between 0 and 10, enter =RAND() * 10.
Enter =RAND() * (b-a) + a if you want a random number between a and b. For example, if you want a random number between 10 and 100, enter =RAND() * (100-10) + 10.

Using Excel to Generate a Random Number

Enter one of the following formulas into a cell:
Enter =RAND() if you want the random number to be between 0 and 1.

You can repeat this and copy it down to as many cells as you have items in the Universe or Frame of size N, and use this method to randomize the list of items, such as a list of claims. Note, before you sort by random numbers, save Paste Special as “Values”, otherwise they get regenerated. Take the top n if you want a sample of size=n, (here in the example n=3)

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Presentation – The Way

• Data Analysis/Mining/Prospecting
Data Analysis, Mining & Prospecting

- **Data Analysis**
  - e.g., descriptive statistics, correlations, more general.

- **Data Mining**
  - more defined in terms of audit or search scope – “go dig!”
  - Audits, reviews, data queries for rule violations.
  - Post Pay/Historical.
  - Explore anticipated and unanticipated relationships.

- **Data Prospecting**
  - Less clear what to target - “where to dig?”
  - Pattern detection, e.g., link analysis.
  - Big data, multiple data sets.
  - More complex & sophisticated.
  - Real time -> can help stop processes “out of control” that you would not have even suspected.
Billing Monitoring Program – Data Analysis, Mining & Prospecting

- In today’s enforcement climate, health care organizations need to include aspects of data mining into their claims auditing and monitoring program and use techniques for data “prospecting” potential inappropriate claims or errors in business processes.
- Compliance as oversight function should check if any types of data analytic methods (simple analysis, mining and predictive analytics, prospecting) are being conducted. Get proof, is it actionable?
- A long term strategy to know one’s own data (beyond a claim by claim audit) with queries and mathematical algorithms to detect patterns – before the government auditor/contractor – must become part of an effective billing and claims processing monitoring program.
- Predictive modeling and analytics – ask around.
Evaluation/Management Services – Established Patient Office Visit
Food for Thought

- Use formal methods (Probability/Impact Scores; Criticality Measures).
- Define and use metrics.
- Keep it simple.
- Standardize.
- Include *financial* error rate into billing monitoring programs.
- Set expectations what/how internal monitoring by operations is to report to CO.
- Formalize escalation procedures from routine to non routine monitoring.
- Start small when using sampling and rely on triggers/thresholds for deeper dives.
- Aggregate and trend, don’t lose sight of the big picture.
- Incorporate sampling strategies that can easily be followed.
- If extrapolation and disclosure is an issue, consider outside help to raise credibility of results.
- Do more data analysis, and venture into data mining and data prospecting. Setup a task force. At a minimum do data analysis such as E/M profiling.
- Watch the 60 day clock!
- 80/20 Rule.
Questions and Contact Info

• Q/A
• How to reach us
Contact Information.

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