

The Art of

# Benchmarking Risk

Without Needing a Statistics Degree



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## What We Are Going To Cover

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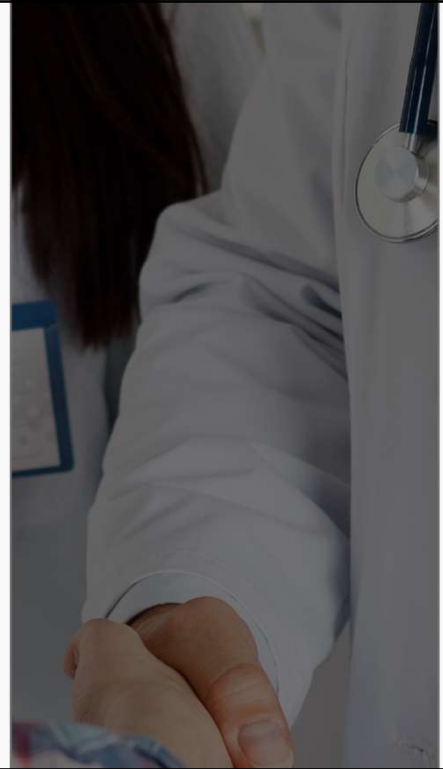
- 1 *Why Benchmark to Begin With?*
- 2 *The Analyses You Should Consider*
- 3 *How to Identify Outliers*
- 4 *How to Build Your Audit Plan*



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## Why Benchmark to Begin With? Reactive Auditing Trend

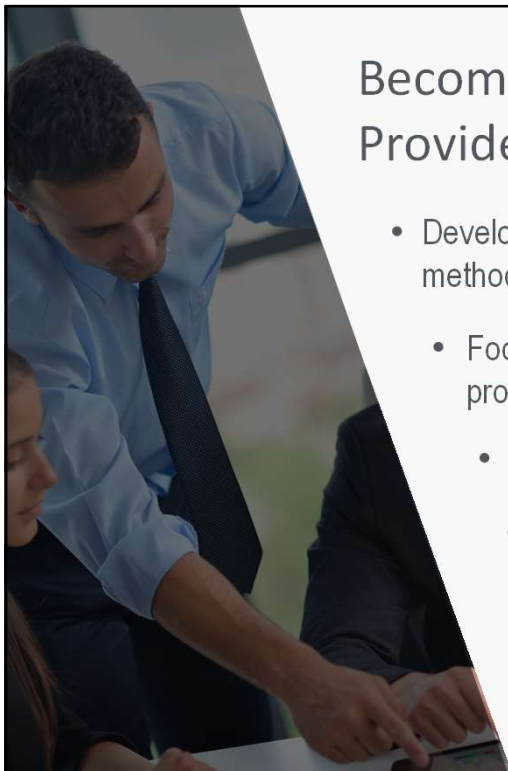
- The current reactive approach to auditing and monitoring
  - Just responding to audit requests
  - Conducting documentation reviews entirely in random
  - Benchmarking without a set action plan
- Reasons why this reactive approach is still being used
  - Data issues
  - Understanding benchmarking
  - Restricted FTE and tech resources
  - Fear of knowing



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## Becoming Proactive with Provider Benchmarking

- Develop benchmarking and data analytic capabilities that mirror methods being used by the OIG, DOJ, CMS etc.
- Focus your limited auditing and monitoring resources towards providers based on risk
  - Reduce workload on the auditing team
  - Provide transparency throughout the organization and increase the effectiveness of strategic planning
  - Due diligence of new practices



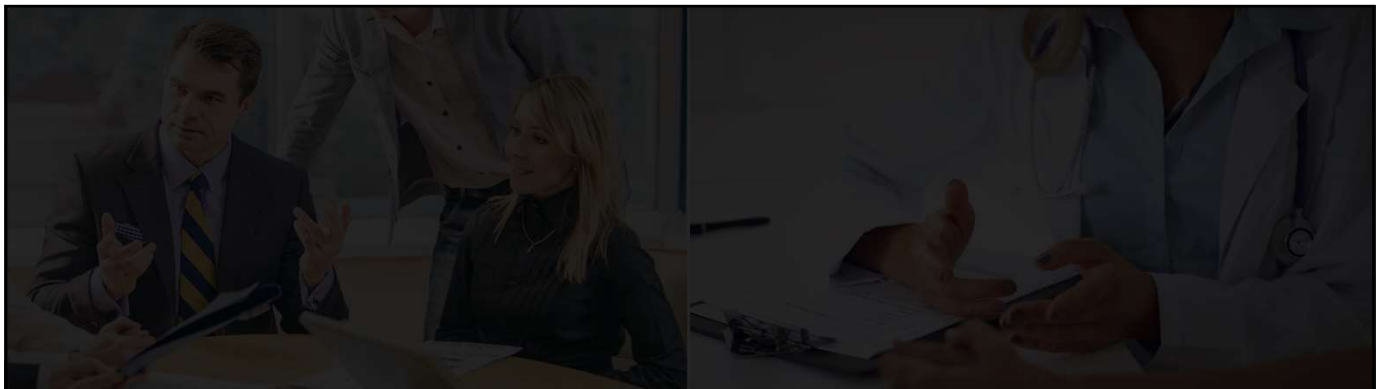
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Type	Contractors	Comments
Medicare Administrative Contractors (MACs)	• National Government Services	<ul style="list-style-type: none"> <li>• Process claims and provider payments</li> <li>• Reduce payment error rates</li> </ul>
Zone Program Integrity Contractors (ZPICs)	• Cahaba Safeguard Administrators	<ul style="list-style-type: none"> <li>• Focus on identifying fraud</li> <li>• All providers</li> <li>• Data mining and analysis</li> </ul>
Supplemental Medical Review Contractor (SMRC)	• Strategic Health Solutions	<ul style="list-style-type: none"> <li>• Nationwide claim review</li> <li>• All providers</li> <li>• Data mining and analysis</li> </ul>
Comprehensive Error Rate Testing Contractors (CERT)	• Multiple contractors	<ul style="list-style-type: none"> <li>• Annual audits to determine FFS error rates</li> <li>• All provider types</li> </ul>
Recovery Audit Contractors (RACs)	<ul style="list-style-type: none"> <li>• CGI Technologies (Medicare)</li> <li>• HMS (Medicaid)</li> </ul>	<ul style="list-style-type: none"> <li>• Identify over and under payment errors</li> </ul>
DHHS – Office of Inspector General (OIG)	• N/A	<ul style="list-style-type: none"> <li>• Audits and investigations</li> <li>• Annual Work Plan published</li> </ul>
Department of Justice (DOJ)	• N/A	<ul style="list-style-type: none"> <li>• Enforcement actions under the False Claims Act</li> </ul>
Medicaid Inspector General	• IL Dept. of Healthcare and Family Services	<ul style="list-style-type: none"> <li>• Aggressively using extrapolation for repayment liabilities</li> </ul>

Who is  
**AUDITING** ?  
 Healthcare Providers

*An Example: Illinois*

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## Availability of Provider Data Online

How easy it is to find out who your outliers are online...

*Live Example*

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## What Analyses You Should Consider?



01

E/M Distribution

02

High Risk Modifiers

03

Top Billed Procedures

04

High Productivity Providers



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- CMS Utilization Raw Data
  - Sub-Specialty Bias
  - Payer Mix Bias
- MGMA – Surveys and Benchmarking Data
  - Understand Volume of Data Included (Total / Specialty / Locality)
- CMS Utilization & Payments Data
  - Line Item Data Not Included on Services Performed on Small Number of Patients

## Understanding Peer Group Data

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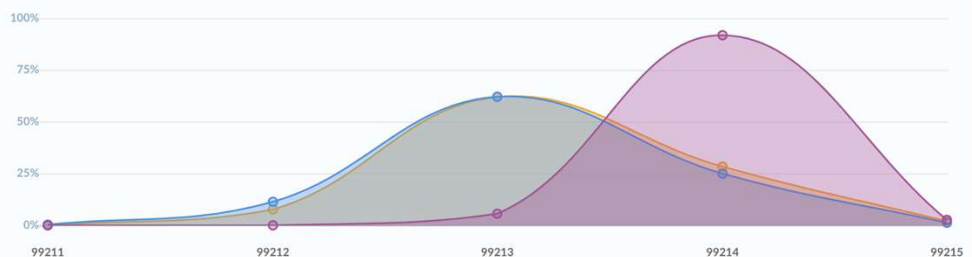
20	Physician/Orthopedic Surgery	207X00000X 207XS0114X	Allopathic & Osteopathic Physicians/Orthopaedic Surgery Allopathic & Osteopathic Physicians/Orthopaedic Surgery, Adult Reconstructive Orthopaedic Surgery
		207XX0004X 207XS0106X 207XS0117X 207XX0801X 207XP3100X 207XX0005X	Allopathic & Osteopathic Physicians/Orthopaedic Surgery, Foot and Ankle Surgery Allopathic & Osteopathic Physicians/Orthopaedic Surgery, Hand Surgery Allopathic & Osteopathic Physicians/Orthopaedic Surgery, Orthopaedic Surgery of the Spine Allopathic & Osteopathic Physicians/Orthopaedic Surgery, Orthopaedic Trauma Allopathic & Osteopathic Physicians/Orthopaedic Surgery, Pediatric Orthopaedic Surgery Allopathic & Osteopathic Physicians/Orthopaedic Surgery, Sports Medicine

## Example of CMS Sub-Specialty Bias

- Understanding the make-up of the peer group data is critical when attempting to make determinations on the results

## E/M Distribution Analysis

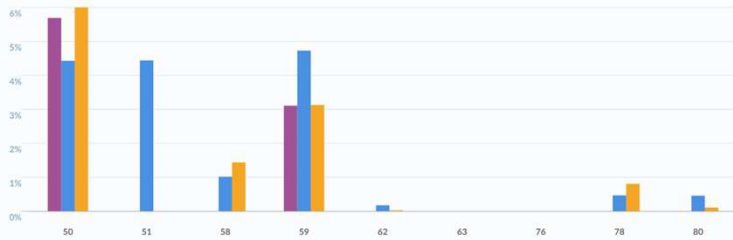
Established Office Visits Distribution Analysis



Established Office Visits Distribution Analysis

CPT	Freq	This Provider's Data		CMS National Peer Group		Internal Peer Group	
		Util	Diff	Util	Diff	Util	Diff
99211	0	0%	-0.3%	0.3%	-0.02%	0.02%	-0.02%
99212	0	0%	-11.36%	11.36%	-7.66%	7.66%	-7.66%
99213	15	5.61%	-56.46%	62.07%	-56.35%	61.96%	-56.35%
99214	245	91.76%	66.76%	25%	63.4%	28.36%	63.4%
99215	7	2.62%	1.39%	1.23%	1.98%	1.98%	0.64%

Reimbursement Modifier Utilization Analysis



Reimbursement Modifier Utilization Analysis

Modifier	Description	Freq	Util	Util	Diff	Util	Diff
50	Bilateral Procedure	22	5.68%	4.42%	1.26%	5.99%	-0.31%
51	Multiple Procedures	0	0%	4.43%	-4.43%	0%	0%
58	Staged or Related Procedure...	0	0%	1.01%	-1.01%	1.43%	-1.43%
59	Distinct Procedural Service	12	3.1%	4.72%	-1.62%	3.12%	-0.02%
62	Two Surgeons	0	0%	0.17%	-0.17%	0.02%	-0.02%
63	Procedure Performed on Inf...	0	0%	0%	0%	0%	0%
76	Repeat Procedure or Service...	0	0%	0%	0%	0%	0%
78	Unplanned Return to the Op...	0	0%	0.46%	-0.46%	0.8%	-0.8%
80	Assistant Surgeon	0	0%	0.45%	-0.45%	0.1%	-0.1%

## High Risk Modifier Analysis

Focus On

- 24
- 25
- 58
- 59
- 62
- 63
- 76
- 78
- 80
- AS

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All Services Billed (00100 - 99499)

Rank	CPT	Description	Fee	Freq	Util	Gross Charges	Rank	Util	Diff
1	99214	Office/outpatient visit est	\$109.44	245	30.39%	\$26,812.50	3	6.66%	23.73%
2	99204	Office/outpatient visit new	\$167.40	147	18.23%	\$24,607.52	13	1.71%	16.52%
3	99024	Postop follow-up visit	\$0.00	122	15.13%	\$0.00	14	1.37%	13.76%
4	73564	X-ray exam knee 4 or more	\$40.32	104	12.9%	\$4,193.23	12	1.88%	11.02%
5	73030	X-ray exam of shoulder	\$29.88	32	3.97%	\$956.14	8	2.74%	1.23%
6	29881	Knee arthroscopy/surgery	\$561.59	24	2.97%	\$13,478.25			
7	29827	Arthrosop rotator cuff repr	\$1,093.31	16	1.98%	\$17,492.92			
8	99213	Office/outpatient visit est	\$74.16	15	1.86%	\$1,112.38	1	16.55%	-14.69%
9	29826	Shoulder arthroscopy/surgery	\$183.24	14	1.73%	\$2,565.33			
10	29824	Shoulder arthroscopy/surgery	\$690.83	12	1.48%	\$8,289.98			
11	29888	Knee arthroscopy/surgery	\$1,021.67	7	0.86%	\$7,151.68			
12	99215	Office/outpatient visit est	\$147.60	7	0.86%	\$1,033.18			
13	73560	X-ray exam of knee 1 or 2	\$31.68	7	0.86%	\$221.75	10	2.19%	-1.33%

Top Billed Procedures  
All Service Types Included

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**Top Billed  
Procedures**  
Only Surgical  
Services Included

Only Surgical Services Billed with a Fee > \$0 (10040 - 69990)

<div> <div>This Provider's Data</div> <div>CMS National Peer Group</div> </div>									
Rank	CPT	Description	Fee	Freq	Util	Gross Charges	Rank	Util	Diff
1	29881	Knee arthroscopy/surgery	\$561.59	24	24.48%	\$13,478.25	16	0.76%	23.72%
2	29827	Arthroscop rotator cuff repr	\$1,093.31	16	16.32%	\$17,492.92	14	0.88%	15.44%
3	29826	Shoulder arthroscopy/surgery	\$183.24	14	14.28%	\$2,565.33	10	1.05%	13.23%
4	29824	Shoulder arthroscopy/surgery	\$690.83	12	12.24%	\$8,289.98	25	0.52%	11.72%
5	27447	Total knee arthroplasty	\$1,408.30	7	7.14%	\$9,858.13	3	4.12%	3.02%
6	29888	Knee arthroscopy/surgery	\$1,021.67	7	7.14%	\$7,151.68			
7	20610	Drain/inj joint/bursa w/o us	\$61.92	6	6.12%	\$371.51	1	41.01%	-34.89%
8	20985	Cptr-asst dir ms px	\$153.36	3	3.06%	\$460.07			
9	29828	Arthroscopy biceps tenodesis	\$943.19	2	2.04%	\$1,886.37			
10	29877	Knee arthroscopy/surgery	\$644.39	2	2.04%	\$1,288.78			

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in 2015



**\$888,476**

Total payments

Orthopedic Surgery  
11900 E 12 MILE RD SUITE 110 | WARREN, MICH.

Year	Total Payments	Number of Patients	Payments per Patient
2015	\$888,476	1,227	\$724
2014	\$1,070,623	1,276	\$839
2013	\$1,136,984	1,156	\$984
2012	\$1,172,712	1,338	\$876

Provider Comparison

NATIONALLY STATEWIDE

How compares to 677 other providers in Michigan specializing in Orthopedic Surgery:

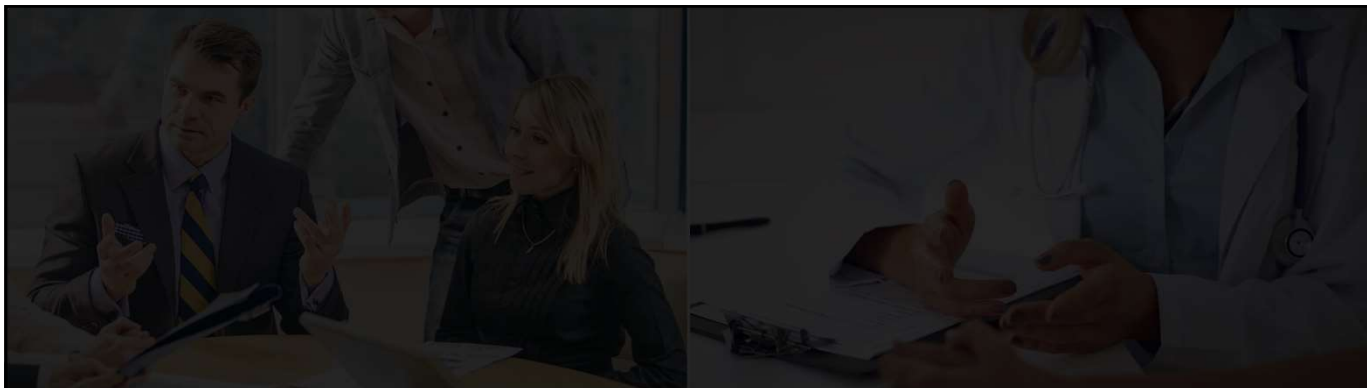
2015	Total Payments: <b>\$888,476</b> 100th percentile statewide	Number of Patients: <b>1,227</b> 100th percentile statewide	Payments per Patient: <b>\$724</b> 95th percentile statewide
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**High  
Productivity  
Analysis**

Medicare  
Payments

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## Analysis Construction Walk-Through

The Do It Yourself Version

*[View Excel Example](#)*



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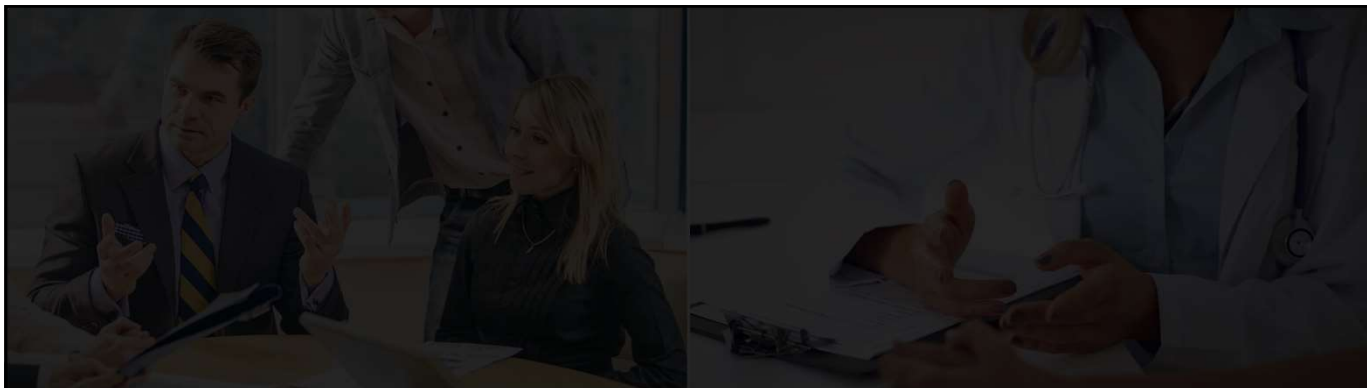
## How to Identify Outliers: Use Risk Thresholds

- Creates a standardized approach to know when a provider is an outlier
- Streamlines the analysis process by filtering out the providers that are not a risk
- Scorecards can be created by combining multiple analysis thresholds together



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## How to Build Thresholds into your Analysis Results

*[View Excel Example](#)*



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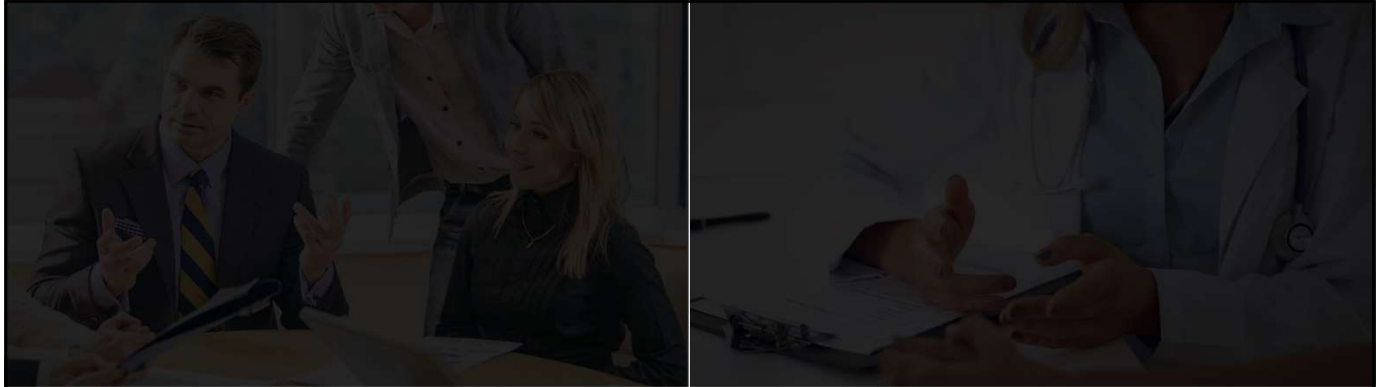


## Creating an Audit Plan

- Understanding the Goal of the Audit
  - Yearly Compliance Coding Review
  - Due Diligence Project
  - Highly Compensated Providers
  - Outside Sources
- Build Prioritization Methodology
  1. What is the goal of the audit?
  2. What is your resource capacity?
  3. How do we operationally conduct audits?
    1. By Facility?
    2. Are auditors are assigned specific groups of providers?



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## Actual Audit Plan Examples Utilized by Health Systems

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*[View Excel Example](#)*



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## Using Benchmarking for Acquisitions – Due Diligence

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- Benchmarking of data is key initial step in due diligence for physician employment or acquisitions
  - Identify potential risks prior to closing
    1. Go or No Go
  - Identify compliance issues
  - Identify opportunities for integration
    1. Education
    2. Coding and Billing Hold



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## Audit Odds & Ends

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- Sampling process/consideration:
  - Retrospective claims (prior 3 months)
  - Non-statistical sampling e.g. judgment sampling
  - Population is stratified (stratums) based on benchmarking
  - Sample size – small samples based on risk
  - Extrapolation – NONE
    1. Since the sample size was controlled by the auditor it cannot be measured
- Analysis of Sample
  - Provider documentation in comparison to CPT codes
  - Accuracy of diagnoses
  - Accuracy of place of service codes
  - Functionality an use of the EMR system



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## Questions & Contact Information

*Please reach out if you have questions or need help starting risk assessment benchmarking and building a proactive audit plans.*

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