

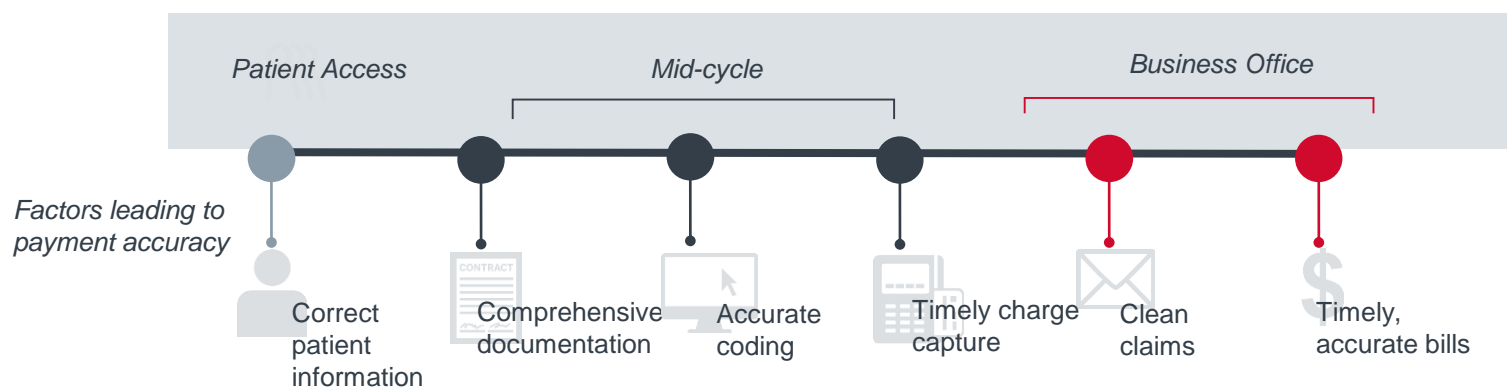
# Defining Revenue Integrity: Case Studies from Four Health Systems

## Background

The topic of revenue integrity has seen increased interest from revenue cycle leaders across the past 18 months; Advisory Board researchers have fielded a growing number of questions around best practices for revenue integrity programs. Despite interest in the topic and the prevalence of programs (53% of Advisory Board members claim to have a revenue integrity team), revenue cycle leaders struggle to define the term.

Research revealed huge variation in revenue integrity program structures, goals, scope, and staffing, making it difficult to define a set of best practices and standards for these teams. Despite this lack of consistency, at the root of revenue integrity is its focus on payment accuracy. As such, Advisory Board defines **revenue integrity as the act of maintaining accuracy in the payment information chain**. Along this chain, correct information must be passed from stakeholder to stakeholder to maximize the number of clean and accurate claims sent out the door.

## The Revenue Integrity Information Chain



Protecting and maintaining the information chain is difficult in and of itself. This task becomes even more challenging given market forces that can disrupt the chain: regulatory changes, various fee schedules, the adoption of new technology and growing complexity in payer contracts all add to the hurdles faced by revenue integrity teams.

This publication includes the imperatives we have seen deployed by progressive organizations, along with four in-depth case studies of effective programs.

The case studies compiled here are from organizations who have successfully protected and maintained their information chain through various methods, such as focusing on government audits, educational programs, and collaboration with IT. While key differences exist, each program has focused on and enjoyed increased payment accuracy as a result.

# Nine imperatives to increase payment accuracy

---

## Strengthening the revenue integrity information chain

While there are natural variations in revenue integrity programs, our research uncovered nine imperatives that all organizations should consider incorporating into their program structure and strategy.

### 1. Establish flexible oversight

The revenue integrity program should be an internal team that ensures the integrity of the information chain. Rather than combining a subset of revenue cycle functions into one entity, revenue integrity provides oversight, monitors data, and looks for potential performance gaps that could lead to revenue loss. Revenue integrity is also responsible for implementing changes and solutions to issues they've identified.

### 2. Craft a compelling career opportunity

The roles of revenue integrity specialists and directors are emerging ones, and due to the mix of skills and requirements, difficult ones to fill. Not only must revenue integrity staff have a comprehensive understanding of the revenue cycle, they must also problem solve, be comfortable interacting with a number of shareholders across the health care system, and possess critical thinking skills.

### 3. Use ROI as the ultimate performance metric

Revenue integrity touches many different pieces of the revenue cycle, making it difficult to tease out metrics that would show impact of a revenue integrity program alone. The best way to measure program efficacy is through ROI – revenue retained by the program that would otherwise have been lost.

### 4. Ensure a strong foundation through CDM and contracting

The chargemaster serves as the foundation of any revenue integrity program and should be maintained frequently. Programs must also ensure that contracting specifics, such as carve-outs and intricacies from risk-based arrangements are reflected in charge capture.

### 5. Monitor the regulatory landscape for potential chain disruptors

Legislative or regulatory changes can significantly impact the payment chain, potentially placing reimbursement at risk. Most best practice revenue integrity programs include a compliance and/or regulatory team that spends time and resources monitoring the latest changes and protecting revenue against audit.

### 6. Increase scrutiny in areas of high revenue risk

Certain service lines and clinical areas contain greater reimbursement risks than others. The sheer amount at risk with oncology and pharmaceuticals have led many organizations to place increased revenue integrity resources in these areas to ensure protection of vulnerable payment streams.

### 7. Fill the charge capture gaps with IT support

While the majority of organizations rely upon their EHR for charge capture, most also report that further IT support is required. Whether dedicated to revenue integrity, or loaned from the IT department, successful programs have formalized mechanisms for obtaining IT support in workflow refinements and build-outs.

### 8. Engage with, but don't corrupt, CDI

Clinical documentation is a critical piece of revenue integrity, and some revenue integrity efforts may be similar to Clinical Documentation Improvement (CDI) efforts. Despite the similarities, it is critical to keep these functions separate, because their respective goals are distinct. While revenue integrity is about protecting reimbursement and revenue streams, CDI is about accurate capture of clinical information, for payment, but more importantly for the clinical record.

### 9. Make charge drop easy for clinicians

Charge drop can be a bottleneck in the charge capture and billing process. Progressive revenue integrity programs have spent time identifying challenges to timely clinician charge drop by mapping workflows and providing solutions to speed the charge drop process.

Source: Revenue Cycle Advancement Center research and analysis.







# Case Study 1: Cedars-Sinai

## Focus on continuous monitoring of regulatory landscape, audit preparation

### Overview

Cedars-Sinai's revenue integrity program started in 2004 when the system's current Executive Director of Revenue Integrity and Compliance took responsibility of the chargemaster. The program has since expanded and now acts like "air traffic control," coordinating interactions between the contracting and finance departments and working on pricing with the managed care and finance departments.

### Program functions and staff

	<b>Chargemaster:</b> manage prices and procedure codes, update changes 4 FTEs		<b>Data Integrity:</b> maintain information related to charges, claim scrubbing 1 FTE
	<b>Charge Capture:</b> monitor systems and processes to ensure timely revenue capture 9 FTEs		<b>Billing Compliance:</b> reduce risks associated with payer billing requirements 8 FTEs
	<b>Charge Audit:</b> conduct concurrent and post-billing audits with a focus on high-risk areas such as oncology and high-cost drugs 5 FTEs		<b>Hospice Billing:</b> manage responses to investigators regarding prices and processes on research billing 3 FTEs

### The Government Audit Program

The Government Audit Program (GAP) is a significant portion of Cedar-Sinai's program. GAP was launched in 2012, after the organization realized audits and requests for information weren't centralized or managed by one function. Instead, audits were entering the system from multiple points, with insufficient accountability for managing the response or compliance with requests. Realizing the potential risks, the revenue integrity program took ownership, purchasing database software and hiring 3.5 FTEs, formally establishing the GAP.



*Dedicated staff*



*Maintained database*



*Consistent measurement*

- Team of 3.5 FTEs added to manage audits, requests for information and reporting
- Audits and requests for information tracked in purchased database software.
- Performance monitored consistently
- Second level appeals also tracked within database, due to similarity in information requests between appeals and governmental audits
- Monthly report includes success rates, current areas of risk and other financial metrics

Source: Cedars-Sinai, "Facts and Reports," <https://www.cedars-sinai.org/about/facts-and-reports.html>; Revenue Cycle Advancement Center research and analysis.

# Audit program continues to grow and evolve

---

## Expanding GAP's Scope

The program's success in the acute care setting has led to its expansion in different areas. Cedars-Sinai is implementing the same type of audit documentation for high cost drugs, physician billing, and is also incorporating the newly-acquired Marina del Rey hospital site into the GAP.



### **HIM talent used in revenue integrity**

A case manager from HIM moved to revenue integrity to standardize the audit process across the organization before GAP's launch



### **Cedars-Sinai Medical Center**

GAP program launched with focus on acute care



### **Move to include physician billing**

Physician proactively brought RAC audits to the GAP program, driving program to take on physician billing as well



### **Expand focus to high cost drugs**

Rolling out oversight and management of audits and denials related to pharmaceuticals and size of related revenue risk



### **Cedars-Sinai Marina del Rey Hospital**

GAP now working with Marina del Rey site of care to expand coverage over audits and denials at that site of care.

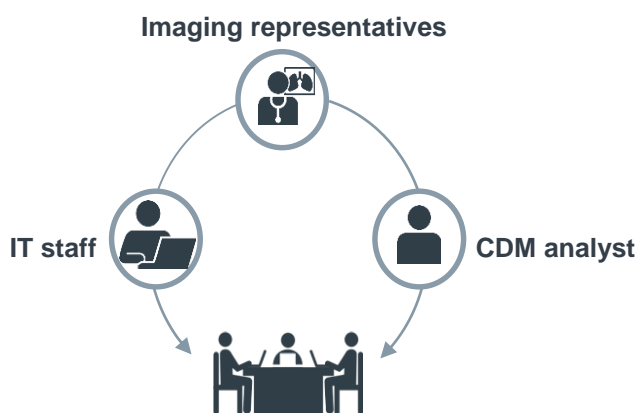
# Harnessing clinical and IT expertise

Work groups eliminate information gaps and efficiency lags in charge capture

## Revenue integrity clinical workgroups





Cedars-Sinai's program also includes work groups for each service line, comprised of representatives from revenue integrity, clinical specialties, and IT. The goals of each group are to oversee IT system conversion, understand and identify current workflow challenges, monitor revenue risks, and ensure coordination across departments on revenue integrity issues. The work groups meet regularly, have standardized minutes and agendas, and measure revenue impact of changes and improvements.

### Imaging work group



### Other work groups

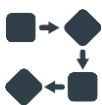
#### Clinical area

-  Pharmacy
-  Ambulatory
-  Imaging
-  Oncology

#### Revenue integrity workgroup leader

-  Associate Program Director
-  Charge Capture Manager
-  CDM Analyst
-  CDM Analyst

## Keys to work groups' success



### Increased efficiency

Complex issues no longer managed via email, resolved in the moment



### Dedicated time

Faster escalation of issues and follow-up



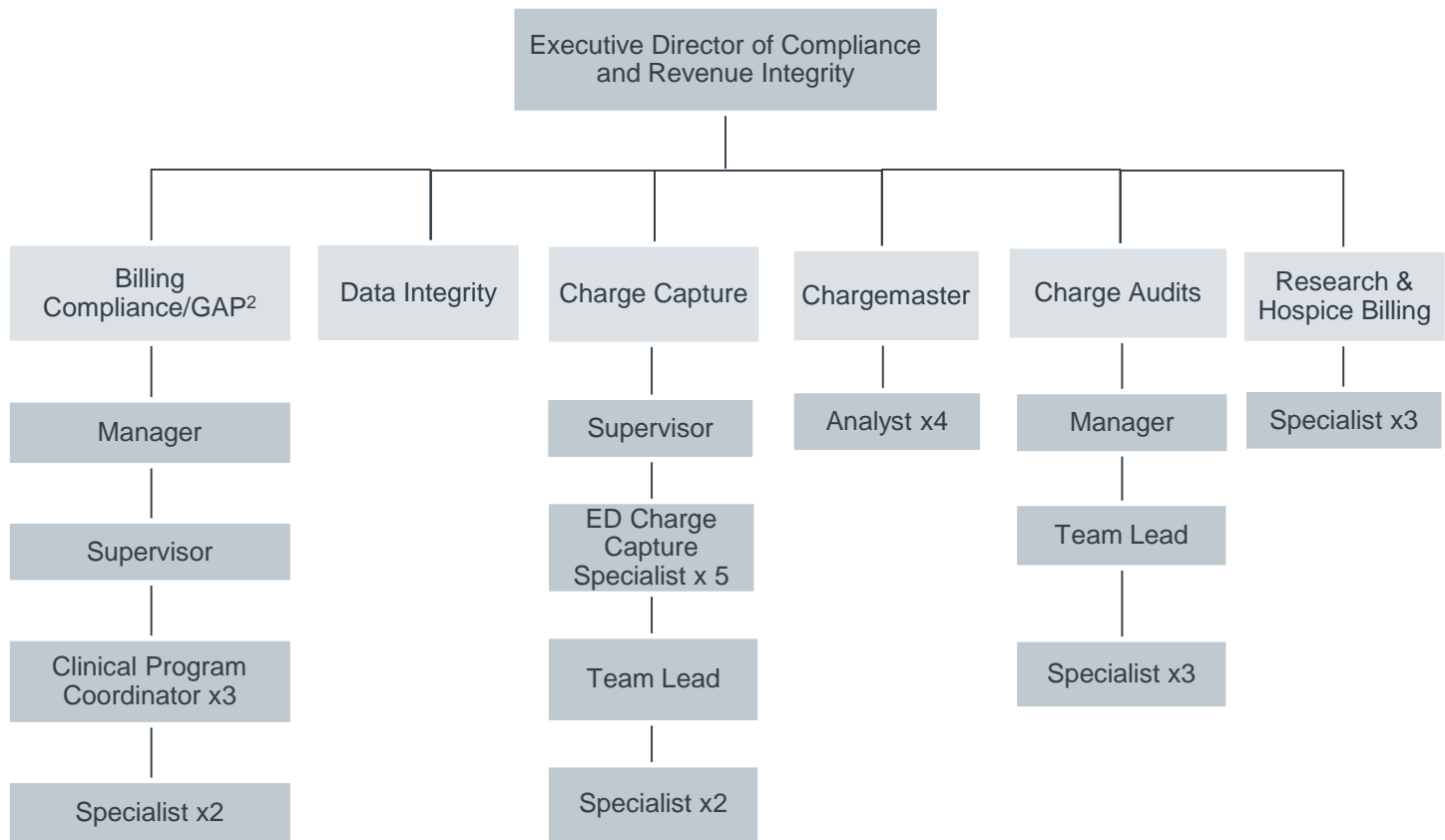
### Focus on revenue

Clinical attention to charges results in reduced revenue leakage

**70%**

Percentage of revenue at risk due to audit saved by GAP and revenue integrity program, October 2007-March 2019

# Revenue integrity organizational chart



## CASE EXAMPLE Cedars-Sinai

2-hospital health system • Los Angeles, CA

- Revenue integrity includes audit and audit prevention program; extensive resources also dedicated to clinical diplomacy and education around charge capture and documentation
- Program currently spans both inpatient and physician offices
- Net patient revenue: \$3.4 billion (2017); program has avoided \$76 million in potential revenue loss/leakage

1) Cedars-Sinai's revenue integrity structure covers both compliance and revenue integrity, with a performance improvement and cost accounting team over the compliance side (not reflected above)

2) Government Audit Program

Source: Revenue Cycle Advancement Center research and analysis.

# Case Study 2: CoxHealth

## Program includes analytics, significant educational resources

### Overview

CoxHealth's revenue integrity program was designed to support the broader revenue cycle and limit disruption of day-to-day operations. The program includes focus on education, for both clinicians and revenue cycle staff, with significant revenue integrity resources deployed to training. Other functions include system business development and maintenance, reporting and analytics, and support and/or project facilitation for issues and improvement initiatives.

### Program functions and staff



**Revenue Optimization:** oversee denials and avoidable write-offs prevention, charge capture monitoring and optimization and hospital pricing

3 FTEs



**Analytics:** oversee claim and business rules maintenance, operational process support and optimization, vendor implementation, reconciliation and performance reporting, as well as data extracts and analysis

7 FTEs



**Education:** manage staff training and ongoing education for revenue cycle staff; will soon add clinical staff to courses

4 FTEs

### Education team responsibilities

The four-person education team develop and lead courses for both revenue cycle and clinicians. While revenue cycle staff (including HIM<sup>1</sup>, patient access and patient financial services) attend sessions on IT applications and new system policies, clinical staff are invited to attend revenue cycle courses relevant to their roles. The hope is to teach clinicians the importance of revenue integrity, and their critical role in ensuring payment accuracy.

#### Educational modules cover:

- Revenue cycle applications
- General revenue cycle topics
- New system policies
- Performance improvement



#### Revenue Cycle Staff

- Staff receive onboarding training and ongoing education
- Curriculum taught using combination of classroom and online



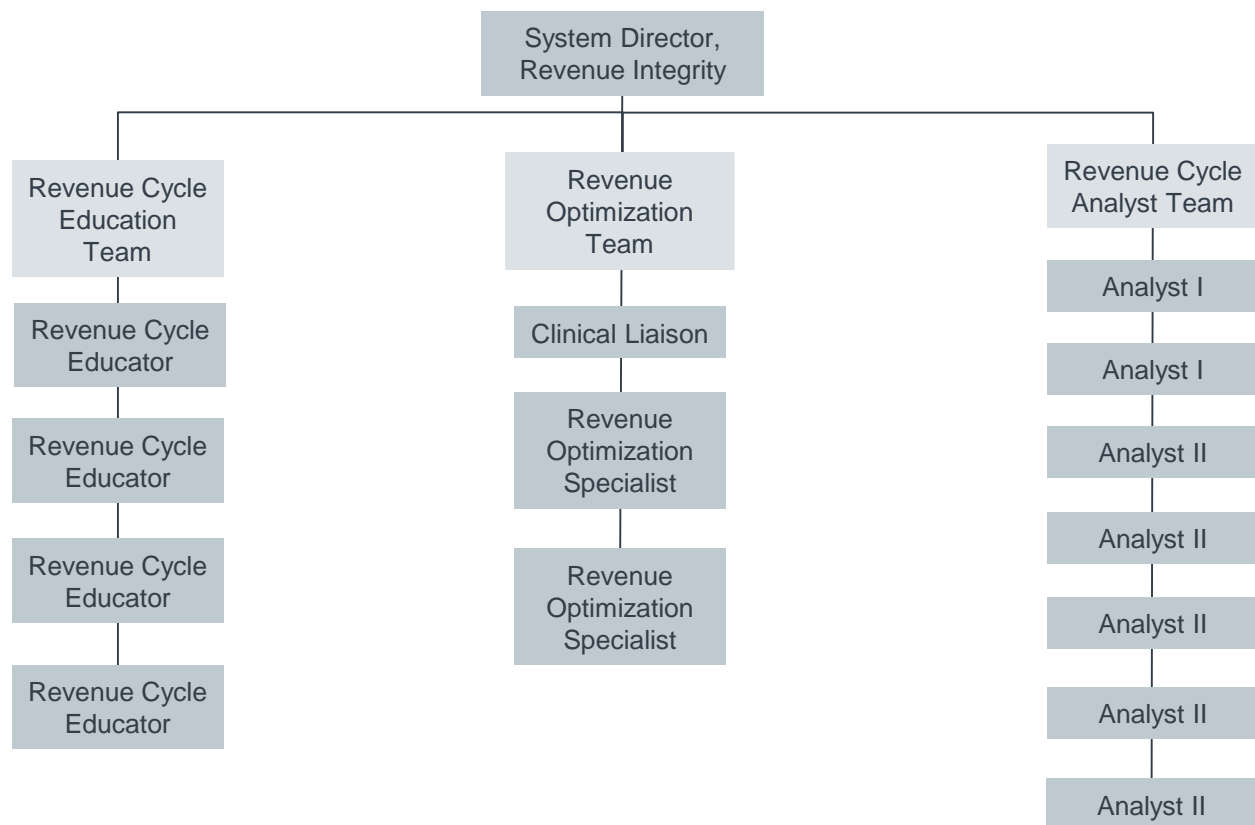
#### Clinical Staff

- Invited to attend revenue cycle training sessions
- Program working to create targeted revenue cycle training for clinical staff

1) Health Information Management

Source: CoxHealth, "CoxHealth 6 30 18 Operating and Financial DAC Final," <https://emma.msrb.org/ES1189881-ES929918-.pdf>; Revenue Cycle Advancement Center research and analysis.

# Revenue integrity organizational chart



## CASE EXAMPLE Cox Health

6-hospital health system • Southwest, MO

- Revenue integrity program focuses on education for both revenue cycle and clinical staff
- Unique to CoxHealth are their education initiatives for both revenue cycle and clinical staff, and their revenue optimization team focused on hospital pricing
- Net patient revenue: \$9 billion (2018)

Source: Revenue Cycle Advancement Center research and analysis.



# Case Study 3: OHSU

## Significant IT resources bolster revenue integrity efforts

### Overview

Charge capture is a critical piece of revenue integrity, with many programs relying extensively on IT systems to ensure an efficient process. Optimizing and maintaining these systems often requires additional and ongoing support.

OHSU's revenue integrity program includes dedicated IT staff to ensure that processes involved with payment accuracy and revenue integrity are as efficient as possible. The system's Vice President of Revenue Cycle and Enterprise Revenue Cycle Director initially suggested the addition of IT staff after noticing issues in front end work flows that required a significant amount of time to resolve. The system's Chief Financial Officer then approved the re-centralization of three IT teams to the system's revenue integrity program (EHR billing systems, revenue integrity support, and revenue cycle liaison).

### Program functions and staff



**CDI/HCC/IP Coding:** support Clinical Documentation Improvement and perform outpatient HCC<sup>1</sup> and inpatient coding reviews  
14 FTEs



**Quality Improvement:** support entire revenue cycle with process improvement projects  
1 FTE



**Revenue Cycle Liaisons:** liaise between hospital billing office and clinics and provide charge capture support, develop work flows, and offer analytics  
11 FTEs



**EHR Billing Systems:** support professional billing with system build, maintenance, upgrades, and enhancements  
10 FTEs



**Revenue Integrity Support:** manage EHR and provider master files, in addition to system build and maintenance  
4 FTEs



**Provider Enrollment and Client Services:** perform facility and provider enrollment with payers and liaises with billing office and clinical departments, provides charge capture support, develops work flows, and analytics  
19 FTEs

### Revenue Cycle/IT team divisions

The three IT teams at OHSU provide support across all of revenue cycle but report up through revenue integrity. For further assistance, revenue cycle staff can access the organization's broader IT support for larger projects.



#### EHR billing systems

- 10 FTEs
- Support professional billing
- Perform system build, maintenance, upgrades and enhancements



#### Revenue Integrity support

- 4 FTEs
- Manages department and provider master files
- Performs build maintenance



#### Revenue cycle team

- 11 FTEs
- Provide charge capture support
- Help develop work flows to ensure compliant billing
- Liaise between clinics and billing office

<sup>1</sup>) Hierarchical Condition Category

# Using revenue integrity to engage, promote staff

---

Across our research, health systems reported that revenue integrity positions can be difficult to fill, given the unique skillset required of them. OHSU views their program as a critical rung on the rev cycle career ladder. New revenue cycle employees typically start their careers in the billing office; once they've gained certain skills and are ready for promotion, staff move into revenue integrity. Working within revenue integrity provides considerable training and experience with problem solving, diplomacy, and critical thinking. As a result, OHSU has seen several former revenue integrity employees move up within revenue cycle, and two have taken leadership roles in the organization's clinical infrastructure.

## OHSU's career ladder



### Staff begin in billing office

- Many staff become analysts after working in the billing office
- From these experiences, staff become good candidates for revenue integrity analysts



### Move into revenue integrity

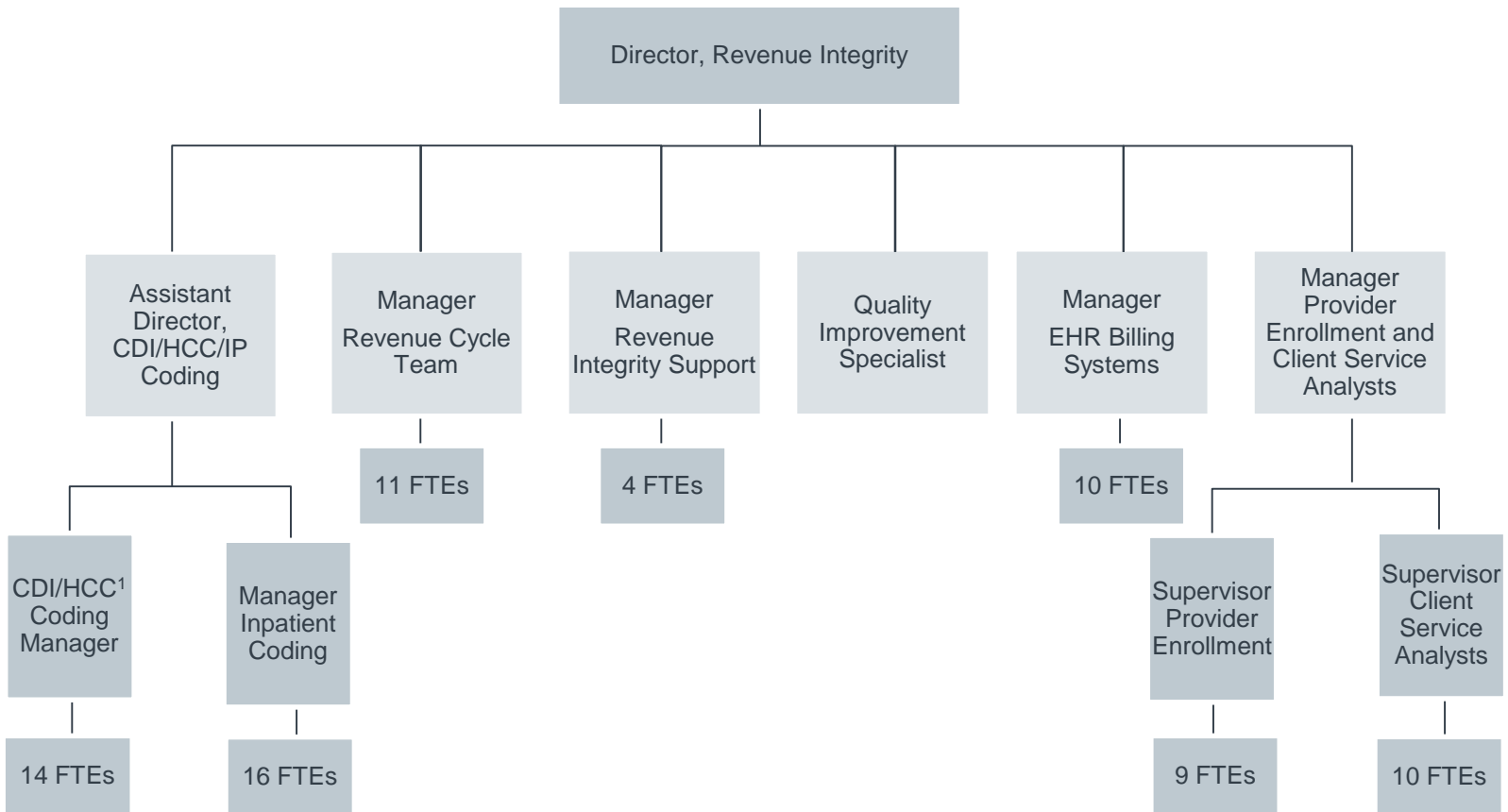
- Current staff train new employees
- Employees, specifically client service analysts and revenue cycle analysts, gain a comprehensive understanding of revenue cycle issues



### Grow into leadership

- Analysts can be considered for revenue cycle leadership roles given skillset and abilities
- Two analysts have taken leadership roles in clinical departments

# OHSU revenue integrity organizational structure



## CASE EXAMPLE OHSU

6-hospital health system • Portland, OR

- Revenue integrity program includes significant investment in IT resources and support
- IT staff coordinate with revenue integrity, supporting RI initiatives including significant EHR conversions
- Net patient revenue: \$2.1 million (2017)

<sup>1</sup>

# Case Study 4: Duke Health

## Ensuring accurate reimbursement through service line focus, education

### Overview

Duke Health started its revenue integrity program in 2012 with the goal of “revenue preservation,” protecting the organization against payer audits and guaranteeing correct payments from individual, government, and commercial payers. In the past 7 years, the program’s scope has grown to include process improvement projects and regulatory monitoring specific to each service line.

### Program functions and staff



**Coding Integrity:** manage compliance issues and audit professional and technical coding  
15 FTEs



**Clinical Trials Billing:** maintain charge compliance between program studies and insurance companies, post charges and scrub claims  
13 FTEs



**Revenue Integrity and CDM:** perform medical chart audits, assist with billing inquiries, obtain insurance adjudication decisions and field external audit requests  
17 FTEs



**Charge Integrity:** act as service line-revenue cycle liaisons, ensure compliant charge capture, monitor regulatory updates from CMS and support payer relations and government regulations department  
12 FTEs

### Charge integrity team

Duke’s *charge integrity team* is divided by service line and EHR application. The revenue managers on this team are responsible for optimizing revenue opportunities, while providing guidance on regulatory rules and procedures related to their assigned areas. These individuals frequently work with other revenue cycle teams, from pre-service verification, provider enrollment, revenue integrity, hospital and professional billing, to ensure appropriate charges and claim submissions are performed optimally and compliantly. Through routine clinical-operational and Revenue Integrity Committee (RIC) meetings, they also serve as the main point of contact for service line vice presidents on revenue cycle related issues. Because of the importance of the position, Duke is focused on hiring individuals with the right skills and making these positions compelling areas for career growth.

### Revenue manager qualifications



Bachelor’s degree required, Master’s degree preferred



Ability to facilitate collaborations, drive multi-disciplinary engagement and participate in strategic planning



Six years of health care experience required



Specialization in revenue cycle functions and EHR applications



Ability to investigate charge and claim information and navigate information systems



Ability to manage complexity and ambiguity and communicate across a variety of audiences

Source: Duke Health, “Financial Information,” <https://corporate.dukehealth.org/financial-information>; Revenue Cycle Advancement Center research and analysis.

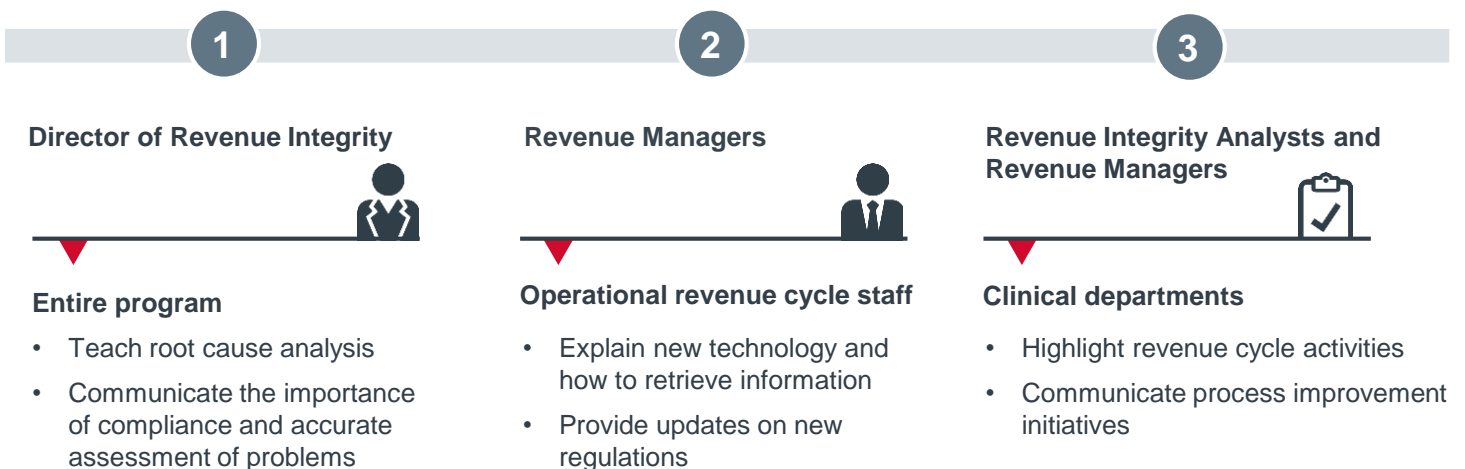
# Increased specialization allows error reduction

## Scope of the role

Duke's service line focus allows revenue managers to be highly specialized in their areas of expertise. In turn, they are able to work with revenue cycle operational staff and educate them on specialized technology and regulatory knowledge. Revenue managers work with a range of revenue cycle staff including patient access, pre-authorization, charge capture, and billing.

Beyond revenue managers, each role within the revenue integrity program has educational responsibilities. These responsibilities ensure an engaged staff and reduced errors.

## Examples of educational responsibilities

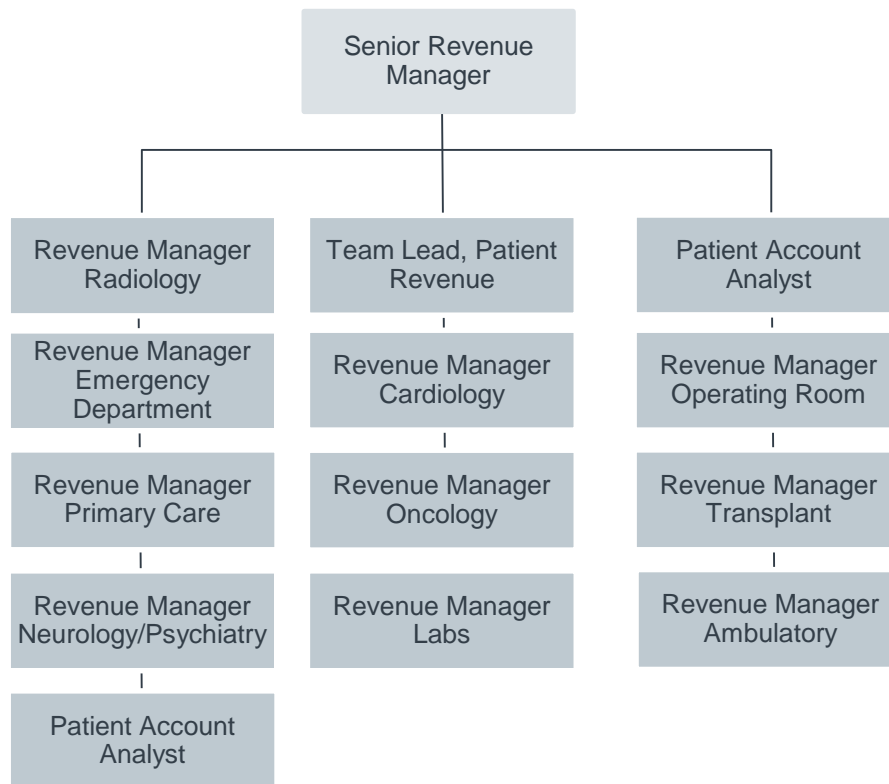


1) Component of broader organization chart

Source: Revenue Cycle Advancement Center research and analysis.

# Clinical charges accounted for in organizational structure

## Duke's charge integrity team<sup>1</sup>



### CASE EXAMPLE Duke Health

3-hospital health system • Durham, NC

- Revenue Integrity program includes both hospital and professional billing
- Focus includes communicating the downstream impact of errors to operational revenue cycle staff to prevent future mistakes
- Net patient revenue: 3.5 billion (2018)

1) Component of broader organization chart

# Revenue Cycle Advancement Center

## Research Team

Robin Brand

Senior Director

Sophia Duke-Mosier

Analyst

## Program Leadership

Eric Fontana

Managing Director

---

### LEGAL CAVEAT

Advisory Board has made efforts to verify the accuracy of the information it provides to members. This report relies on data obtained from many sources, however, and Advisory Board cannot guarantee the accuracy of the information provided or any analysis based thereon. In addition, Advisory Board is not in the business of giving legal, medical, accounting, or other professional advice, and its reports should not be construed as professional advice. In particular, members should not rely on any legal commentary in this report as a basis for action, or assume that any tactics described herein would be permitted by applicable law or appropriate for a given member's situation. Members are advised to consult with appropriate professionals concerning legal, medical, tax, or accounting issues, before implementing any of these tactics. Neither Advisory Board nor its officers, directors, trustees, employees, and agents shall be liable for any claims, liabilities, or expenses relating to (a) any errors or omissions in this report, whether caused by Advisory Board or any of its employees or agents, or sources or other third parties, (b) any recommendation or graded ranking by Advisory Board, or (c) failure of member and its employees and agents to abide by the terms set forth herein.

Advisory Board and the "A" logo are registered trademarks of The Advisory Board Company in the United States and other countries. Members are not permitted to use these trademarks, or any other trademark, product name, service name, trade name, and logo of Advisory Board without prior written consent of Advisory Board. All other trademarks, product names, service names, trade names, and logos used within these pages are the property of their respective holders. Use of other company trademarks, product names, service names, trade names, and logos or images of the same does not necessarily constitute (a) an endorsement by such company of Advisory Board and its products and services, or (b) an endorsement of the company or its products or services by Advisory Board. Advisory Board is not affiliated with any such company.

### IMPORTANT: Please read the following.

Advisory Board has prepared this report for the exclusive use of its members. Each member acknowledges and agrees that this report and the information contained herein (collectively, the "Report") are confidential and proprietary to Advisory Board. By accepting delivery of this Report, each member agrees to abide by the terms as stated herein, including the following:

1. Advisory Board owns all right, title, and interest in and to this Report. Except as stated herein, no right, license, permission, or interest of any kind in this Report is intended to be given, transferred to, or acquired by a member. Each member is authorized to use this Report only to the extent expressly authorized herein.
2. Each member shall not sell, license, republish, or post online or otherwise this Report, in part or in whole. Each member shall not disseminate or permit the use of, and shall take reasonable precautions to prevent such dissemination or use of, this Report by (a) any of its employees and agents (except as stated below), or (b) any third party.
3. Each member may make this Report available solely to those of its employees and agents who (a) are registered for the workshop or membership program of which this Report is a part, (b) require access to this Report in order to learn from the information described herein, and (c) agree not to disclose this Report to other employees or agents or any third party. Each member shall use, and shall ensure that its employees and agents use, this Report for its internal use only. Each member may make a limited number of copies, solely as adequate for use by its employees and agents in accordance with the terms herein.
4. Each member shall not remove from this Report any confidential markings, copyright notices, and/or other similar indicia herein.
5. Each member is responsible for any breach of its obligations as stated herein by any of its employees or agents.
6. If a member is unwilling to abide by any of the foregoing obligations, then such member shall promptly return this Report and all copies thereof to Advisory Board.