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PRESENTED BY
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Winning the Denials Battle with Automation and Analytics

agshealth

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Agenda

1. Denial Trends and Challenges
2. Transformation from Tech First to AI First Services
3. Effective Denial Management Program
4. Sample Implementation Framework and Approach
5. Q & A

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INTRODUCTIONS

Debra Stall
Senior Vice President
Transitions

As SVP of Transitions of Strategic Solutions at AGS Health, Debra leads the service implementations for the company. With more than 40 years of experience in revenue cycle management, Debra brings expertise in delivering clients transformational engagements focused on improving financial and operational metrics.

Thomas Thatapudi
Chief Information Officer

As Chief Information Officer, Thomas helps drive AGS Health's digital and technology strategy. He brings an exceptional track record of transforming customer, employee, and stakeholder experiences through technology-powered products and services. He is passionate about using data, insight discovery, and digital platforms to build and deploy products, platforms and services making transformation real and sustainable.

Before joining AGS Health, he was an entrepreneur, building real-time and data-intensive platforms to bring e-commerce-like experiences into traditional industries such as insurance and healthcare. Prior to that, he was the Chief Data Officer at Aetna, responsible for building a 'unified data fabric' as a pervasive, and trusted data ecosystem. He also held senior leadership roles at Cognizant and UBS Investment Bank.

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Denial Trends and Challenges

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UNDERSTANDING DENIAL TRENDS AND CHALLENGES

The Financial Toll of Claim Denials on Patients and Providers

FINANCIAL IMPACT

Leaked Revenue[1]: More providers are reporting that upwards of 1 in 10 medical claims are denied or delayed, directly impacting healthcare revenue

Costly Cycle: Denials generate unnecessary operational costs for hospitals and health systems

Reimbursement Delays: Delayed reimbursements strain cash flow and financial stability

OPERATIONAL IMPACT

Resource Drain: Time and resources are wasted investigating and appealing denials

Increased Workload: Staff are overburdened, impacting overall efficiency

Morale Decline: Denied claims can demotivate and frustrate healthcare workers

PATIENT IMPACT

Confusion and Frustration: Patients facing denials can experience confusion and stress over billing issues and balances flipped to self-pay

Access Barriers: Denials can delay needed treatment or create financial barriers for patients

Negative Perception: Denials can erode patient trust and satisfaction with healthcare services

[1] https://journal.ahima.org/page/claims-denials-a-step-by-step-approach-to-resolution

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UNDERSTANDING DENIAL TRENDS AND CHALLENGES

Impact to Your Bottom Line

Data published in June 2025 shows an increase in initial claim denial rates, which are putting pressure on patient collections and the overall healthcare revenue cycle.

$19.7B
spent on overturning denials (2022)

$184
average cost to rework or appeal a claim

15%
initial denial rate for private payers

54%
of denials are overturned after appeals, but only after costly, multi-step processes

50%
of denials stem from patient access and financial clearance

31%
of providers use AI or automation for denial management

https://journal.ahima.org/page/claims-denials-a-step-by-step-approach-to-resolution
https://www.aha.org/aha-center-health-innovation-market-scan/2024-04-02-payer-denial-tactics-how-confront-20-billion-problem#:~:text=It%20found%20that%3A,trying%20to%20overturn%20denied%20claims
Initial claim denial rates put revenue cycle in tough spot | TechTarget

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Transformation from Tech First to AI First Services

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TRANSFORMATION FROM TECH FIRST TO AI FIRST SERVICES

The framework illustrated here is an archetype of how work gets / will get delivered within the AGS ecosystem across front-end, mid-cycle, and back-end.

* Not an exhaustive list

Front-End*
Auth Determination
Auth Submission
Auth Follow-up

Mid-Cycle*
Code Determination

Back-End*
A/R Follow-up
Denial Management
Clinical Denials

AGS Ecosystem

US Healthcare Providers

HL7
APIs
SFTP

Ability to ingest at scale

Human Labor

AI Agent

HIL = Human-in-the-loop

No HIL

AI / AI Agent

Digital Workflow that seamlessly orchestrates work

Intelligent Allocation

HIL

AGS Global Talent Pool

Augmenting Humans

Digital Native Workflows

Real-Time Analytics

Ask Arya (AI Chatbot)

AI driven work will keep increasing over the next 12-36 months

Resolved / Coded / Collected etc.

We have designed our workflows to accommodate AI infusion into our solutions across front-end, mid-cycle, and back-end.

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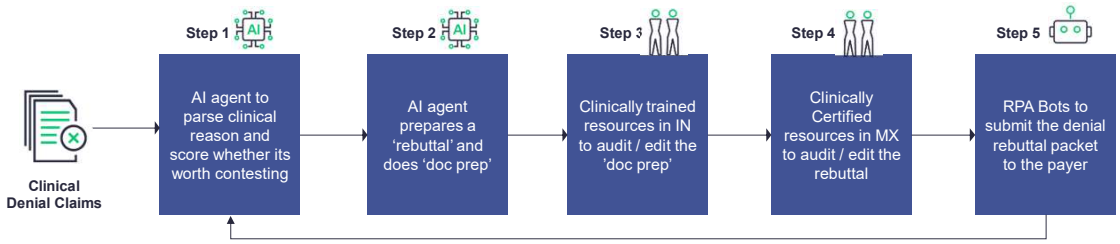
TRANSFORMATION FROM TECH FIRST TO AI FIRST SERVICES

Clinical Denial Management – Powered by AI

Challenge: Raise in clinical denial rates and shortage of clinical resources in the US

Solution: AI hybrid solution that brings clinically certified resources in Mexico (MDs), clinically trained resources in India (Coders), and autonomous AI agents to add context and litigate clinical denials at scale



- Match payer clinical denial rates with scale and accuracy
- Build an AI-powered hybrid workflow that brings all AGS resources, globally, in a high-powered progressive assembly line
- Deploys AI intelligently to ensure costs are commensurate with ROI

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Effective Denial Management Program

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EFFECTIVE APPEALS MANAGEMENT

The Growing Complexity of Appeals Management in Healthcare RCM

Appeals management in RCM is burdened by payer-specific rules, fragmented systems, and labor-intensive workflows that drain time and resources.

01. Identify

1. Identify and triage
2. Download and analyze the account and extract the specific medical transcripts
3. Save medical records
4. Generate an appeal letter

02. Manage

1. Log in to the payer portal
2. Fetch the claim by providing patient/claim level inputs
3. Complete online appeal form
4. Upload the medical records into the portal
5. Initiate submission and collect the tracking number
6. Update the documentation and end action in EHR

03. Monitor

1. Tracking and follow-up on appeals
2. Real-time output validation
3. Account flagging mechanism for immediate attention

04. Prevent

1. Categorize overturned appeals by denial reason (e.g., coding, authorization, documentation) to help identify systemic issues that can be fixed upstream, like training gaps or EHR template errors

Challenges:

- Ambiguity in denial reasons
- Lack of standardized criteria
- Insufficient data visibility
- Payer-specific rules

- Labor-intensive workflows
- Tight timelines
- Staff training and turnover
- Lack of integration between systems
- Limited visibility into appeal outcomes

- Tedious manual tracking process
- High volume and complexity
- Inadequate reporting tools
- Fragmented data systems

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EFFECTIVE APPEALS MANAGEMENT

Vendor Partner Appeals Management Solution

The hybrid intelligence approach for appeals ensures a balance between efficiency and accuracy, enhancing human accuracy and enabling organizations to significantly improve productivity when dealing with appeals, leading to cost reduction and improved cash flow.

01. Identify

Human-in-the-Loop

1. Identify and triage
2. Download and analyze the account and extract the specific medical transcripts
3. Save medical records
4. Generate an appeal letter

02. Manage

Agentic Automation

1. Log in to the payer portal
2. Fetch the claim by providing patient/claim level inputs
3. Complete online appeal form
4. Upload the medical records into the portal
5. Initiate submission & collect the tracking number
6. Update the documentation and end action in EHR

03. Monitor

Monitoring, Reporting, and Exception Handling

1. Tracking and follow-up on appeals
2. Real-time output validation
3. Account flagging mechanism for immediate attention

04. Prevent

Continuous Improvement

1. Leverage outcomes of thousands of submissions to continually refine the model and expand the automation scope

~50% savings

Simulation of savings

Manual Processing	10-12 minutes	+	12-15 minutes	+	5-8 minutes	=	Avg. Time Manual: 27-35 mins
Integrating Vendor Solution	10-12 minutes	+	4-6 minutes	+	0	=	Avg. Time Vendor Hybrid: 14-18 mins

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EFFECTIVE DENIAL MANAGEMENT PROGRAM

People: Considerations for denial management delivery models with onshore and global resources

Whether through in-house or outsourced services, staff a high-performing denial management team designed to ensure you are fully paid for your services while allowing you to create a better patient experience.

In-house

Sourcing in-person or virtual support from the U.S. Least cost-effective model.

Outsourced

Sourcing resources from countries outside the U.S. Most cost-effective model.

Hybrid

Utilizing a combination of onshore and global resources. Cost-effective model.

Outsource Best Practices

- **Search and selection**
- Return on Investment (ROI)
- **Service Level Agreements (SLAs)**
- Compliance standards (HIPAA)
- **Investment in transformation, knowledge share**
- Collaborative approach
- **Analytics to monitor effectiveness**
- Governance models to prevent misalignment between parties
- Executive support

EFFECTIVE DENIAL MANAGEMENT PROGRAM

An Effective Approach to Denial Management Combines People, Process, and Technology

A program that implements technology, combined with human expertise and streamlined processes, offers lower costs and increased efficiency in denial management.

Process

Establishing standardized workflows that leverage technology and empower people to consistently deliver effective results.

- Denial Steering Committee

People

Ensuring the right people are in the right spot at the right time to maximize collection efforts:

- Hybrid onshore / global model
- Leveraging denial management project management office (PMO) resource

Technology

Providing your teams with the optimal technology to:

- Reduce manual touches
- Increase the efficiency of each touch
- Review denial analytics

EFFECTIVE DENIAL MANAGEMENT PROGRAM

Process: Collaboration between teams leads to the most effective denial remediation results

Roles and responsibilities for denial management and remediation between teams across revenue cycle leadership:

Denial Prevention Governance

- CFO / RCM leadership sponsored
- Leadership support from:
  - Patient access
  - HIM / Clinical
  - Managed care
  - Accounts receivables
- Analytics team for denial reporting

Vendor PMO Leadership

- Gather information and denial report presented for leadership review
- Identify the most critical areas for assessment and rank them
- Define monthly areas of focus and assign ownership (including a specific leader) for deliverables in each area
- Analyze root causes identified during the denial and create actionable steps to prevent similar incidents in the future

Vendor Denial Team Role

- Accounts worked by denial specialists on a payer basis (e.g., Blue Cross specialists)
- Denial issues are tracked with applicable owners, follow-up dates
- Appeal letters prepared and sent, as needed
- Appeals overturned are reported back to the Denial Prevention Committee monthly
- Impact of root cause changes is tracked
- Denials resolved / adjusted by A/R denial team
- Leverage vendor coding and clinical experts for specific denial feedback

Client Denial Steering Co.

Client + Vendor Partnership

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EFFECTIVE DENIAL MANAGEMENT PROGRAM

Process and Technology: Creating the ideal state process and supplementing with technology to reduce manual effort

An effective approach to denial management relies on building payer specialization and leveraging technology to automate manual touchpoints, ultimately ensuring the right account is worked by the right person at the right time.

Team Structure + Inventory Allocation

- Payer-based team structure
- Intelligent inventory allocation
- Rule-based stratification for SLA adherence and maximizing cash
  - ✓ Denial type: Billing, auth, coding, clinical, etc.
  - ✓ Age, balance, appeal limit, etc.

Automate Manual Tasks for Accuracy and Efficiency

- Automated claim status
- Next best action helper – "Digital RCM Consultant"
- Standardized notes and action suggestions provide consistent responses
- Payer-specific workflows
- Automated appeal creation and submission

Productivity, Quality Audit, and Compliance

- Real-time productivity monitoring and SLA adherence
- Automated risk-based sampling
- Rule-based error identification

Analyze and Report on Denials

- Denial Management performance dashboards
- Root cause analysis for denial prevention
- Resolution metrics to identify and eliminate unnecessary touches

Value Delivered

Intelligent Inventory Control and Payer Specialization	Accelerate Collections and Cash Flow Through Automation	Adherence to Service Level Agreements	Continuous Improvement in Denial Management

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EFFECTIVE DENIAL MANAGEMENT PROGRAM

Technology: Leveraging analytics to effectively manage, prioritize and track denials

Monitor denial key performance indicators (KPIs)	• Clean claim rate • Primary denial rate • Denial write-offs as a percentage of net revenue • Time from initial denial to claim resolution • Time from initial denial to appeal

Denial trend and denial grouping analysis	• Analyze trends by denial reasons, denial codes, payers, facility, CPT code, service area, and outstanding balance
	• Grouping denied claims by:
	  • Zero pay, partial pay, and no response for driving resolution strategies
	  • Preventable, soft, and hard denials to optimize workflow

Payer behavioral analysis	• Payer-specific state-level and CPT-level denial trends to identify high-impact problem areas
Denial root cause analysis	• Mining denial data to identify patterns and uncover root causes • Use insights to create a feedback loop, preventing future denials
Predictive analytics	• **Denial Prediction:** Analyzes historic denial patterns to flag potential future denials • **Outcome Prediction:** Predicts future denial resolution success based on past actions and outcomes • **Denial Forecasting:** Uses payer behavior trends (by CPT and region) to anticipate future denials

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Sample Implementation Framework and Approach

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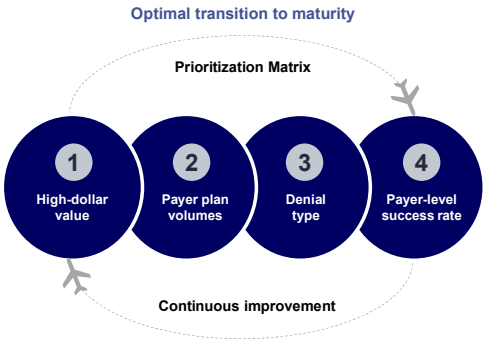
SAMPLE IMPLEMENTATION FRAMEWORK AND APPROACH

Implementation Learnings and Best Practices



1. High-dollar denials first
Focus on denied claims with the highest reimbursement potential. These often involve surgeries, inpatient stays, or specialty treatments. Even a small number of successful appeals here can significantly boost revenue.

2. Payer plan and volumes
Prioritize the payer and respective plans with maximum volumes/ impact.

3. Denial type
Start with administrative denials (e.g., coding, authorization) before clinical ones—they're easier to automate.

4. Payer–specific strategy
Some payers are more likely to overturn denials than others. Use historical data to prioritize high-value claims with high success rates.

5. POC, Pilot, and Scale
Start with a proof of concept (POC) using limited samples, providing a view into the possibilities. Then, move to a pilot with limited samples to validate outcomes and scale.

6. Monitor, Measure, and Iterate
Track output, bot performance, exception management reports, KPIs, productivity, and ROI consistently.

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SAMPLE IMPLEMENTATION FRAMEWORK AND APPROACH

Sample Implementation Framework

This framework, from discovery to implementation, enables a seamless and rapid transformative journey for providers.

R Requirement Gathering	A Architect	P Planning	I Implement	D Deliver and Sustain
• Discovery workshop • Strategic alignment • High-level scoping (art of the possible) • Process mapping (as-is & to-be) • High-level technical feasibility (replicable vs new) • Proposal • Finalize project team	• Detailed process / technical diagnostics • Prioritize use cases • Define success criteria • Initiate business requirement document (BRD) • Develop implementation work-packages • Change management framework • Align / initiate hiring of developers	• Project plan • Sprint level timelines • Provision required tech and licenses • Resource alignment • Finalize business requirement document (BRD) • Access to customer tools and systems • Quality assurance framework for exception management • Success criteria validation RACI matrix • Initiate development	• Kick off • Sprint-level development • User acceptance testing • Validate results and customer expectations (BID vs DID) • Follow the change management template with impact analysis and approval mechanism	• Go-live • Detailed SOP • Escalation matrix • Risk matrix • Change management process & turn-around time • Track bot performance • Measure ROI (Revenue elevation / cost reduction) • Measure quality performance
Deliverable : Scope, timelines, success criteria finalization		**Deliverable: Project plan and approach**	**Deliverable: Development, UAT and sign off**	**Deliverable: Bot performance results, ROI tracking, and reporting**

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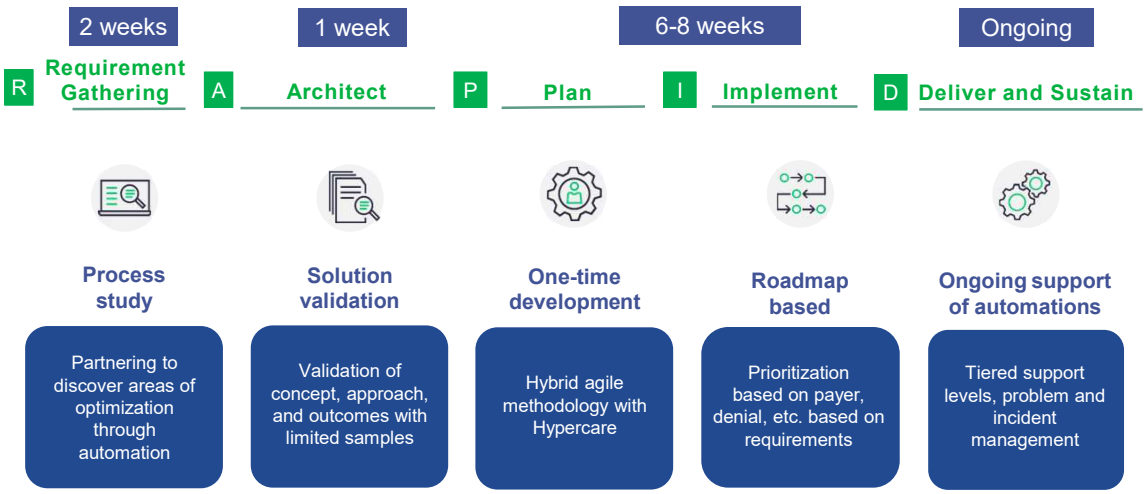
SAMPLE IMPLEMENTATION FRAMEWORK AND APPROACH



Incremental development of 2 weeks per payer

SAMPLE IMPLEMENTATION FRAMEWORK AND APPROACH

Phase		Implementation Plan										
Task	Activities	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11
R Requirement Gathering	Discovery workshop											
	Strategic alignment											
	Art of possible - Scoping											
	Process mapping (As-is & To-be)											
	Tollgate 1 – Go/No-Go											
A Architect	Detailed process / technical diagnostics											
	Prioritize use cases & define success criteria											
	Develop implementation work-packages											
	Tollgate 2 – Proposal, scope finalization											
P Planning	Project Plan - sprint level timelines											
	Provision required tech and licenses											
	Finalize business requirement document (BRD)											
	Access to customer tools and systems/ RACI/ Success criteria											
	Tollgate 3 – Project plan / timelines											
I Implement	Kick off											
	Sprint level development											
	User acceptance testing											
	Validate results & customer expectations (BID vs DID)											
	Tollgate 4 - Deliverable sign off											
D Deliver	Go-live											
	Project handbook											
	Escalation/ Risk matrix											
	Change management process & turn around time											Business as usual

Q & A

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agshealth Revenue to Realize Your Vision

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