

# Realize Outsized Value of Imaging CDS

Compendium #4: Toolkit for Successfully Implementing Imaging CDS

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IMPLEMENTATION RESOURCE

**Look inside for:**

- Strategies to prepare for preauthorization negotiations
- Ideas to measure CDS outcomes
- Opportunities to align CDS with larger organizational goals

# Your Guide to This Compendium

## WHEN SHOULD YOU THIS RESOURCE?

- Preparing for payer or preauthorization negotiations
- Identifying payers to partner with imaging management
- Tracking and analyzing CDS outcome data
- Developing imaging goals for your organization

## WHO SHOULD USE?

These resources are designed for CDS leaders, most commonly:

- Imaging leaders
- CMIO, CMO, CIO
- VP Ambulatory
- Radiologists

## What's Your Goal?

### My Goal is to:

- ☐ Quantify the benefits of provider-owned utilization management
- ☐ Prepare for preauthorization negotiations with payers
- ☐ Identify payers receptive to streamlining preauthorization
- ☐ Select metrics that quantify CDS outcomes
- ☐ Determine next steps required for data collection
- ☐ Find ways to leverage CDS to improve quality and cost
- ☐ Understand how CDS could align with different organizational goals, like cost reduction

### Use This Resource:

- Resource #1:  
**CDS Payer Negotiation Guide. . . . . 3**
- Resource #2:  
**Payer Identification Guide. . . . . 4**
- Resource #3:  
**CDS Metric Selection Guide. . . . . 5**
- Resource #4:  
**Optimizing CDS Benefits Decision Guide. . . . . 6**

## Interested in Additional CDS Resources?

*Four Sections of the Toolkit for Successfully Implementing Imaging CDS*



Access all our CDS resources and best practices at [advisory.com/ipp/cds](https://advisory.com/ipp/cds)



# CDS Payer Negotiation Guide





## Resource Description

This resource compares two methods to manage imaging utilization: the traditional preauthorization process and CDS.




## Use This Resource to:

Prepare for conversations with payers about imaging utilization management.

## Shortfalls of Preauthorization

	Significant administrative time and costs		No formal referring provider education	<b>45%</b>	of imaging programs take >24 hours to obtain preauthorization <sup>1</sup>
	Delays to patient care		Physician frustration	<b>303</b>	hours per month saved by providers in Minnesota using CDS instead of preauth <sup>2</sup>




## CDS a Potential Replacement

	Providers investing in CDS to meet Medicare requirements		Appropriateness decision made at point of order, not retrospectively, leading to fewer denials and downstream changes	<b>4.8%</b> ↓ <b>2.8%</b>	Number of same day order modifications before and after implementation of CDS at Rockford Health <sup>3</sup>
	Physicians access clinical evidence at point-of-order				

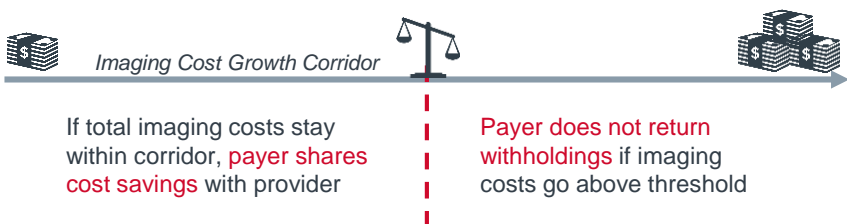
## Data Demonstrating Effectiveness of CDS

Decreased utilization	Improved appropriateness	Changed ordering behavior	Cost savings
Decrease in number of imaging exams ordered	Increase in appropriateness scores or decline in low utility exams	Increase in number of orders changed or canceled	Reduction in cost per patient or annual cost
<b>24%</b>	<b>11% → 5.4%</b>	<b>23%</b>	<b>\$150M</b>
Decrease in utilization rate after CDS implementation at Virginia Mason <sup>4</sup>	Decrease in frequency of low utility exams after CDS implementation at University of Virginia Health System <sup>5</sup>	CT Sinus orders rated inappropriate changed during MID <sup>6</sup>	Savings for Minnesota payers during ICSI CDS pilot program <sup>2</sup>

## Early Adopters Willing to Take on Risk

-  Shared savings from projected cost
-  Payer not liable for costs above set threshold
-  Imaging part of broader ACO contract

### Example Contract Agreement: Partners HealthCare



1) 2015 Outpatient Imaging Access Survey, Imaging Performance Partnership.

2) Institute for Clinical Systems Improvement, "Diagnostic Imaging," [https://www.icsi.org/health\\_initiatives/diagnostic\\_imaging](https://www.icsi.org/health_initiatives/diagnostic_imaging).

3) "HIMSS Analytics Stage 7 Case Study: Rockford Health System," HIMSS Analytics, December 2014.

4) Blackmore CC, et al. "Effectiveness of Clinical Decision Support in Controlling

Inappropriate Imaging," Am J Manag Care, 2011, 18: 19-25.

5) Huber, Timothy, et al., "Impact of a Commercially Available Clinical Decision Support Program on Provider Ordering Habits," J Am Coll Radiol, 2018, online.

6) RAND, "Medicare Imaging Demonstration Final Evaluation Report to Congress," [http://www.rand.org/pubs/research\\_reports/RR706.html](http://www.rand.org/pubs/research_reports/RR706.html).

# Payer Identification Guide

## Resource Description

This resource presents four ways to begin payer negotiations about replacing traditional preauthorization with CDS.

## Use This Resource to:

Identify payers that may be open to streamlining the preauthorization process. This activity will help determine who to prioritize when beginning these negotiations.

## Brainstorm Ways to Approach Preauthorization Negotiations

**Instructions:** Review four ways to approach preauthorization negotiations in the left column, and then write potential payers and contacts to engage based off your current contracts in right column. This resource should be used as an initial, but not exhaustive, list.

### Segment by Payer Type

### Potential Payers to Engage



#### Local Payers

Begin preauthorization conversations with small, local payer; easier to reach agreement due to established relationship

Payer(s): \_\_\_\_\_

Contact: \_\_\_\_\_



#### Provider Sponsored Health Plan

Manage preauthorization for covered patients of owned health plan; mutual cost savings by omitting role of RBM<sup>1</sup>

Payer(s): \_\_\_\_\_

Contact: \_\_\_\_\_

### Segment by Clinical Targets



#### Specific Clinical Condition

Assume imaging management of particular clinical condition; use as model for additional conditions

Payer(s): \_\_\_\_\_

Contact: \_\_\_\_\_



#### Appropriate Exams

Manage use of appropriate imaging exams with help of CDS; health plan continues preauthorization for all other exams

Payer(s): \_\_\_\_\_

Contacts: \_\_\_\_\_

<sup>1</sup>) Radiology Benefits Manager.

# CDS Metric Selection Guide

## Resource Description

This tool lists metrics organizations can track to align CDS with larger goals. The metrics are separated by two primary CDS outcomes.

## Use This Resource to:

Determine which metrics to track. Select the metric(s) that align best with your intended goal(s) and record whether or not it's currently tracked, the necessary source, and metric(s) purpose.

## Metrics Displaying Utilization Management

Metric	Definition	Currently Track Metric (Y/N)?	Data Source Required	Purpose of Metric
<input type="checkbox"/> <b>Utilization rate by volume</b> <i>e.g. per 1,000 patients</i>	Utilization changes after CDS consultation by modality			
<input type="checkbox"/> <b>Total, per capita imaging cost savings</b>	Cost savings resulting from changed orders			
<input type="checkbox"/> <b>Imaging expenditure per patient</b>	Total dollars paid to imaging center per patient, increased imaging management if data shows lower utilization and less costly imaging			
<input type="checkbox"/> <b>Aggregate, physician-level appropriateness scores</b>	Percentage of appropriate exams ordered after consulting AUC			
<input type="checkbox"/> <b>Other:</b>				

## Metrics Displaying Appropriate Imaging Standardization

Metric	Definition	Currently Track Metric (Y/N)?	Data Source Required	Purpose of Metric
<input type="checkbox"/> <b>Yield of positive tests for indication, exam</b>	Positive predictive value of imaging exam orders, shows improved patient outcomes especially when displayed with decreased utilization rates			
<input type="checkbox"/> <b>Frequency of changed, cancelled orders</b>	Percentage of changed or cancelled orders after AUC consultation, shows ordering pattern shifts			
<input type="checkbox"/> <b>Utilization rate variation by presenting condition</b>	More nuanced metric than aggregate utilization rates; compares imaging use for similar patients to measure standardization of imaging care			
<input type="checkbox"/> <b>Aggregate, physician-level appropriateness scores</b>	Percentage of appropriate exams ordered after consulting AUC			
<input type="checkbox"/> <b>Other:</b>				

# Optimizing CDS Benefits Decision Guide

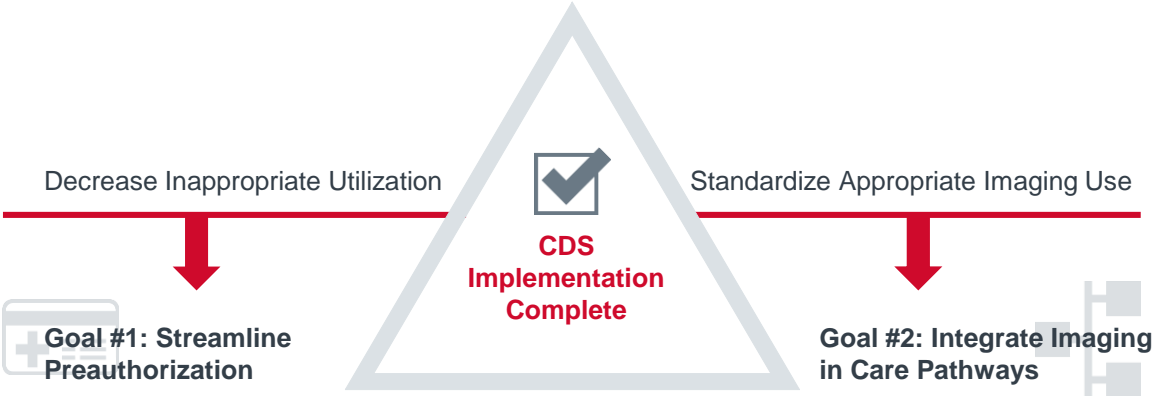
## Resource Description

This resource provides a framework to identify ways CDS can support larger goals beyond the traditional scope of imaging.

## Use This Resource to:

Consider ways that CDS can advance organizational quality, cost, or productivity initiatives. Identify an organizational goal, then use the guide to finalize next steps.

**Instructions:** First, review two ways to leverage CDS outcomes: streamlining preauthorization and integrating imaging into care pathways. Then, complete the decision guide to brainstorm ways to leverage CDS to achieve the two listed goals or identify other organizational goals. Use the *CDS Metric Selection Guide* to support.



Big Picture: Organizational Goal	How Imaging CDS Can Support this Goal	Metrics Required to Advance Goal	Project Owner
1			
2			
3			
4			

# Next Steps for CDS Leaders

## Imaging CDS Resources Guide All Stages of Implementation

Four Sections of the Toolkit for Successfully Implementing Imaging CDS



### Educate stakeholders about imaging CDS

#### Action Steps

- Read the *CDS Education Research Brief* for support in crafting an education strategy
- Use the *Imaging CDS Education Compendium* to educate stakeholders on CDS benefits, build an optimal CDS team, and learn more about CDS requirements
- Present the *CDS Roadshow Presentation* to referring providers and organizational leaders to help them understand CMS requirements and tool benefits
- Review our blog outlining the most recent policy updates related to imaging CDS



### Prepare for your organization to go live with CDS

#### Action Steps

- Read the *CDS Implementation Research Brief* for implementation guidance
- Use the *Imaging CDS Implementation Compendium* to understand vendor selection and develop a pilot for your organization
- Download the *CDS Vendor Analysis Spreadsheet* to identify a CDS vendor that fits your organizational priorities



### Ensure provider adherence and conduct data analysis

#### Action Steps

- Read the *Provider Adherence and Data Analysis Research Brief* for best practices in delivering provider reports and analyzing CDS data
- Use the *Provider Adherence and Data Analysis Compendium* for support in developing provider reports, identifying physicians outliers, and tracking metrics
- Understand potential imaging volume shifts with the *CDS Volume Impact Analysis*

Access all our CDS resources and best practices at [advisory.com/ipp/cds](https://advisory.com/ipp/cds)

