



Solventum™ All Patient Refined Diagnosis Related Groups (APR DRGs) Classification System

- Automatically classifies patients into clinically meaningful groups, creating a comprehensive view of the inpatient population to generate insights into utilization, cost and quality
- Accounts for SOI and ROM to support planning, analysis, accurate reimbursement and clinical insights
- Offers a consistent and cost-effective means of comparing healthcare providers and performance

A classification system for all populations

The Solventum Clinical and Economic Research Department, the Children's Hospital Association and several physician groups collaborated to develop a reliable system that healthcare experts can use to define care and measure outcomes across a broad population of all patient types, including pediatric, newborn, maternity and behavioral health. The resulting Solventum APR DRG methodology classifies acute care patients and adjusts data for their conditions.



The challenge: Capturing and analyzing data for value-based reimbursement

The Centers for Medicare & Medicaid Services (CMS) transitioned reimbursement from volume to value-based models, and some commercial payers and healthcare providers are following suit. In this environment, getting paid for quality healthcare requires processing and analyzing huge volumes of patient data. Healthcare providers, regulators and payers must capture accurate data that reflects the true condition of patients, including all diagnoses and procedures performed. Even with detailed data, many patient classification systems lack breadth and depth. For instance, many models do not account for the severity of a patient's condition, and CMS diagnosis related groups (DRGs) focus on the Medicare population.

The solution: Align quality with reimbursement

Solventum APR DRGs use standard patient discharge information to provide a comprehensive view of the entire acute care patient population. First, the system automatically classifies patients into clinically meaningful groups. Then, it divides patients into four severity of illness (SOI) and four risk of mortality (ROM) subclasses within each Solventum APR DRG code. The fundamental principle is SOI and ROM depend on the patient's underlying condition. High SOI and ROM are characterized by multiple serious diseases and the interactions between disorders.

By reflecting the quality and intensity of care, Solventum APR DRGs align the hospital care provided with how it is reimbursed. The system can also offer insights into population health across the care continuum and help assess patient outcomes, resource utilization and quality measures, as well as determine fair comparisons of healthcare providers, hospitals and health networks.

Value of Solventum APR DRGs across the care continuum

Hospitals and health systems, payers, more than 30 state Medicaid agencies, governments and ministries of health around the world use Solventum APR DRGs. By adjusting patient data for severity and risk, Solventum APR DRGs help provide the accurate, consistent, transparent and cost-effective data necessary for planning and analysis.

Hospitals

- Comparative profiling
- Clinical pathway development
- Quality and cost improvement
- Documentation and coding improvement
- Price and resource evaluation
- Payer negotiation for reimbursement that matches case mix complexity

Payers and agencies

- Accurate reimbursement
- Enhanced risk adjustment
- Cost analysis
- Value-based care support
- Trend projection
- Precise reflection of quality and intensity of care delivered



Features and benefits

- **Usage of readily available data** helps avoid additional, expensive data collection outside of the normal coding process
- **Annual updates**, including ICD codes and clinical logic to reflect the current healthcare environment and common practices, are:
 - Developed and maintained by physicians
 - Able to help stabilize service line variation and manage cost trends
- **Intensive care unit (ICU) resource use and billing pattern analysis** helps:
 - Better manage patient care
 - Capture ICU admission rates thanks to ICU severity indicator flagging logic
- **Behavioral health classification** supports:
 - Application to freestanding inpatient psychiatric facilities
 - Parity between physical and mental health payment policies
- **Special affect flags** show the contribution of each diagnosis and procedure to the Solventum APR DRG classification
- **Relative weights** are provided to:
 - Compare multiple patient groups by case mix index
 - Provide infrastructure for using Solventum APR DRG technology as a payment methodology
 - Improve ease of use for cost and utilization analysis
 - Reduce outlier payments
 - Evaluate length of stay (LOS) and perform hospital bed capacity management
- **ICD code re-sequencing** places secondary diagnosis and procedure codes with the greatest impact on SOI and ROM assignment at the beginning of the list, so the most appropriate codes can be sent in truncated data sets
- **Comprehensive definitions manual** explains each step in Solventum APR DRG clinical logic
- **Patient admission data** enables:
 - Quality improvement professionals to use the “Admission APR DRG” calculation to reduce hospital-acquired conditions (HACs) and other complications
 - Hospitals to adopt more meaningful mortality reduction strategies

Optimize use of Solventum APR DRGs

Integration with other Solventum solutions

Solventum APR DRGs and their grouping capabilities are available within other Solventum solutions, including:

[Solventum™ 360 Encompass™ System](#)

[Solventum™ 360 Encompass™ Clinical Documentation Integrity System](#)

[Solventum™ Coding and Reimbursement System \(CRS\)](#)

[Solventum™ Core Grouping Software \(CGS\)](#)

[Solventum™ Grouper Plus Content Services \(GPCS\)](#)

[Solventum™ Data-to-Action \(DTA\) Solution](#)

[Solventum™ Informed Analytics \(IA\) Platform](#)

Supplemental Solventum services

To help customers get the most out of Solventum APR DRGs and effectively leverage grouper output to meet program goals, Solventum™ Methodology Content Services (MCS) offer modularized Solventum™ APR DRG Services, including:

- Educational sessions
- Evaluations of patient record accuracy
- Assessments of how effectively clinical documentation reflects the appropriate DRG, SOI and ROM
- Converting existing coded data into Solventum APR DRGs

Take quality to the next level

The clinical logic of Solventum APR DRGs is the basis for other specialized Solventum methodologies that help address the “preventables” in healthcare. Combining these solutions with Solventum APR DRGs allows organizations to dig into patient data, take action to prevent adverse events and improve quality outcomes.

- The [Solventum™ Potentially Preventable Readmissions \(PPRs\) Classification System](#) determines whether a readmission is clinically related to a prior admission based on the patient’s diagnosis and procedure codes associated with the prior admission and the reason for readmission.
- The [Solventum™ Potentially Preventable Complications \(PPCs\) Classification System](#) identifies conditions not present on admission and determines whether the conditions were potentially preventable given patient characteristics, reason for admission, clinical procedures and interrelationships between underlying medical conditions.

These clinical insights into complications enable healthcare providers to initiate root cause analysis and focus resources on areas with the greatest opportunity to advance patient safety. Along with identifying PPRs and PPCs, these tools can also calculate expected performance, evaluate the impact on costs and assess opportunities to improve hospital LOS, capacity and throughput.



Contact Solventum today

For more information on how our software and services can assist your organization, contact your Solventum sales representative, call us at 800-367-2447, or visit us online at [Solventum.com](https://www.solventum.com).



Solventum Corporation
3M Center, Building 275
2510 Conway Avenue East
Maplewood, MN 55144

© Solventum 2025. Solventum, the S logo and 360 Encompass are trademarks of Solventum or its affiliates. All other trademarks are owned by their respective owners.