

The HCI³ ECR Analytics® Advantage

The HCI³ ECR Analytics were developed to help purchasers, payers and providers:

1. understand the source of variability that causes excessive costs in managing patients with certain conditions, illnesses or injuries;
2. implement various innovative payment models including Bundled Payments, patient-centered medical “villages”, ACOs and others;
3. create better transparency on the price and quality of healthcare

There are unique features embedded in ECR, or Evidence-informed Case Rate, definitions and the Analytics, which enable its various uses. No other commercial grouper can accomplish all that can be done with ECR Analytics.

Understanding the source of variability

The definitions of ECRs include four distinguishing characteristics that help provide a better understanding of the types of variability most often cited as sources of clinical harm to patients: underuse, overuse and misuse. The characteristics are:

- Distinguishing services provided during the course of an episode that can be attributed to routine or “typical” care, and care associated with potentially avoidable complications (PACs). PACs are unique to ECRs and some of the PAC definitions have been endorsed by the National Quality Forum as comprehensive outcomes measures. PACs, to a large extent, are an indication of misuse, but can also be a result of overuse or underuse. The ECR Analytics quantifies the total dollars in each episode that are attributed to PACs and creates insights on the performance of physicians and rates of PACs.
- Tagging services that are “core” to an episode, or the types and quantity of services that are recommended by clinical guidelines as appropriate and essential for the care of a patient. The ECR Analytics can calculate the rate of underuse of these core services, which can be an indicator of poor patient management.
- Tagging services that are overused in an episode. Building on the ABIM Foundation’s Choosing Wisely campaign, services for certain episodes (e.g. imaging for patients with low back pain) have been tagged as potentially avoidable. The ECR Analytics can calculate the frequency of these services for specific episodes, which can become valuable feedback to providers as they seek to improve quality and reduce costs.
- Associating episodes to one another when clinically relevant. When two episodes have a clinical link, whether typical or a complication, the ECR definition identifies that link and the ECR Analytics can sum the costs of linked episodes to better understand the frequency of certain procedures in the treatment of illnesses or diseases, and the frequency of complications. This unique feature can provides insights on the appropriateness of

treatments in managing patients with certain conditions as well as the opportunity for reducing total episode costs by reducing the occurrence of complications.

Taken together, these four characteristics can help better understand what drives variability within episodes and between providers managing patients with certain episodes. They can also help create insights about the causes of variability across episodes (for example if the type and frequency of complications is similar for a provider across procedural episodes). In addition, the ECR Analytics include a novel sub-analysis that determines the relative weight of price, service mix and use variability in the total intra episode variability. As such, in addition to providing insights on the clinical and/or practice pattern causes of episode cost variability, the ECR Analytics can also shed light on the effect of the price of services.

Implementing various new payment models

The groupers in use today were designed for a single purpose: to analyze the costs of an episode and to compare the relative “efficiency” of providers who are attributed those episodes. The designers of these groupers made certain decisions on how the episodes were defined, services assigned, episodes attributed, and patient severity adjusted, to meet the desired use. As such, using these groupers for another purpose has proven impossible. The ECR Analytics were developed purposefully for multiple uses.

Bundled payments – there are several health plans, regional and national, that are using the ECR Analytics to power their bundled payment implementations. The Analytics can calculate a severity-adjusted prospective budget for any patient-episode, and that budget can be used to generate a bundled payment. After the payer and provider have approved the budget, the actual expenses incurred can be calculated against the budget. These tasks are automated and can enable full implementation of bundled payment programs.

Patient-centered Medical Villages – as payers and purchasers increasingly realize that it’s important to engage all the clinicians managing patients with multiple conditions, the concept of PCMV’s has started to emerge. Thanks to the clinical associations built between episodes in the ECR Analytics, combined budgets, adjusted for the severity of the patient, can be calculated for clusters of episodes relevant to any patient. These budgets can form the basis for negotiating a contract with providers who are willing to manage those multiple conditions.

ACOs – the ECR Analytics can calculate total prospective budgets across all episodes for patients attributed to an ACO. And contrarily to the opaque reports that focus on total costs of care only, the ECR Analytics can provide ACOs with significant insights on the causes of internal cost variability, frequency and costs associated to avoidable complications, and comparisons of internal provider variability on costs and quality of care.

Transparency of costs and quality

Many employers and health plans, as well as States through All-Payer Claims Databases are attempting to reveal the price of health care to consumers in order to help them make more informed decisions. The ECR Analytics can calculate total actual average episode costs, adjusted for the severity of attributed patients, for any provider (as long as there is a reasonable sample size of episodes).

While other groupers could perform a similar task, the ECR Analytics can distinguish the average costs of the episodes between typical and complication, thus providing a level of transparency that is unique to this solution and can help consumers make decisions not simply about the average cost, but the cost in relationship to the quality of care as expressed in terms of avoidable complications. Recent research has shown that consumers understand the concept of avoidable complications and respond favorably to such information.