As provider use of the Electronic Health Record has evolved, so has utilization of order sets. When Stage 1 of Meaningful Use—the federal rule requiring provider use of EHRs—hit the rule books in 2010, one of the most significant requirements under the Healthcare IT adoption program was that providers show that they are making use of Computerized Physician Order Entry (CPOE).

As a consequence, most organizations focused significant attention and resources to create complete libraries of order sets in their EHR as part of the initial go-live efforts. Many institutions concerned with anticipated resistance to this transition simply recreated the familiar content of their existing order sets in their EHR. Others saw this as an opportunity to trim down the number of documents and to perform an evidence-based comprehensive review of their content. With the advent of CPOE came renewed hope that the full value of evidence based order sets to improve outcomes and reduce variability in care might be more fully realized.

Few would question that the effort to drive physician order entry has been a success. CMS declared CPOE had “topped-out” in 2016 and that focus should be turned to optimizing order entry to better realize the potential benefits. Unfortunately, historical challenges around order sets remain ubiquitous. Physician adoption and proper utilization of disease- or condition-specific order sets remains disappointing at best. Many have relied on limited EHR functionality and existing familiar document management tools, while others have sought out purpose-designed knowledge management tools to help them with the process of order set management.

While providers are able to store electronic order sets in their EHR, keeping them organized and updated has proven to be a burdensome task for most hospitals, resulting in inefficiencies and redundant costs. Today, electronic order sets are practically ubiquitous at American hospitals, but providers diverge in how they choose to manage them: a large majority of providers choose to manage their order sets themselves, while others leverage a third-party content management system.

As the paradigm shifts from CPOE adoption to optimization, understanding the challenges and potential benefits of streamlining order set management processes is paramount for both
provider organizations and industry vendors alike. Provation, in partnership with Modern Healthcare Custom Media, surveyed U.S. healthcare executives to find out how they manage order sets today and how they feel about the current process, to understand if the current norm is the right way forward as the American healthcare IT framework continues to advance.

**PROCESS EFFICIENCY**

Seventy-two percent of healthcare executives told us that they create, maintain and review order sets on their own. That means a large majority of provider organizations are storing vast amounts of order sets in their EHR—a system that in many cases isn’t designed for that purpose—and are solely responsible for keeping those order sets up to date with the most current medical evidence and clinical best practices. It’s an extremely laborious and time-consuming task, and can take a significant toll on resources and operational efficiency. For those providers who develop order sets internally, 27% said their process is not efficient and 38% said their process was only somewhat efficient. Only 7% of executives feel that their current order set management process is “very efficient.”

Providers have an average of about 304 order sets, according to our survey. Each of those must be reviewed regularly to ensure accuracy and relevance. But a notable 28% of providers told us they don’t know how many order sets their organization has. At best, this means they’re simply not aware. At worst, it means their order sets have gotten so out of control they don’t have a meaningful way to keep track. Theoretically, providers should have an accurate idea of how many order sets they have, as they should be tending to those order sets every 1-2 years, and they should be clearly labeled, organized and maintained. But when providers are using a system that isn’t designed to manage order sets, it may be difficult to keep track. Experts at Provation say they find that many providers have duplicative order sets, making it difficult to keep track of what needs to be kept up to date.

**STAFFING**

A multitude of order sets requires a multitude of employees to create, review and maintain them. Providers who took the Modern Healthcare Custom Media/Provation survey reported an average of 16 people across departments who

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*includes providers who have a hybrid model or are in transition to a third-party

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**ORDER SET AVERAGES**

<table>
<thead>
<tr>
<th>RESPONSE</th>
<th>PERCENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 200</td>
<td>26%</td>
</tr>
<tr>
<td>200-400</td>
<td>29%</td>
</tr>
<tr>
<td>401-600</td>
<td>12%</td>
</tr>
<tr>
<td>601 or above</td>
<td>5%</td>
</tr>
<tr>
<td>I don’t know</td>
<td>28%</td>
</tr>
</tbody>
</table>

Mean 303.81 order sets
create, maintain, or review order sets, including external consultants, and organizations who develop their order sets internally were more likely to have a higher amount of staff involved. Sixteen percent of providers said they’re not sure how many staff are involved in the order set management process across departments. That’s not surprising—the process reaches far across departments, requiring physicians in multiple specialties to review order sets on a regular basis in order to update them with the most current clinical best practices. That can have a burden on physician satisfaction—these are high-ranking, sophisticated clinicians who are spending a significant amount of their time researching and formulating the optimal treatments for their hospitals’ order sets. Like many advancements in healthcare information technology, there’s a concern that arduous processes like order set management could be taking highly-skilled physicians away from what they were trained and hired to do—care for patients.

**REVIEW CYCLE**

On average, providers say it takes them 2.3 months from the request of an order set change to implementation of an order set update, and order sets are updated an average of once every 1.5 years. Over 40% of respondents said it takes them over a month to complete an order set change request. That’s a long time to wait for up-to-date best practices to be included in a tool that is being used each day for patient care. In the meantime, patients may not be receiving the best, evidence-based care possible. Part of the reason the process may be so far drawn-out is the need for the multiple people involved in the process to weigh in. That can have an effect on clinician efficiency, as staff wait on their colleagues to complete their role in the process.

Though many hospitals reported their turnaround and update times for order sets, nearly 1 in 5 executives said they don’t have a defined policy for how often order sets should be updated. That’s a problematic statistic that should be of concern to compliance leaders, as the Center for Medicare and Medicaid Services requires that order sets be reviewed regularly by medical, nursing and pharmacy staff through “periodic review to determine their continuing usefulness and safety,” and requires providers to ensure that they are “dated, timed and authenticated promptly.” Hospitals that don’t yet have a defined policy for updating order sets—or those that struggle to facilitate consistent updates—should consider looking into a third-party solution to ensure a more consistent and reliable process.

**THE SOLUTION**

Improving order set management efficiency has potential to impact both clinical as well as financial outcomes of a health system. The Advisory Board recently reported potential savings of $20M-$30M dollars (per $1B in revenue) that a typical organization can realize if “unwarranted care variation” was eliminated. Not only does care variation impede clinical outcomes, according to the Advisory Board, care variation reduction is considered by hospital CFO’s to be the single most important cost opportunity, more so than labor and supply costs.
While care variation can be traced to multiple sources, adoption and use of evidence-based order sets is seen as one of the most attractive investments to achieve these goals. In 2016, a KLAS Research report sites that most provider organizations identify order sets as a core focus for their organizations clinical decision support (CDS) application strategy moving forward. As hospitals shift their focus to order set efficiency, so to have third party order set vendors, accentuating content management versus being only a content provider.

Hospital executives clearly want to get order sets right, and this was evident in the results of this study, in which 91% of respondents said the order set management process is “very important” or “important” to their organization. That’s not surprising with the clinical and financial risks involved. Seventy-five percent and 66% of survey respondents felt that improving their current processes would have a significant, positive impact on their organization’s clinical or financial outcomes, respectively.

If your organization is one of the 7% that feel their order set process is run very efficiently, then you’re on the right path. However, if your organization is managing order sets internally and struggling to use your EHR to maintain hundreds of order sets, you are clearly not alone. The time is now to rethink your long-term order set strategy and pursue a content management partner that can streamline your processes and deliver continuous value and support you’ll need in the long-run.