Understanding Data

Lesson Learned

Performance Challenge
To participate in an Alternative Payment Model (APM), practices need to develop skills to easily digest data, identify waste and areas for improvement, and incorporate data analytics to target and measure improvements in health outcomes.

Practice Solution
Introduce the role of a data analyst and adopt a strategy of analyzing practice data and providing feedback to clinicians in easily digestible formats.

Identifying data sources and acting upon available information quickly is a key component for practices transitioning from current fee-for-service contracts to value-based payment agreements.

Change Steps
Practices can understand their data by doing the following:

- Aggressively pursue existing and new data sources to analyze practice performance.
- Identify an internal data champion or hire a data analyst who can lead analysis of existing data sources and incorporate findings into quality improvement initiatives.
- Commit to delivering easily digestible data to clinician team members through formats such as a monthly scorecard or dashboard.

Practice Spotlight
Radiology Partners (RP), a multi-state hospital-based radiology practice, is the fastest growing radiology practice in the country, with a client base spread over 17 states and over 1,000 employed physicians who conduct 16 million exams annually.

The journey to transform radiology began with the idea to reduce variability and improve standardization and quality in the Detection and Management of radiology findings, starting with incidental thyroid nodules (ITNs). RP selected ITNs as the first clinical initiative by RP because they are common – 10% to 15% of Chest CT scans have ITNs – and are typically poorly managed. Overutilization of follow-up imaging for ITNs and unnecessary biopsies and other treatments result in unnecessary health care spending and a reduction in quality adjusted life years (QALYs) in patients with ITNs.

RP met the TCPI goal of sustaining efficient care delivery by reducing unnecessary testing and procedures. The efficiency and effectiveness of testing and follow-up led to cost savings for both commercial payers and the federal government through the application of evidence-based best practice recommendations (BPRs) developed for areas such as ITNs, ovarian cysts, abdominal aortic aneurysms, and lung nodules.

Plan Design: To improve ITN management, RP developed standardized evidence-based BPRs based on ACR white papers, the ACR Appropriateness Criteria and other expert guidelines, and the collaborative participation of in-house radiologists. The BPRs specify guidelines for the management of ITNs based on age, size, imaging characteristics, and any co-morbidities.

Plan Implementation: RP assigned designated time to three of its physicians to develop the evidence-based BPRs for ITNs and assigned two data analysts and one full-time program manager to the project. After the BPRs were formalized, all RP radiologists were informed and training on the BPRs was provided via a teaching video showing examples and techniques for managing ITNs effectively and efficiently. Training for these guidelines is included in the orientation of every radiologist who joins the practice. A crucial component in achieving successful implementation is engagement of the local leadership and their consistent dedication and commitment to getting their team on board with this process.

Plan Tracking: Practicing Continuous Quality Improvement, BPR compliance tracking for incidental thyroid nodules is performed through data analysis of radiology reports, and creation of monthly

Authors: Network for Regional Healthcare Improvement, American Board of Family Medicine, American College of Radiology, American College of Emergency Physicians
Lessons Learned

Change Tactics

Successful practice transformation tactics fall under the priority areas of continuous data-driven improvement and sustainable business operations, in the following ways:

- **Supporting culture of quality and safety**—Overutilization adds to health care spending and reduces quality adjusted life years (QALYs) in patients.

- **Transparent measurement & monitoring**—BPR compliance tracking for incidental thyroid nodules (ITN) is performed through data analysis of radiology reports.

- **Capability to analyze and document value**—Commercial payers are showing a growing interest in financially rewarding radiologists who deliver value-based care.

- **Efficiency of operation**—Effective testing and follow-up yields cost savings for both commercial payers and the government.

Resources

The PRIME Registry (ABFM) is a Qualified Clinical Data Registry (QCDR) open to all primary care clinicians for reporting to CMS for MIPS and APMs. EHR data is mapped to a set of quality measures presented in an easy-to-use dashboard that allows clinicians and practices to view and track measure performance data at the practice, clinician and patient level. *(Registration Required.)*

The Emergency Quality Network (E-QUAL) learning collaboratives (ACEP) have a nine-month learning period with monthly activities that sync-up with the CMS Improvement Activities (IA) list, and showcases quality improvement initiatives and best practices implemented in EDs from a variety of settings. *(Registration required.)*

SAN Learning Programs & Learning Labs (NRHI) for targeting waste and finding opportunities for improvement. Also offered is a resource to display data and create measures at the practice level.

Practice Spotlight

practice- and physician-specific actionable scorecards. Physicians and practices who do not meet the 90% compliance criteria receive training support. Practice maintains transparency by sharing data collection methodology with physician leaders, who then share data on their practice’s performance at departmental meetings and with their local physician board. In addition, some groups incentivize compliance with the BPRs as pay-for-performance.

**Plan Outcome:** The ITN BPRs made increased the detection rate of significant ITNs from 34% to 76% practice wide. Ultrasounds recommended for insignificant ITNs decreased from 35% to seven percent. The compliance rates improved from the baseline and currently most of the practices consistently meet the 90% compliance criteria as evidenced by the monthly scorecards. The practice-wide compliance rate for ITN has improved from 56% at baseline to 95% by Oct 2018 *(See Figure 1.)*

**Figure 1: Best Practice Performance ITN 2017-2018, Radiology Partners**

<table>
<thead>
<tr>
<th>Year</th>
<th>Compliance Rate for ITN</th>
</tr>
</thead>
<tbody>
<tr>
<td>RP Baseline</td>
<td>56%</td>
</tr>
<tr>
<td>RP Dec. 2017</td>
<td>91%</td>
</tr>
<tr>
<td>RP Oct. 2018</td>
<td>95%</td>
</tr>
</tbody>
</table>

Commercial payers who recognize the value that the RP ITN program provides are interested in financially rewarding radiologists.

To continue with the momentum created by ITN Best Practices, RP is also participating in an ACR TI-RADS (Thyroid Imaging Research and Database Systems) initiative with academic and teaching hospitals across the nation that will ultimately lead to evidence-based appropriate management of thyroid nodules.

Through natural language processing and data mining, RP’s Clinical Value Team delivers lists of patients that need follow-up to their clients who then work within their health systems and care coordination platforms to ensure that patients get appropriate follow-up. This initiative is still early in implementation, but aims to assist health systems in providing guidance for population health management, and allowing them to assume risk on behalf of their patients.

Authors:  Network for Regional Healthcare Improvement, American Board of Family Medicine, American College of Radiology, American College of Emergency Physicians