Insurance company prior-authorization processes delay care while amplifying patient anxiety and physician frustration. But one leading health system has worked to automate its process for ordering and scheduling imaging tests and has dramatically sped up and improved the experience.

Radiology prior-authorization processing times, costs and denials have been reduced at the Atlantic Health System in Morristown, New Jersey. But the effort it took do so was far more than just “automating” the process.

“If you’re automating an inefficient process, you just increase the inefficiency by severalfold,” said Sunil Dadlani, senior vice president and chief information officer for Atlantic Health. “Typically, the process is extensively manual, time consuming and resource intensive. When we leverage AI/ML [machine learning] initiatives—we also undertake process-reengineering where we evaluate current process and reimagine future to be process based on best industry practices for maximizing optimization and then automating it end to end.”
Atlantic Health System is a member of the AMA Health System Program, which provides enterprise solutions to equip leadership, physicians and care teams with resources to help drive the future of medicine. Atlantic Health’s successful efforts to automate and reengineer its prior authorization processes for images were undertaken on their own and are not part of an AMA initiative.

Atlantic Health’s Radiology Imaging Artificial Intelligence Analysis Project was recently recognized as an example of “enterprise excellence” by CIO, a publication that covers the “digital transformation” of businesses. The system was recognized for using augmented intelligence (AI)—often called “artificial intelligence”—to spot potential abnormalities in diagnostic imaging studies and then moving those images to the top of the list for radiologist review.

“Technology is at the front and the center of the Atlantic Health System strategy and, really, what it comes down to is asking how do we use the technology to enhance care quality, patient outcome, satisfaction and engagement and throughput while patients navigate through the care journey with AHS as well as support our business objectives,” Dadlani said.

“We are very cognizant in terms of identifying the right use cases, and then we decide what technologies need to be deployed and what objective we are trying to achieve,” he explained. “One of the central service lines that we identified was radiology, and we found that preauthorization was something that was ripe for disruption because it was a completely manual process.”

Fixing prior authorization is a critical component of the AMA Recovery Plan for America’s Physicians.

It is overused, and existing processes present significant administrative and clinical concerns. Find out how the AMA is tackling prior authorization with research, practice resources and reform resources.

Managing 1.3 million rules

The process that was reengineered and the resulting technology platform is based on almost 1.3 million rules used by the more than 300 different health plans in which Atlantic Health patients are enrolled.
“Just imagine the manual workload if somebody has to navigate 1.3 million rules, managing that in a spreadsheet, and making sure they stay current—because payer rules and policies keep changing,” Dadlani said.

“What it does is completely eliminate the manual intervention,” he explained. “It picks up the order, the right documentation and the clinical notes, and identifies the right payer that matches with the patient and sends this information automatically to the payer portal.”

Not all imaging orders require authorization. So, based on the rule engines, the solution identifies which imaging studies require a pre-authorization from payers.

If prior authorization is required, it identifies the prerequisites that need to be sent to the payer in terms of policies, clinical notes and clinical documentation so payers have what they say they need to give authorization.

Then there is constant scanning that identifies when the payer takes action and authorizes the imaging order and then automatically updates the file in Atlantic Health’s electronic health record system.

“The good part is that this can happen 24/7,” Dadlani said. “It can happen in the night because it’s done by an automated platform. It does not have to wait for somebody showing up the next morning in the office and manually sending orders for authorization. It is happening seamlessly.”

The solution also tracks which orders have a higher chance of denial and identifies if this was because of information that was previously missing when the process was done manually.

“It truly gives us an end-to-end, 360 [degree] picture of the prior-authorization process that we follow,” Dadlani said.

“These innovative solutions have resulted in a more than 50% time-reduction in pre-authorization submissions, with more than 82% of those pre-authorizations now fully automated,” he added. “Our performance in this space is bolstered by our vendor partners, according to whom we are ranging in the top percentile of health care systems across the country.”

This process has “had such a huge positive impact on care delivery” in radiology that it is being extended into orthopedic surgery and other surgical services, Dadlani said.

The reengineering has been two-sided, he added. Atlantic Health worked with payers so they knew not to sit by their fax machines waiting for the system to send over their documentation and notes.

“This was not unilateral,” Dadlani said. “Because, if we are exchanging information manually, they’re also exchanging and delivering their decision-making through faxes and through manual processes,
so it increases efficiencies on the payer side as well.

“This technology is something payers are utilizing, even more than many of the health systems, so they are on board with this technology and end-to-end automation to the fullest.”

The process went live in June after about six months of preparation, which involved:

- Identifying the use case.
- Defining the problem.
- Measuring the size of the problem, including time and effort spent on prior authorization, denial rates and the impact on patients caused by rescheduling and care delays.
- Establishing baselines to measure improvement.

“You have to define the problem correctly,” Dadlani said. “We conducted our due diligence involving all of our stakeholders—what we call ‘going through our business IT governance process’—where we present a business case for the problem we are trying to solve.”

Once the project was approved, available technology and industry-leading vendors were identified, reference checks were made, and it was determined whether the technology was compatible with Atlantic Health’s IT system and its legal and compliance framework.

“There is a systematic intake process & due diligence with right checks and balances to prioritize and commit investments and resource allocations on these initiatives,” Dadlani said.

“This is followed up by pragmatic vendor and technology selection with complete architecture, cyber and legal and compliance framework to start POC with clearly defined measures of success before we scale it at enterprise level,” he added. “At Atlantic Health, we are always very focused on doing the right thing first, and then doing things right.”

A model to follow

Automating prior-authorization processes is a reform agreed to by organizations representing physicians, medical groups, pharmacists and health insurers in a 2018 consensus statement.

“Technology adoption by all involved stakeholders, including health care providers, health plans, and their trading partners/vendors, is key to achieving widespread industry utilization of standard electronic prior-authorization processes,” the statement (PDF) says.

A recent AMA survey, however, found that only 26% of physicians report their EHRs offer electronic prior authorization for prescriptions. Also, 59% said prior authorizations for medical services are still
done by phone and 45% via fax.

While some small organizations with fewer resources may have difficulty adopting Atlantic Health’s approach, Kathleen Blake, MD, MPH, a senior adviser at the AMA, thinks many could use it as a model.

“The observed concordance of Atlantic’s PA results and those generated by systems that payers are already using, and the performance improvements experienced by payers suggests there is a potential opportunity for a more collaborative, less adversarial approach to PA,” Dr. Blake said.

Physicians and patients can visit fixpriorauth.org for information on AMA’s efforts to reform prior authorization.