

\*\*Lumeon's Care Pathway Management platform is a game changer for us. We had been looking for a system that met our needs in this way for quite some time - Lumeon not only fit what we needed, but has transformed the way we deliver care.

Dr. Charles Niehaus, CMO, Alliance Medical

### **Challenges faced by Alliance Medical**

Alliance Medical is a leading independent provider of medical imaging services, scanning over half a million patients each year. As the company's customer base has grown, they have managed an increasing number of diverse and complex set of patient journeys, with a high number of contractual variables.

They found that it was challenging to expand their business without incurring huge administrative overheads, and that they had unnecessary variations in cost, processes and turn-around time.

#### **ABOUT ALLIANCE MEDICAL**

Alliance Medical supply outsourced diagnostic scanning and/or reporting services to a huge volume of hospitals. They currently operate a network of 49 MRI, CT and PET-CT static imaging centers (some integrated within local hospitals and some in standalone clinics), as well as a fleet of 100 mobile units.



#### reduction in resourcing costs

pathway orchestration and automation reduced resourcing overheads by almost a third



98%

## reduction in report formatting and distribution time

report formatting and distribution time reduced from 6 hours to less than 1 minute



93%

# reduction in invoice validation period

reduced invoice validation from 7 hours per day to 30 minutes per day







#### **SOLUTION**

Lumeon helped Alliance Medical create sophisticated workflows (or 'pathways' as well call them) to manage the entire patient journey with the support of intelligent automation. Seven different software systems were consolidated into one master platform, proactively orchestrating optimum processes at lower delivery cost.

Their pathways include digital protocols to manage each stage of the patient journey, from referral screening, patient preparation and diagnostic imaging, through to study management, report distribution and billing. These protocols can be automatically varied to meet the needs of individual patients, as well as each of the payers Alliance Medical deals with, enabling them to reduce the administrative burden of care management.

Using intelligent automation reduces asset wastage and enables highly paid radiologists to work at the top of their license. For example referrals can now be automatically risk-profiled and passed to radiographers for a quick double-check, with only more complex cases being automatically sent direct to radiologists. If any referrals fail to meet basic demographic or payer criteria they can also be rejected outright and Lumeon will send a message back to the referrer automatically.

At each stage of the pathway, patients are automatically transferred between relevant teams, prompting relevant e-checklists for them to complete. Processes are optimized using efficiency algorithms (for example scheduling algorithms avoid gaps in diaries and machine down-time) as well as being stratified to meet patient needs (for example diabetic patients receive different automated preparation instructions and reminders about how to manage their medication prior to PET-CT scans).

A pathway approach has enabled Alliance Medical to provide a superior service its clients by automatically adapting processes to their requirements. This includes things like which PACS the images are automatically re-routed to, how they want reports formatted and whether they want the radiologist's report returned as a standalone document or with the original images as well. A referrer portal also allows hospitals and primary care physicians to see the real-time status of any of their patients at any point in the overall process.

Finally, each pathway contains SLA timers that ensure every stage of the process is completed according to the needs of each patient and client. Proactive breach avoidance sequences, such as task re-allocation, traffic light color coding or alerts help staff complete standardized tasks within the optimal time-frames.

#### **OUTCOMES**



#### Reduced unwanted variation and improved business efficiency

Alliance Medical went from fragmented software and variable working practices, to an efficient automated network run through one master platform. They were able to reduce resourcing costs by 30% and operate at such scale and efficiency that they could offer unbeatable cost and service quality for their clients.



#### Service tailored to clients and customers

Lumeon helps clinical and non-clinical staff to provide the best possible service, using automation to produce a personalized, seamless care experience and reduce waiting time for diagnostic results. Patient satisfaction is now at 99%.



#### **New business opportunities**

Alliance Medical's ability to manage tens of thousands of diagnostic procedures at lower cost, but with consistent service quality has resulted in significant contract wins. This includes a landmark contract to manage PET-CT scans across 30 large hospitals.



#### Reduced reporting time

Lumeon's pathway engine reduced formatting and distribution time from six hours of manual work to less than one minute. Rather than waiting for staff members to come on online and complete administrative and image manipulation tasks, the system now does this 24-7 in the background.