A smooth and successful transition to MOSAIQ® brings improved workflows and more efficient processes

Contributors
Andrew Saunders
General Manager, Queensland
Dr. Marie-Frances Burke
Radiation Oncologist
Joanne Mitchell
Radiation Therapy Lead
Daniel Papworth
Radiation Therapist
Leah Wheeler
Patient Services Lead
About

GenesisCare Queensland

Locations
- Gold Coast (Tugun and Southport)
- Brisbane (Wesley and Chermside)
- Sunshine Coast (Nambour)
- Central Queensland (Rockhampton, Bundaberg and Fraser Coast)

Staff
- >250 Medical Professionals and Support Staff

Patient throughput
- >3,500 patients per year

Andrew Saunders
General Manager, Queensland

Dr. Marie-Frances Burke
Radiation Oncologist
Ensuring standardization and consistency across a global network

GenesisCare in Queensland is part of the global GenesisCare group that provides innovative, personalized care to cancer patients around the world and performs more than 350,000 treatments across its network every year.

GenesisCare is the largest provider of radiation therapy services in Australia, operating more than 30 cancer centers in metropolitan and regional settings across the country. Doctors and their teams treat all tumor groups with the latest techniques, such as intensity-modulated radiotherapy (IMRT), volumetric arc therapy, stereotactic radiotherapy and radiosurgery, low dose rate and high dose rate brachytherapy.

GenesisCare’s oncology services in Queensland were established in 2014, and the organisation has grown to become the leading provider of essential radiation therapy services in the state, treating over 3500 patients per year at eight treatment centers located in the Gold Coast, Brisbane, Sunshine Coast and Central Queensland.

At the time of joining the GenesisCare group, five of the six centers in Queensland used a combination of Aria and CAS for workflow, electronic medical record (EMR) and billing purposes, whereas the rest of the GenesisCare network in Australia uses MOSAIQ as a comprehensive oncology information system (OIS) and EMR. In addition, Queensland Health, the public health department for which GenesisCare provides a number of radiation oncology services, also uses MOSAIQ as an EMR, and so it was decided to implement MOSAIQ across all six GenesisCare centres in order to align and collaborate with the wider national and international GenesisCare network, as well as to integrate with Queensland Health.

“We knew that the implementation of MOSAIQ across GenesisCare internationally is important for ensuring standardization and consistency in our approach, and really helps us to make the most of being a network provider,” comments Andrew Saunders, Queensland General Manager. “It will enable us to drive high quality patient care through standardisation of patient pathways and workflows, and it will be much easier to record, collate and share diagnosis, staging and patient outcomes data for reporting and research purposes.”
“Being on a nationally consistent OIS platform makes data reporting much easier and helps ensure that patients receive the same level of care no matter where they are treated,” agrees Daniel Papworth, Radiation Therapist.

One of the attractions to MOSAIQ for GenesisCare is that it is an open platform that can integrate with the wide range of equipment and software used across the group.

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Dan continues, “Having a platform that is vendor neutral is essential for an international organisation like ours that consists of a variety of different treatment planning system and linac combinations.”

“In addition, we have developed a lot of in-house innovation across the network,” Andrew explains.

“The open-platform nature of MOSAIQ enables us to integrate well with the tools we have developed to help us operate a solid, high quality and efficient clinical practice—such as our data warehouse, automated reporting and integrated billing systems—and to bring them into Queensland as well. We also have a doctor portal that drives care pathways and imaging tools that help to lock down our end-to-end patient QA processes. An open platform, such as MOSAIQ, allows us to innovate around some of our specific needs as a network organization.”

Smooth implementation

The transition to MOSAIQ in five of the six Queensland departments at the same time (the Rockhampton site already used MOSAIQ) was challenging—technically and from a change management perspective.

“This was a major project that would involve a change in practice for everyone—doctors, patient services, nursing, radiation therapists, medical physicists would all be affected by the transition,” says Saunders. “It was really important that we adopt the right approach to this change from the start, from project management to our staff communication and engagement, acknowledging the scale of what we wanted to achieve and having incredibly aligned and dedicated teams not just here in Queensland, but also from Elekta and from the wider GenesisCare network.”

“We started by defining our ideal future state, and then we built MOSAIQ to support it,” explains Papworth. “This method of design meant that we relied heavily on MOSAIQ ‘super users’ from within our own network, and support from Elekta to overcome any minor issues that we faced and create a solution to match our vision. This broad range of support enabled us to configure a system with more automation than anywhere else in our network.”

“The team at Queensland began building their MOSAIQ system in the second half of 2016,” recalls Joanne Mitchell, Radiation Therapy Lead. “Data was transferred from one system to the other, and the senior administrative team received training from Elekta to prepare them for using the system. All staff members were provided with training and work instructions, and technical staff received planning and treatment training on the completed system. Training consisted of classroom style learning, tailored for various role types, and practical demonstrations on linacs within each department.”

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Testing of quality checklists (QCLs) and workflows began months before the system went live in May 2017. A test environment was made available to all staff to test and practice their skills prior to going live.
“The training program we developed with the Elekta applications team was essential to the success of the changeover,” Joanne continues. “Having a test environment that mirrored the live environment exactly, and was completely configured for training, made so much difference for our users who had never seen the system before. We created test patients in our planning system so every radiation therapist could transfer a plan and set it up exactly as they would for a clinical case.”

The changeover to MOSAIQ happened at all five sites over a single weekend, with minimal disruption to the normal running of the departments. Staff adapted well to MOSAIQ and, with continued support from Elekta, are finding ways to increase the utilization of the system every day.

“The commitment of the Elekta applications training team was amazing,” Joanne comments. “They were very supportive and knowledgeable, which was absolutely essential to the successful rollout of the software. We stopped using the old systems on a Friday and started using MOSAIQ on the following Monday across the five treatment centers. In the first week, we appreciated hands on support from Elekta as well as from experienced users within our own network so that we could hit the ground running by week two. Every patient continued to receive an excellent level of care throughout.”

“Thanks to excellent preparation and a very hard working, dedicated team, the implementation of MOSAIQ went as smoothly as it possibly could,” adds Radiation Oncologist, Dr Marie Burke. “Elekta was very helpful in supporting education sessions in the lead up to the transition. In addition, the support from the GenesisCare network nationally on the weekend prior to going live was invaluable, with experienced people spending time in each department to help with that final transition. A highlight for me was seeing our own local people rise to the challenge and blossom. It was a huge change but a good attitude and teamwork from everyone involved made it successful.”
Immediate improvements

In the short time that GCCQ has been using MOSAIQ, they have already begun to experience clinical and operational benefits in several areas. For example:

Clinical data tracking

“One of the most exciting features of MOSAIQ is the ability to track clinical outcomes in a much easier fashion than before. Previously, we had to manually wade through data but now we can access and document data—such as side effect profiles, acute toxicity, light toxicity, ultimate clinical outcomes etc.—quickly and easily, which is extremely valuable. We think we do things very well but it’s nice to obtain evidence and document that easily.”

– Dr. Marie Burke

“The ability to track and record diagnosis and staging details, side effect profiles and outcomes data is vital to ensuring the best possible cancer care. MOSAIQ does this really well and in a standardised way, not just in Queensland but across the national and international GenesisCare network, which is incredibly powerful and will allow the outcomes to speak for themselves.”

– Andrew Saunders

“The rapid accumulation of treatment outcome data across the global network is also important for research purposes, which will ultimately benefit the treatment of all patients.”

– Joanne Mitchell

Efficient care pathways

“MOSAIQ ensures our patients are treated safely, accurately and in a timely manner.”

– Dan Papworth

“MOSAIQ has allowed us to standardize all aspects of care pathways, which is a key component of our clinical and operational quality improvement initiative.”

– Joanne Mitchell

“MOSAIQ helped us perform an analysis of our process for 100 patients, from first consultation through physics QA to starting treatment. This gave us a very good understanding of the patient experience from start to finish, which is helpful in exploring how to make the patient journey more efficient and identifying where potential delays might exist.”

– Dr. Marie Burke

“MOSAIQ helps us to understand the bottlenecks in our process, the more we can interpret that data and address it in real time, which is a huge differentiator for us. If we can shorten the time to treat from 4–5 days, which is where it is right now, down to 4–5 hours, this is very compelling for patients and referrers.”

– Andrew Saunders

Improved workflows

“I really like the workflow improvements that we have with MOSAIQ across the whole department. For doctors, specifically, one of the MOSAIQ experts from elsewhere in the country has developed a program where, every morning when we log in, we get a list of tasks required for that day in order of priority according to patient start dates. This has really simplified the process of organizing and prioritizing work during the day, which has been very helpful.”

– Dr. Marie Burke

“Having changed from a separate clinical information system and workflow/record and verify system, MOSAIQ has eliminated the need for replication of data entry. With MOSAIQ, we are now almost completely paperless, which is a huge operational benefit.”

– Joanne Mitchell

“The QCLs (quality checklists) are helpful for ensuring that there is a record of requests and follow up for each patient.”

– Leah Wheeler, Patient Services Lead

Consistent network-wide approach

“The ability to retrieve and compare data across the GenesisCare network is one of the most powerful aspects of MOSAIQ. A consistent approach means we can scrutinize this data to ensure that best practice, in terms of quality and efficiency, is in place across the network. A platform as easy to query as MOSAIQ makes our reporting possibilities virtually endless.”

– Dan Papworth

“There is a lot of existing MOSAIQ experience within GenesisCare in Australia. Having access to this expertise and a wealth of accumulated data has enormous benefits in terms of collaboration and training.”

– Andrew Saunders
IQ Scripts enhance workflow automation

GenesisCare’s Queensland team has embraced the use of MOSAIQ IQ Scripts to better coordinate and actively drive workflow efficiency within each department. Their fully IQ Scripted care pathways, with automated QCLs and standardized assessments, ensure the inclusion of all essential evidence-based steps recommended as standard of care and will form a benchmark for the entire GenesisCare group.

“No, with IQ Scripts care pathways, we know when one task is completed and the patient is ready for the next part of their care”

“Previously we had a library of care pathways that included all the necessary steps in a patient’s journey, from bookings to treatment,” explains Papworth. “However, these care pathways were static, and intervention was required if a patient deviated from the standard pathway. This meant additional work for staff and introduced the risk of missing key tasks. IQ Scripts has made our workflows more dynamic through responses to assessments and the completion of QCL. For example, if a patient informs CT staff that they have an IECD, rather than having to manually adjust the patient’s care pathway, the required QCL are generated automatically when the CT assessment is completed, acknowledging the IECD.”

“In preparation for the transition to MOSAIQ, we studied our processes and mapped out the entire patient journey, from referral to treatment and follow-up,” says Mitchell. “Now, with IQ Scripts care pathways, we know when one task is completed and the patient is ready for the next part of their care. The pathway may vary, depending on data entered during assessments, which ensures the most relevant journey for each patient.”

“The use of IQ Scripts has created a seamless workflow, incorporating all job families and ensuring that each task considers the impact on others within the organization,” adds Leah Wheeler, Patient Services Lead. “Patients are assured of the same consistent, high-quality care every time and at every location.”

Exceeding expectations and meeting goals

“Having had no prior exposure to MOSAIQ, I admit to having doubts that the transition would result in so many improvements, but I’ve been pleasantly surprised,” comments Dr. Burke. “Not only was it implemented smoothly, but we are using the system well, and I can see we will continue to make improvements in the future. I think the ability to track clinical outcomes is particularly exciting.”

“The ability that MOSAIQ gives us to contribute to data analysis on a global scale is really exciting,” agrees Andrew. “It will help us monitor and improve what we do and clearly ties into GenesisCare’s goals to provide high quality care—and to address the access gaps that we see in cancer care.”

Further information about MOSAIQ is available at elekta.com/mosaiq

Disclaimer

This customer perspective is based on the experience and application of medical experts, and is intended as an illustration of an innovative use of Elekta solutions. It is not intended to promote or exclude any particular treatment approach to the management of a condition. Any such approach should be determined by a qualified medical practitioner.
For almost five decades, Elekta has been a leader in precision radiation medicine.

Our nearly 4,000 employees worldwide are committed to ensuring everyone in the world with cancer has access to—and benefits from—more precise, personalized radiotherapy treatments.