

- 20 years after its invention, Surface Guided Radiation Therapy is now an essential part of the radiation therapy offer for many cancer centers.
- Not all SGRT systems are the same, and picking the right one is a key decision for your clinic, affecting the accuracy of your treatments, the efficiency of your workflow and most importantly, your patient outcomes.
- Vision RT, the inventors of SGRT, asked 10 radiation therapy professionals for their advice on how to best evaluate and compare different SGRT systems.



CHECK FOR PEER-REVIEWED, PUBLISHED DATA

Even before getting a quote, ask for evidence. TG302 (AAPM guidelines for SGRT) is now available. Check, using the published literature, that any system you buy is TG302 compliant, for all skin tones, couch and gantry angles. This is especially important if you want to use your SGRT system in stereotactic applications.

"Reviewing clinical papers is a good place to start when looking to purchase any new medical technology. It is important to make sure the published evidence matches how you plan to use the technology. The wealth of evidence on the use of SGRT will be essential to help you make the case for buying and implementing SGRT in your department."

Kenton Thompson

RT Clinical Coordinator, Peter MacCallum Cancer Centre, Australia

REVIEW SERVICE, SUPPORT & RELIABILITY

Your SGRT system needs to be reliable. Make sure to look into the service and support plan being offered. Can software issues be fixed remotely? How frequent are hardware failures and how long do they take to be addressed?

"Most centers can't afford the disruption of downtime. Make sure to ask for evidence of reliability and up-time. Service and support isn't just there for when things don't work – sometimes at that point it's too late. You want an SGRT system supported by a vendor who understands the importance of updates and maintenance."

Mathias Dierl

Head of Medical Physics, Klinikum Bayreuth, Germany

THE EXTRAS MATTER FOR YOUR WORKFLOW

You shouldn't look at your SGRT system as a standalone unit. Work with your vendor on the supplies and extras you will really use. The goal should be acquiring an SGRT technology that improves your entire workflow and the right solution should help with everything from CT sim all the way through to treatment. This is where your site visit will really help you visualize how this can all work.

"Your SGRT system is an integral part of your workflow. There are SGRT solutions out there that integrate with, or improve virtually every step of planning and treatment. Find a system that can partner with your clinic to improve your overall workflow."

Mike Tallhamer

Chief of Radiation Physics, Centura Health, Colorado, USA

SCHEDULE A SITE VISIT

Once you have more information from your peers, ask them or the SGRT supplier for a site visit. There's no better evaluation tool than seeing a system in action for yourself. Make sure your visit is to a clinic with similar circumstances to your own. Be prepared to ask lots of questions.

"When we were looking to purchase our SGRT systems, we found site visits invaluable. The opportunity to see the technology being used with patients as well as having honest conversations about the reality of implementation, commissioning and day-to-day use really helped us make an informed decision about which system to buy. The visits also gave us lasting connections with counterparts for future support as well."

Josh Naylor

Imaging Lead Principal Physicist, University Hospitals Dorset, UK









BUNDLES CAN BE TEMPTING, BUT MAKE SURE YOU'RE NOT MISSING OUT ON FEATURES

As with any part of your workflow, don't make the mistake of seeing your SGRT system as a "throw-in," if you're procuring it as part of a larger purchase, such as with a new linear accelerator. Motion management and accuracy should be critical to your decision. An SGRT system that isn't interoperable or that doesn't measure up to your high standards will be one you won't use.

"When choosing an SGRT system, it was important to us to evaluate all systems on the market, and not just go with the one bundled in with the linac. This allowed us to evaluate and purchase an SGRT system that fitted our clinical goals."



Operations Manager Radiotherapy, Bon Secours Cork, in association with UPMC Hillman, Ireland

TALK TO YOUR PEERS

There is an entire community devoted to sharing knowledge of, and best practice in the use of Surface Guided Radiation Therapy.

Start your research at sgrt.org, where you can find a wealth of peer-generated presentations and information.

Speak to your colleagues on your own. Find out what they think of their own SGRT systems. What were their evaluation criteria? What do they wish they had known when they were assessing different systems?

"We were really pleased to see that there is already a robust community of professionals out there using SGRT and willing to share their experiences. I would advise anyone considering SGRT to attend SGRT Community events and webinars and visit the website. There's so much to learn from those who've been using AlignRT for years. Take advantage of that!"



Senior Radiation Therapist, Cleveland Clinic, Florida, USA

MAKE SURE IT CAN HOLD THE BEAM IN 6DOF

One of the key benefits of implementing an SGRT system should be its ability to work seamlessly with your linear accelerator to stop the beam if a patient moves out of tolerance – however the patient moves. The gold standard is to track and hold beam in six degrees of freedom.

"Make sure your SGRT system can monitor the DIBH breath-hold in all 6 degrees of freedom. Sometimes when patients get tired, they inadvertently arch their backs, potentially putting the heart into the beam. Systems only monitoring the breath-hold in the vertical direction will not catch this."

Luke Rock

Chief Medical Physicist, Department of Radiotherapy, Beacon Hospital, Ireland

DOUBLE-CHECK YOUR IMPLEMENTATIONS

Many clinics will first implement SGRT systems because of its advantages in delivering DIBH treatments or to be able to offer tattoo and mark-free treatments to their patients. As the radiation oncology team becomes more comfortable and proficient with SGRT, they usually look to expand its use.

One of the great benefits of SGRT is that its use can be expanded to every indication, for every fraction. But not every SGRT system is capable of this. Make sure your expanded utilization plans don't hit a barrier.

You can also ask your vendor about their future roadmap and how it aligns to your clinical plans.

"Learning from your peers is a powerful way to successfully widen your adoption of SGRT. The SGRT community is a great way to tap into existing knowledge and is particularly helpful when looking to start using SGRT for new indications"

Tina Hall RTT

Radiation Oncology Manager, Sarasota Memorial Hospital, Brian D. Jellison Cancer Institute, Florida, USA









TRAINING, TRAINING AND THEN MORE TRAINING

Your team have trained long and hard on your current systems and workflows. It's totally normal for people to have anxieties about the introduction of new, disruptive technologies, even if everyone understands and agrees on the clinical benefits. This is where training becomes really important.

Ask about the training offer, both for go-live and importantly, beyond. You aren't looking for a supplier, you're looking for a partner who will make sure that your clinic is just successful in setting up their SGRT workflow and eventually, expanding it.

"It's really important that your SGRT system is not just easy-to-use, but that you are confident in the training you will receive. The best system in the world will not be well adopted if the staff are not well trained and buy in to the value of the system. It was key to us that the trainers were so flexible and met the needs of the department tailoring the training to exactly what we required."



Lead Radiographer, Christie Radiotherapy at Royal Oldham Hospital, UK

IT'S ALL ABOUT THE PATIENTS

Awareness of SGRT has become much more widespread over the past several years, especially amongst patients. An informed patient will ask about SGRT, particularly if they are concerned about having tattoos or permanent marks as part of their treatments. And there is also increased awareness of the risks of heart damage among left breast cancer patients. They may ask for DIBH with SGRT.

Implementing an SGRT system will help with efficiency, safety and accuracy, but it should also be a part of your overall patient-focused treatment approach. Patients have more choices about where they get treated than ever before. Make sure you partner with an SGRT provider who will help you with local support to raise awareness of the benefits of SGRT in your community and attract those patients looking for the best outcomes and the most comfortable treatment options.

"With the introduction of SGRT we have eliminated tattoos and marks and deliver a frameless SRS service and with the AlignRT technology enabled a truly patient centic approach to treatment."

Josh H. Heinzerling, MD

Southeast Radiation Oncology Group, Levine Cancer Institute Concord, Atrium Health, North Carolina, USA



