

Successful implementation of SGRT: patient benefits and staff satisfaction from a radiographer's perspective



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RCC staff overview

47 treatment
radiographers (band
5 and 6)

9 band 7 treatment
team leaders

1 8a treatment lead

1 8a continuous
improvement lead

11 pre treatment
radiographers

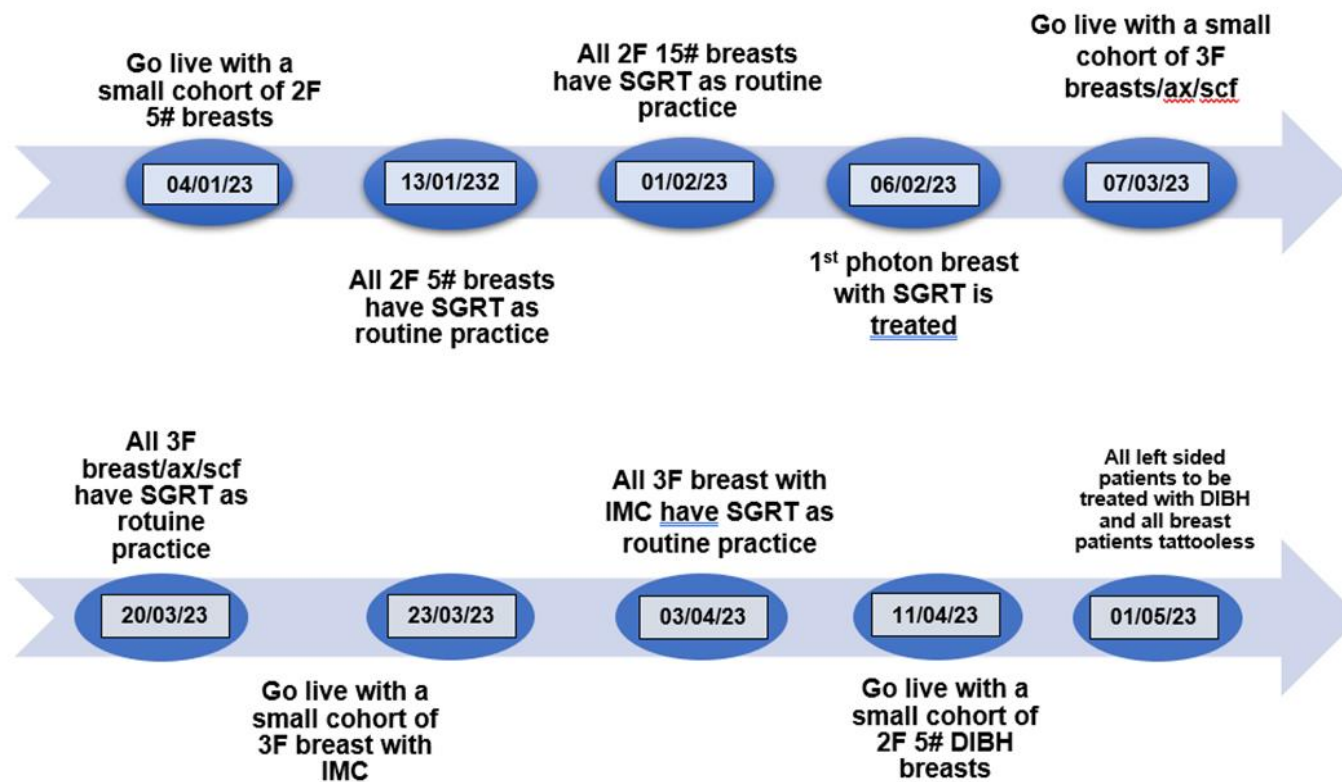
4 pre treatment band
7 team leaders

1 8a pre treatment
lead

Staff Training

The image displays a collage of overlapping screenshots from a training portal. The screenshots show a navigation menu with options like 'Stream', 'Discussion', 'Calendar', and 'Group'. A 'TRAINING MANUAL' for 'alignrt Advance' is visible. A 'MEDICAL DEVICE COMPETENCY DOCUMENTATION' form for 'AlignRT' is shown, including fields for author, reviewer, and keywords. A 'GUIDANCE NOTE' for troubleshooting issues is also displayed. The Lancashire Teaching Hospitals NHS Foundation Trust logo is present throughout.

SGRT Go live timeline



Service expanded to Radical Thorax 06/09/23

Staff engagement



Key aspect of implementation plan was on boarding the radiographic staff



Band 6 radiographer on super user training



Education sessions were delivered to widen knowledge of SGRT and the capability of Align RT/Sim RT systems



Align RT online learning



Align RT application training



Super user support

Timing audit data

SITE	PRE SGRT AVE (IN THE ROOM)	POST SGRT AVE (IN THE ROOM)	POST SGRT AVE (ON THE BED)
2F Breast (daily kv planar-online review)	18 MINS	15 MINS (range 10-20 mins)	13 MINS
3F Breast (mv day 1,2 -online review)	22 MINS	16 MINS (range 11-30 mins)	13 MINS
3F Breast with IMC (daily CBCT-online review)	25 MINS	20 MINS (range 10-30 mins)	16 MINS
Photon Breast Boost (daily CBCT-online review)	17 MINS	17 MINS (range 11-30 mins)	14 MINS
DIBH (2F, daily kv planar-online review)	30 MINS	22 MINS (range 14-26 mins)	17 MINS
Radical Thorax (daily CBCT-online review)	15 MINS	13 MINS (range 10-18 mins)	11 MINS

Repeat imaging audit data

SITE	PRE SGRT	4 MONTHS POST SGRT	% CHANGE
2F Breast (kv planar imaging)	113/291 (39%)	68/279 (24%)	15% reduction
3F Breast (mv imaging)	17/34 (50%)	5/26 (19%)	31% reduction

Image displacement audit data

SITE		Pre SGRT			Post SGRT		
		SUP/IN F	A/P	LT/RT	SUP/I NF	A/P	LT/RT
3F Breast with IMC	Average	0.34	0.46	0.33	0.29	0.30	0.33
	SD	0.29	0.61	0.23	0.23	0.19	0.27
Photon Breast Boost	Average	0.24	0.29	0.53	0.25	0.19	0.22
	SD	0.21	0.18	0.32	0.20	0.13	0.15
Radical Thorax	Average	0.07	0.14	0.03	0.27	0.09	0.05
	SD	0.48	0.45	0.43	0.51	0.35	0.32

Other improvements

Rescan rates during treatment	
2022	2023
33	20

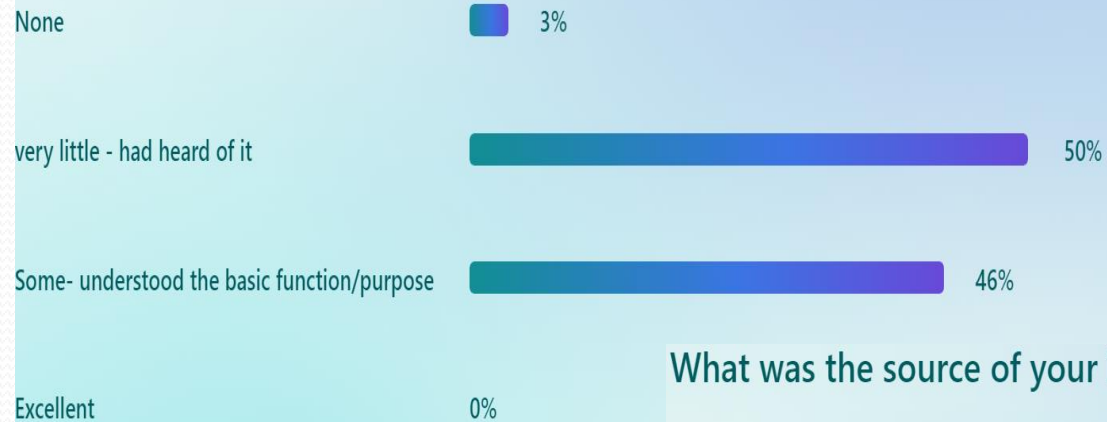
Rescan rates during treatment have reduced by 33%



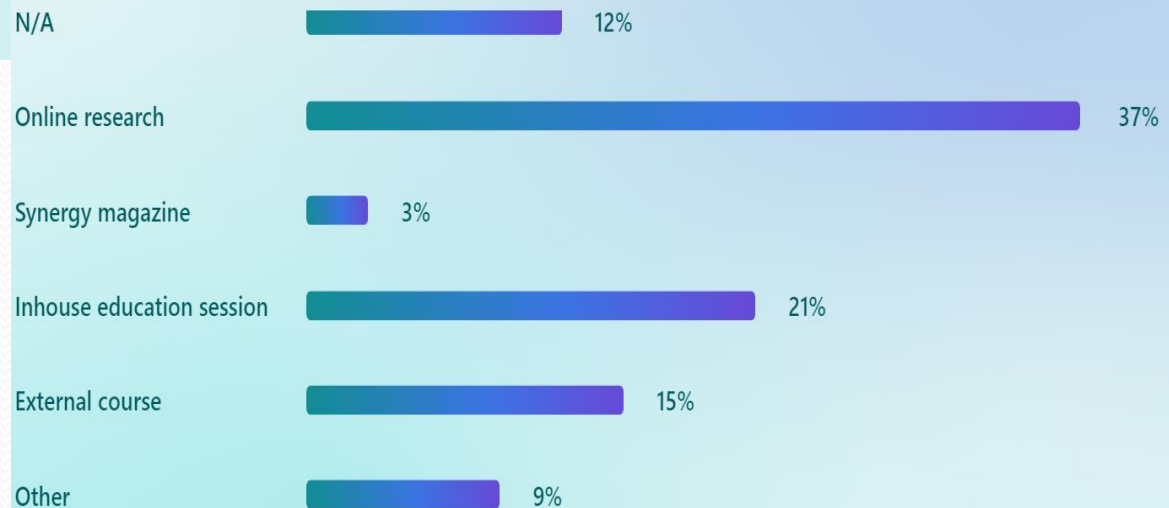
We have successfully treated a large number of patients in Chabner bras using the SGRT system with minimal issues.

Staff experience survey results

What was your knowledge of SGRT prior to application training?



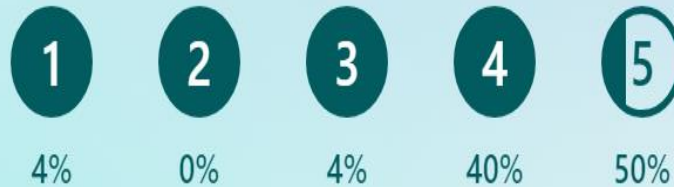
What was the source of your information?



Staff experience survey results

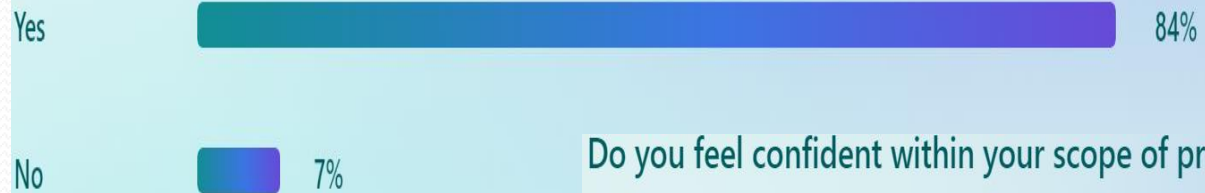
Did you feel that the onsite application training prepared you for treating patients with Align RT

4.3

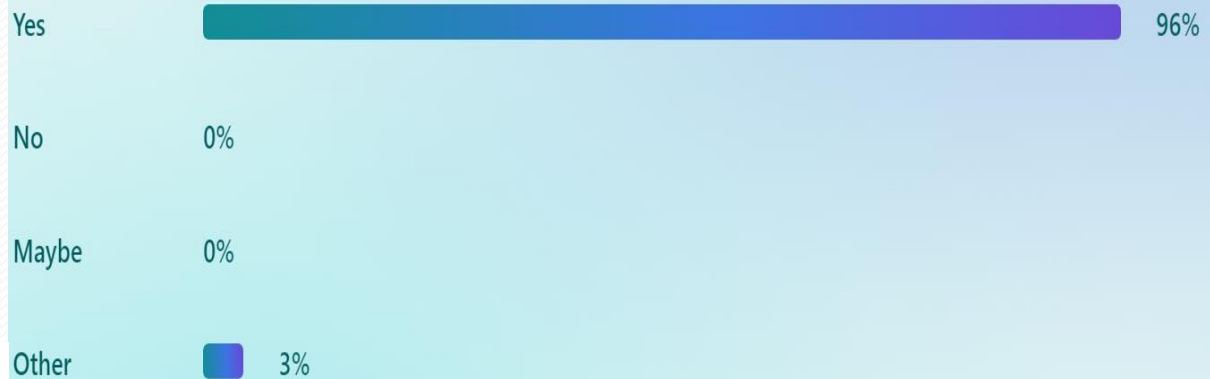


Staff experience survey results

Do you use Align RT daily?



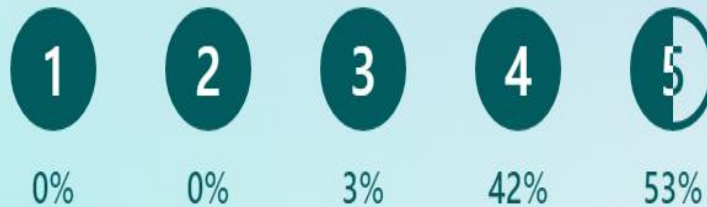
Do you feel confident within your scope of practice to use Align RT



Staff experience survey results

Do you feel that setting up patients is easier with Align RT rather than conventional method

4.5



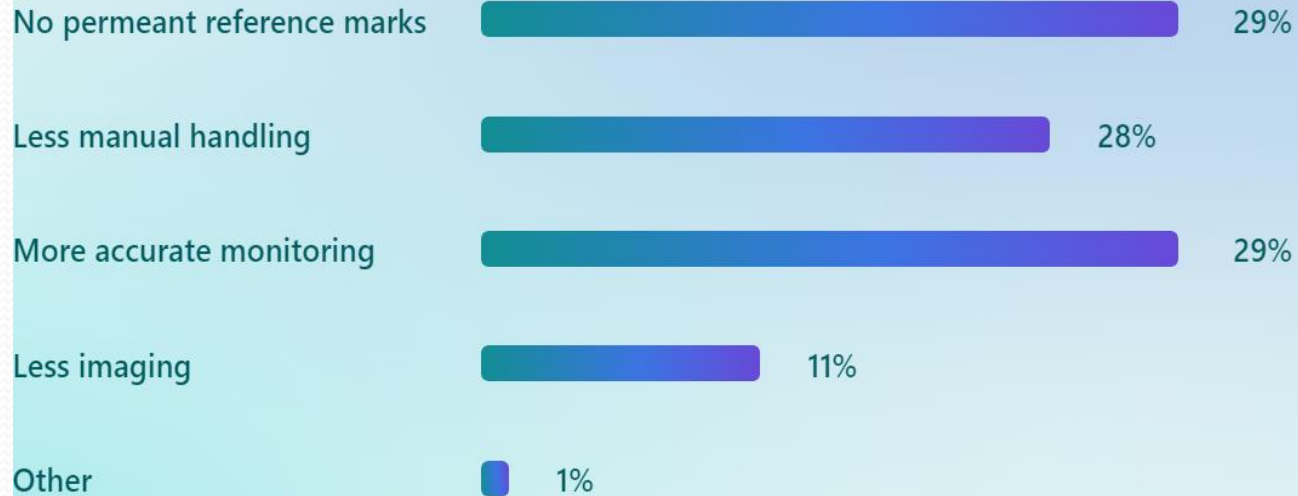
Staff experience survey results

What do you feel the benefits are to you as a radiographer, using Align RT

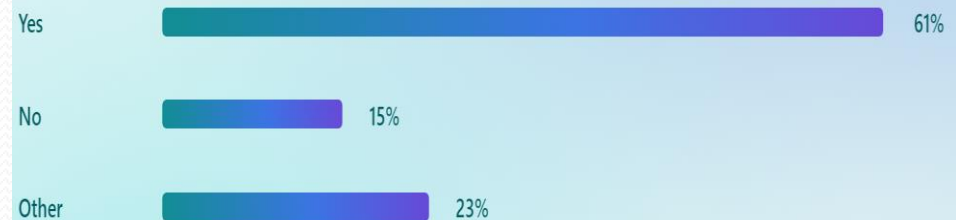


Staff experience survey results

What do you feel the benefits to patients are , using Align RT



Do you think Align RT should be standard of care for all patients?



Describe how easily you found it to adapt to using SGRT into your daily practice compared to previous treatment experience

"System is very user friendly which has made it easy to learn how to use. Apps training was excellent and relevant which isn't always the case "7 years qualified

"I found it quite straightforward just remembering the purpose of the system. Once I had done a few patients felt very confident with the system" 22 years qualified

Feel that I was able to adapt very easily, as it made the whole set up and treatment easier. The multiple breast set ups were previously often difficult to achieve, and often took a lot longer than a patients allocated time slot due to set up issues, imaging needing moves, breath hold achievement etc. " 4 years qualified

"Technology is very user friendly it was very easy to adapt to." 17 years qualified

Describe how easily you found it to adapt to using SGRT into your daily practice compared to previous treatment experience

"The system is user friendly and easy to navigate" 5 years qualified

"Quite easily - applications training was well delivered and opportunity to 'go live' after applications training allowed learning to be put into practice."

"Initially it was difficult getting your head around the different concepts and problem solving any difficulties but it feels now like it has always been here" 10 years experience

I felt comfortable with set up after about 2-3 days, over the past months I have become much more confident in the problem solving aspect using SGRT" 3 years qualified

Survey comments on SGRT benefits

"I think this is an excellent tool for helping reduce moving and handling strains, once the niggles are worked out fully I'm excited to see the future of it for the patients i.e. faceless masks etc."

"I think other than some difficult DIBH + Chabner bra patients all the other techniques are much faster now ie boosts, IMCs, 2+3fd breasts"

"Patients enjoy having treatment without tattoos, I have enjoyed seeing this cohort of patients get well needed assistance for setup."

Sim RT Staff experience survey results

To gain a full department overview, feedback was sought from the pre-treatment team.

Only 40% of the team had an awareness of SGRT and its purpose.



Staff experience survey results

Do you feel the on-site applications training prepared you for scanning the 1st DIBH patient using SimRT?

4.7



0%



0%



0%



20%



80%

Staff experience survey results

Do you feel that it is easier to scanner breathhold patients with simRT rather than conventional method

4.4

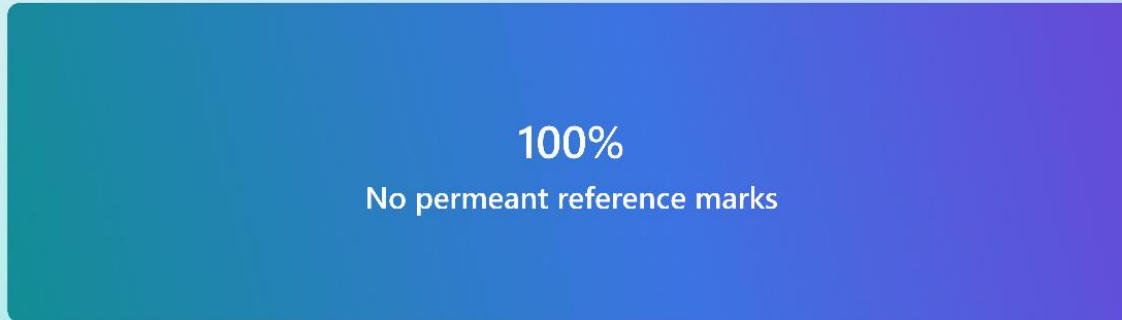


Do you feel confident within your scope of practice to use simRT

100%
Yes

Staff experience survey results

What do you feel the benefits to patients are , using Align RT



"DIBH with SimRT is very good, training from the external staff was excellent"

What do you feel the benefits are to you as a radiographer, using simRT



Advantages for the Team Leaders

Speed on boarding
new staff

Reduces variation in
treatment techniques
for same site which
reduces training
burden

Single competency

Developing
autonomous practice

Allowing time to train
on other aspects such
as imaging.

Able to rotate staff
with manual handling
restrictions to ease rota
burden.

Staff testimonials

I was nervous coming back onto a breast machine as historically they have been very difficult. SGRT was quick to pick up and does help make set ups more streamline. There is much less patient moving. Breath hold set ups are much better and the monitoring is easy to use and better for the patients. The LA3/LA4 team leaders have been great and really supportive“

Lauren Pinder 2023- Band 6

As a student I worked on a breast machine prior to the introduction of SGRT, and so I saw the impact of this technique on patients and staff. I was always nervous to be placed on a breast machine due to the complexity and variety of breast set ups, but using SGRT I have found that the set ups are more accurate and reproducible and have been made easier for staff with less manual handling involved. Upon progressing to a newly qualified member of staff I have found that using SGRT, alongside support from my team leaders, my confidence with the breast techniques has grown enabling me to be fully confident and competent in this technique

Lauren Oates 2023-Ex student and now Band 5

Improving the future advances of SGRT at RCC



Super users creating a problem solving guidance



Providing supportive evidence to keep momentum- time audits, image audits and staff satisfaction.



More sites to be treated staff will now be rotated through the SGRT machines meaning more staff trained in the use of SGRT for resilience.



Gated capture for lung patient



Surface capture for short scan lung patients



Expansion of Breath hold to nodal volumes(inc IMC) with CBCT verification in breath hold. Average treatment time 14 mins. Excellent cardiac comparison.

Breath hold to nodal volumes(inc IMC) with CBCT



Thank you for Listening

