

Workstation self-assessment recommendations

The following sections outline the tests that are recommended to be performed. These include:

- TG-18QC test pattern at the beginning of each reporting session (approx. 2 min)
- Clinical image quality assessment once only when setting up the remote workstation environment (approx. 30min)

TG18-QC test pattern

It is recommended that this pattern is uploaded onto the local PACS system, and viewed using their native PACS interface.

The following checklist must be completed at the beginning of each reporting session

General Image Quality

No smearing	
No artefacts	
Borders and lines of the pattern are visible and straight	
Pattern appears to be centered in the active area of the display device	
Ramps continuous	

Luminance

All 16 patches are distinctly visible	
5% patch visible	
95% Visible	

Resolution elements visible

Horizontal line pairs visible	
Vertical line pairs visible	
Central line pairs visible	

Number of Letters Visible (at least 11 or “QUALITY CONT”)

Dark	
Mid-grey	
Light	

Please see attached powerpoint document for further information on assessing the TG18-QC test pattern.

Clinical image quality assessment

Use the RANZCRCT Image Review Self-Audit Worksheets to evaluate 2 images from each category, as appropriate:

- CT Brain
- CT C-Spine
- CT L-Spine
- CT Chest Adult
- CT Chest (Hi-Resolution)
- CT Abdomen & Pelvis

Using the self-assessment checklist, determine if diagnostic quality is acceptably reproduced using home diagnostic workstation.

CT BRAIN DATA				
Image Quality Criteria	Scan 1	Scan 2	Scan 3	Scan 4
Visually sharp reproduction of the border between white and grey matter	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Visually sharp reproduction of the basal ganglia	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Visually sharp reproduction of ventricular margins	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Visually sharp reproduction of the CSF spaces over the surface of the brain and within the basal cisterns	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Visually sharp reproduction of large intracranial arteries and dural venous sinuses on contrast-enhanced images	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Visually sharp reproduction of pituitary stalk	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Visually sharp reproduction of the internal auditory canals, on bone windows	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Visually sharp reproduction of cortical bone and calvarial diploic bone, on bone windows	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
General Assessment	Scan 1	Scan 2	Scan 3	Scan 4
Noise	<input type="checkbox"/> Too little <input type="checkbox"/> Optimal <input type="checkbox"/> Too much	<input type="checkbox"/> Too little <input type="checkbox"/> Optimal <input type="checkbox"/> Too much	<input type="checkbox"/> Too little <input type="checkbox"/> Optimal <input type="checkbox"/> Too much	<input type="checkbox"/> Too little <input type="checkbox"/> Optimal <input type="checkbox"/> Too much
Spatial resolution	<input type="checkbox"/> Too little <input type="checkbox"/> Optimal <input type="checkbox"/> Too much	<input type="checkbox"/> Too little <input type="checkbox"/> Optimal <input type="checkbox"/> Too much	<input type="checkbox"/> Too little <input type="checkbox"/> Optimal <input type="checkbox"/> Too much	<input type="checkbox"/> Too little <input type="checkbox"/> Optimal <input type="checkbox"/> Too much
Diagnostic Quality	<input type="checkbox"/> Unacceptable <input type="checkbox"/> Borderline <input type="checkbox"/> Acceptable	<input type="checkbox"/> Unacceptable <input type="checkbox"/> Borderline <input type="checkbox"/> Acceptable	<input type="checkbox"/> Unacceptable <input type="checkbox"/> Borderline <input type="checkbox"/> Acceptable	<input type="checkbox"/> Unacceptable <input type="checkbox"/> Borderline <input type="checkbox"/> Acceptable
Comments <div style="border: 1px solid black; height: 40px; width: 100%;"></div>				

Your clinic can develop a clinically appropriate checklist dependent on the workload and what the reporting expectations are. For example, the [Criteria for evaluating the TG18 anatomical images](#) can be used.