

ASA response to RANZCR position statement on the provision of ultrasound-guided injections

21 March 2016



In December 2015, the Royal Australian and New Zealand College of Radiologists (RANZCR) released a [position statement](#) on the provision of ultrasound-guided injections in which it stated that RANZCR cannot support sonographers performing musculoskeletal injections due to the risk to patient safety.

The ASA is disappointed that RANZCR released this statement without first consulting the ASA since throughout 2015 the ASA regularly consulted RANZCR in the development of the course. The RANZCR statement was released less than 2 months prior to the course commencing and was the first indication that they strongly opposed this sonographer practice. The ASA was not given a chance to explain the content nor objectives of the course.

Consequently, many of the statements presented in support of RANZCR's position reflect an ongoing misunderstanding of the practice model facilitated by the Postgraduate Certificate in Ultrasound-guided Musculoskeletal Interventions and elements of the course itself.

Below is the ASA's response to each of the individual statements presented by RANZCR (RANZCR's statements are italicised; the ASA's responses are indented).

We are continuing to work with RANZCR to address the misunderstandings.

The clinical judgement of whether to perform an ultrasound-guided intervention requires medical clinical reasoning skills to assess the patient as a whole to determine that a therapeutic intervention is indicated and safe to perform. Medical training is required to be cognisant of the effect that an intervention may have on the patient, taking in to account co-morbidities, other medications they may be taking and whether the intervention will limit the patient's future treatment options.

Sonographers who have completed the *Postgraduate Certificate in Ultrasound-guided Musculoskeletal Interventions* (the Postgraduate Certificate) will be able to (subject to jurisdictional approval) administer low-risk ultrasound-guided musculoskeletal interventions at the direction of a radiologist or other medical specialist qualified to oversee these procedures.

The medical professional remains the person responsible for applying their medical clinical reasoning skills in assessing the patient as a whole and determining that a therapeutic intervention is indicated and safe to perform.

The usual and anticipated workflow in the comprehensive practice model leaves the radiologist in full control, and that concept is not challenged.

Some likely clinical scenarios may be as follows:

Scenario 1

The referring clinician requests a specific musculoskeletal injection be informed under ultrasound guidance:

- The sonographer clarifies the request with the radiologist, and reviews the provided clinical information and previous images. The sonographer completes pre-procedure documentation, clears contraindications and other safety issues before obtaining informed consent from the patient.
- Under departmental/workplace protocols specifying dose and sterility procedures, the sonographer performs the service, and documentation is completed to record the examination and injection process supported by images of the injection needle position.

Scenario 2

The referring clinician requests a specific musculoskeletal ultrasound examination, with an injection if indicated by the results of the imaging:

- The sonographer performs the initial examination, compiles any documentation, and presents this information to the radiologist for their review.
- At the direction of the radiologist, the trained sonographer clears contraindications, obtains informed consent and administers the ultrasound-guided injection as per documented departmental procedure. Documentation is completed to record the examination and injection process supported by images of the injection needle position.

A musculoskeletal intervention is a medical interaction between a doctor and a patient. Medical training is required to be able to interpret a request, assess a clinical situation, assess the risks and benefits of a procedure, assess the safety to inject a pharmaceutical, explain the planned intervention to a patient, obtain informed consent, perform a safe and targeted procedure, manage complications and provide guidance for post procedural care.

Under this model of practice the medical professional remains the person responsible for interpreting the referral, assessing the clinical situation, assessing the risks and benefits of the procedures and assessing the safety to inject a pharmaceutical. The medical practitioner also remains responsible for oversight of specifically trained staff, to confirm the patient has had an adequate description of the procedure, informed consent was obtained, and that adequate post procedure care was provided.

The purpose of the Postgraduate Certificate is to provide evidence-based education that builds competency in experienced musculoskeletal sonographers to perform these roles under the general guidance/delegation of the medical professional.

Referrals for ultrasound-guided interventions are commonly based on radiographic, ultrasound, computed tomography (CT), magnetic resonance imaging (MRI) and/or nuclear medicine studies. Injections should be performed by a trained medical practitioner who is able to interpret all diagnostic imaging modalities (not just ultrasound) to assess and plan for an intervention and to decide whether ultrasound is the most suitable modality to guide the intervention.

As above, the medical professionals currently responsible for generating and receiving the referral (e.g. referring doctor and radiologist) for these low-risk ultrasound-guided interventions will remain the decision makers in assessing and determining the appropriateness of a course of treatment and whether ultrasound is the most suitable modality to guide an intervention.

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continued



Sonographers who are undertaking or have completed the Postgraduate Certificate will be able to (subject to jurisdictional approval) administer low-risk ultrasound-guided musculoskeletal interventions under the delegation of a medical professional, where the medical practitioner has determined this is the most appropriate treatment pathway for the patient.

The decision re injections involves not only the patient and radiologist interaction but also the referrer and radiologist interaction. This latter interaction requires a medical degree level of knowledge to ensure proper patient care.

This practice model does not replace the important factor of the medical professional's clinical decision making. The medical professional remains key: through doctor-patient interaction; through interaction with the referrer; and determining the appropriate treatment pathway for the patient.

Under this model the medical professional will be supported by experienced musculoskeletal sonographers who may administer low-risk ultrasound-guided musculoskeletal interventions at the medical professional's direction.

The injection of prescription drugs (such as local anaesthetic and cortisone) by a sonographer is currently illegal, except in extremely limited circumstances. The assessment of the safety to inject pharmaceuticals, assessment of dosages required and assessment of contraindications to the injection of pharmaceuticals requires medical training and clinical reasoning.

This is incorrect. Importantly, participation in and completion of the Postgraduate Certificate provides the required education for experienced, accredited sonographers to administer a selection of low-risk ultrasound-guided musculoskeletal interventions only, at the direction of a radiologist or other medical professional.

The ASA has received confirmation from the governments of New South Wales and South Australia that this is an allowable practise for sonographers under their respective legislation/regulation. The ASA also has agreement from the Queensland Government for individual authorities for sonographers to undertake this practise where they are participating in, or have completed, the Postgraduate Certificate.

In 2016, only sonographers from New South Wales, South Australia and Queensland are eligible to undertake the course. The ASA is continuing to work closely with the Victorian Government,

and other jurisdictional governments, who are supportive of this extended sonographer practice. The ASA is committed to ensuring appropriate arrangements are in place to assure patient safety and the legality of this practice prior to making the qualification available to sonographers in those jurisdictions.

Medical practitioners performing injections must be trained and competent in the management of anaphylaxis and resuscitation.

The ASA agrees that recognition and management of anaphylaxis is an important skill for any health professional who is involved in performing these injections. A requirement of sonographers who are undertaking the Postgraduate Certificate is that they only practice when a clinician trained in the management of anaphylaxis and resuscitation is actually on-site.

We do not believe there is a radiologist workforce shortage that would limit patient access to MSK injections performed by a medical practitioner.

Timely access for patients to these low-risk musculoskeletal interventions at health services in close physical proximity to the patient is widely regarded as essential for good clinical outcomes.

The Australian Commonwealth Government reports there is a workforce shortage of radiologists, particularly in regional and rural areas of Australia, which will be impacted further by the growing demand for services provided by radiologists and an ageing workforce.¹

Providing an evidence-based course of education to sonographers to build competency in experienced musculoskeletal sonographers to administer these low-risk ultrasound-guided musculoskeletal interventions provides a potential systemic improvement. This empowers the radiologist to self-determine the best use of their time, and builds their capacity for other essential responsibilities or higher risk health services, to meet these demands.

This system change is supported by a growing body of evidence that experienced musculoskeletal sonographers administering low-risk ultrasound-guided musculoskeletal interventions is a safe and reliable system solution with recognised benefits including reducing patient waiting times, freeing up of radiologists for other duties, greater potential for recruitment and retention, cost-effectiveness, and higher levels of job satisfaction.

1. Health Workforce Australia (2012). *Health Workforce 2025 – Volume 3 – Medical Specialties*.