An Initial Framework for use of Ultrasound by Speech and Language Therapists in the UK: Scope of Practice, Education and Governance

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An adaptable model for supporting expansion of ultrasound across a range of Speech and Language Therapy (SLT) services, including those outside of the current scope of SLT practice and under research development
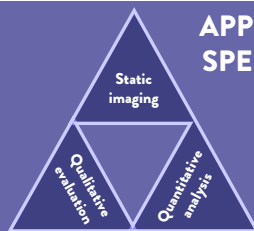
APPLICATIONS OF ULTRASOUND IN SPEECH, VOICE AND SWALLOWING

Static imaging
Qualitative evaluation
Quantitative analysis

Assessment
Screening
Treatment
Biofeedback
Outcome Measurement
Education & Training

SCOPE OF PRACTICE FOR SPEECH AND LANGUAGE THERAPISTS

DEPENDENT ON:
Clinical domain
Multidisciplinary support
Clinical utility & usability
Research evidence

CURRENT EMPHASIS ON:

Static imaging of structures as part of staff and patient education to enable:
⚠ Understanding of normal anatomy
⚠ Landmark identification as a precursor to dynamic imaging
⚠ Theoretical and technical skill development

Qualitative evaluation of structures for biofeedback therapy or augmentative assessment tool to:
⚠ Improve understanding of normal speech, voice and/or swallowing movements
⚠ Support differential between normal versus disordered movement (e.g. presence vs absence of vocal fold movement)

FURTHER EXPANSION AS RESEARCH EVOLVES

EDUCATION & COMPETENCY

Intermediate
Advanced
CLINICAL APPLICATION
JOB ROLE
PREREQUISITE SKILL & COMPETENCY
ADVANCED PRACTICE AGENDA
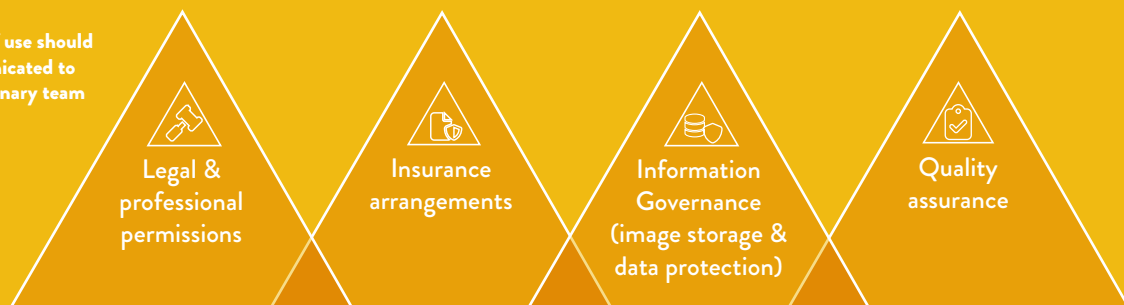Foundation

EDUCATIONAL ELEMENTS:

⚠ **Theoretical understanding**: (i) understanding how an ultrasound image is generated & (ii) safety & professional considerations

⚠ **Technical skill:** image acquisition & optimisation

⚠ **Analysis & Interpretation:** (i) static imaging (ii) qualitative evaluation (iii) quantitative analysis

INSURANCE & GOVERNANCE

Rationale and remit of use should be clarified & communicated to the wider multidisciplinary team

INCLUDES:

Legal & professional permissions

Insurance arrangements

Information Governance (image storage & data protection)

Quality assurance

RESEARCH

Expansion of the evidence base in relation to if, where and how ultrasound can enhance clinical effectiveness and efficiency of SLT assessment/treatment pathways, including:

⚠ Application as a quantitative assessment tool
⚠ Improvement in ultrasound technology (e.g. machine learning & auto-tracking)
⚠ Optimum SLT training & education
⚠ Service delivery models

Opportunities for pooled research and inter-disciplinary collaboration.
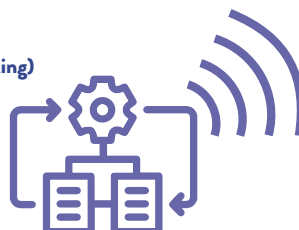
This framework has been endorsed by the RCSLT

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