

**Physiotherapy Lung Ultrasound (LUS) Training**

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# Introduction / Purpose

This document aims to provide specific guidance for physiotherapists training in lung ultrasound (LUS) examinations and the maintenance of their LUS scanning competencies/capabilities. This document expands on the training sections in [CORP/POL/455](http://fcsp.xfyldecoast.nhs.uk/trustdocuments/Documents/CORP-POL-455.docx) – “*Management of Ultrasound by Non-Radiologists and Non-Sonographers”* (1).

N.B. Lung ultrasound (LUS) is one of the imaging modalities within the wider overarching term Point-of-Care Ultrasound (POCUS).

## Scope of Practice

From the Chartered Society of Physiotherapists (CSP): *“The CSP clearly recognises POCUS as being within the scope of physiotherapy practice of the profession as a whole and recognises a Professional Network Electrophysical Agents and Diagnostic Ultrasound (EPADU) as representing those CSP members with a specialist interest in POCUS. Ultrasound imaging and its application as a diagnostic modality sits within the third pillar of physiotherapy practice of ‘therapeutic and diagnostic technologies”* (CSP ‘Context’ PD0138, 2022, p6 (2)).

*“For physiotherapists using POCUS as part of their physiotherapy work, they hold the professional autonomy for determining when a POCUS scan is indicated, and for what purpose it is used. They must also be educated, trained, and competent in POCUS for it to form part of their personal scope of practice”* (CSP ‘Context’ PD0138, 2022, p6 (2)).

This document should be read in conjunction with the following documents:

* The Chartered Society of Physiotherapy (CSP) – “Context of Physiotherapists using Point of Care Ultrasound (POCUS) in physiotherapy practice, PD0138” (2022 (2)).
* The Chartered Society of Physiotherapy (CSP) – “Practice Guidance for Physiotherapists using Point of Care Ultrasound (POCUS) in physiotherapy practice, PD0139” (2022 (3)).
* British Medical Ultrasound Society (BMUS) – “Recommendations for specialists practicing ultrasound independently of radiology departments; Safety, governance, and education” (2023 (4)).
* The Association of Chartered Physiotherapists in Respiratory Care (ACPRC) “Lung ultrasound position statement” (2021 (5)).

# General Principles / Target Audience

This guideline applies to physiotherapists who have completed (or who are working towards) their competencies in diagnostic lung ultrasound (LUS), which informs their clinical management, and who are employed by, or working on behalf of Blackpool Teaching Hospitals (BTH).

The guideline applies to paediatric and adult patients at BTH who have been referred to the physiotherapy service, or who have been identified by a member of the physiotherapy team, as having an indication for respiratory physiotherapy input and requiring the use of LUS as part of the assessment process.

LUS can be used on any of the BTH in-patient or out-patient areas at the discretion of the treating physiotherapist.

# Definitions and Abbreviations

**BMUS** British Medical Ultrasound Society

**BTH** Blackpool Teaching Hospitals NHS Foundation Trust

**CACTUS** Children’s Acute Ultrasound

**CPD** Continuous Professional development

**CSP** Chartered Society of Physiotherapists

**FAMUS** Focused Acute Medicine Ultrasound

**FUSIC** Focused Ultrasound in Intensive Care

**HCPC** Health and Care Professions Council

**LUS** Lung Ultrasound

**POCUS** Point-of-Care Ultrasound

**QA** Quality Assurance

# Responsibilities (Ownership and Accountability)

The responsibility for the implementation of this procedure lies with the individual directorate whose staff are training in LUS. It is suggested that this service be supported by a lead for LUS, who can ensure adequate governance and prevent disrepute of the service.

# Education and Training Requirements

## Training Programme

Physiotherapists using LUS should have completed and gained accreditation in one of the following recognised LUS training programmes:

Intensive Care Society (ICS)

* Focused Ultrasound in Intensive Care (FUSIC) Lung Ultrasound module (6)
* Children’s Acute Ultrasound (CACTUS) Lung Ultrasound module (7)

Society of Acute Medicine (SAM)

* Focused Acute Medicine Ultrasound (FAMUS) Lung Ultrasound module (8)

## Typical Societal Training Format

### Theoretical Training and Introductory Practice

Accreditation will require attendance at an introductory theoretical training course in a LUS module or a similar standard. Where possible it is recommended for physiotherapists to complete a course, at least in part, run by a physiotherapist to gain insight into the uses of LUS for physiotherapists, or through locally delivered training ensuring that the theoretical and knowledge-based aspects of the syllabus are covered and approved by the accrediting society.

### Supervised Practice

The first 10 scans performed on patients will be directly supervised by an experienced LUS professional with societal approval as a trainer/mentor. LUS scan findings can only be documented in the medical notes when counter-signed by the trainer/mentor at this stage.

### Unsupervised Practice and Completion of the Logbook

For scans 11 and above, the trainee performs the LUS scans on patients without direct supervision. The unsupervised LUS scan findings should **not** be documented in the notes without prior confirmation from a LUS-accredited colleague. To prevent “phantom scanning” (a scan being performed but no corresponding record in the patient’s medical notes), the documentation of a “Training Lung Ultrasound Scan” should be recorded in the medical notes, **without** a corresponding report of the findings. This protects the medical / physiotherapy team from acting upon findings performed by a trainee who have not met the requirements for accreditation.

A training LUS reporting form for the trainee's logbook must be completed for each scan.

### Assessment of LUS Competency

It is at the trainer / mentor’s discretion when the trainee has met the required skills and capability to consider attempting the final assessment for accreditation.

On successful completion of the assessment, the relevant paperwork is signed and sent to the corresponding society for consideration. A certification is received on acceptance of your accreditation.

## Core aspects of clinical training

* Patient care
* Patient and staff communication
* Timeliness of examination and complementary imaging
* Equipment controls ([CORP/POL/036](http://fcsp.xfyldecoast.nhs.uk/trustdocuments/Documents/CORP-POL-036.docx) (9))
* Equipment care, QA, and fault recognition ([CORP/POL/036](http://fcsp.xfyldecoast.nhs.uk/trustdocuments/Documents/CORP-POL-036.docx) (9))
* Image acquisition and interpretation involving normal and abnormal
* Storage of images
* Report writing
* Onward recommendations and management.

## Evidence of Training

Documentary evidence of training should be undertaken as follows:

* Record of attendance at a society-approved LUS introductory course.
* Evidence of completion via an approved society certificate.
* A copy of the certificate should be shared with the department's LUS lead.

## Maintaining competency / Continued Professional Development (CPD)

It is the physiotherapists’ responsibility to maintain their LUS skills, knowledge, and competence in line with the Health and Care Professions Council (HCPC) Standards of conduct, performance, and ethics (2024 (10)).

The CSP recommends that all members are able, if required, to provide evidence of learning that demonstrates their ongoing education and training, and that they can demonstrate competence in LUS use through a range of continuing professional development activities.

BTH supports the maintenance and development of therapy staff knowledge & skills through procedural document [THERA/SOP/001](http://fcsp.xfyldecoast.nhs.uk/trustdocuments/Documents/THERA-SOP-001.docx) – “*Continuing Professional Development (CPD)”* (11).

Options for physiotherapists to maintain/develop LUS capability and confidence, including but are not limited to the following:

* Attendance on an introduction to LUS course as a refresher
* Peer LUS scanning sessions
* Supervised LUS scanning sessions with a recognised LUS trainer/mentor
* Progress towards becoming a LUS trainer/mentor status
* Access e-learning material
* Attend a webinar/study day

A bi-monthly audit of LUS scan frequency will monitor for potential early signs of LUS skill fade. Those with a low scanning frequency (less than 2 scans per month) will be offered support to maintain their LUS capability and confidence. If no LUS scans are performed within a 12-month period, physiotherapists should cease any scanning until a review and re-assessment of their capability has been performed. It is the physiotherapist's responsibility to seek additional support if they, or others around them, perceive a shortfall in either LUS scanning capability or confidence.

## Becoming a LUS trainer/mentor

Following a minimum of 12-months LUS practice, both the ICS and SAM will accept and consider applications to become a LUS trainer / mentor. Applications can be made online via their respective websites.

Development opportunities to support a trainer/mentor application:

* Faculty on an introduction to LUS course
* Co-mentor a trainee with an approved trainer/mentor
* Attend a LUS “Train-the-Trainer” course
* Complete an Advanced LUS course

# Equipment usage

All staff using the physiotherapy ultrasound equipment are to be signed off as trained in the use of each ultrasound machine they use under the BTH medical devices Corporate Procedure [CORP/POL/036](http://fcsp.xfyldecoast.nhs.uk/trustdocuments/Documents/CORP-POL-036.docx) – “*Management of Medical Devices”* (9).

# LUS Scan Frequency Monitoring

The use of LUS by physiotherapists will be continuously monitored through self-reporting of completed scans on the “LUS scan tracker” located on the departmental Teams channel. A review of scan frequency will be completed each month as a measure of continued LUS scanning experience to highlight any potential decline in an individual's LUS capability.

# References and Associated Documents

1. **BTHFT - Policy.** Management of Ultrasound for staff Practicing Independently of the Radiology Department. [Online] 11 07 2024. [Cited: 11 03 2025.] http://fcsp.xfyldecoast.nhs.uk/trustdocuments/Documents/CORP-POL-455.docx. CORP/POL/455.

2. **Chartered Society of Physiotherapy.** Information Paper: Context of Physiotherapists using Point of Care Ultrasound (POCUS) in physiotherapy practice. [Online] 04 2022. [Cited: 11 03 2025.] https://www.csp.org.uk/system/files/publication\_files/PD138\_POCUSContext\_e1\_Apr22\_0.pdf. Reference: PD0138.

3. —. Information Paper: Practice Guidance for Physiotherapists using Point of Care Ultrasound (POCUS) in physiotherapy practice. [Online] 04 2022. [Cited: 11 03 2025.] https://www.csp.org.uk/system/files/publication\_files/PD139\_POCUSPracticeGuidance\_e1\_Apr22.pdf. Reference: PD0139.

4. **A joint collaboration by the British Medical Ultrasound Society and The Royal College of Radiologists.** Recommendations for specialists practising ultrasound independently of radiology departments. *Safety, governance and education -.* [Online] 04 2023. [Cited: 11 03 2025.] https://www.bmus.org/media/resources/files/BMUS\_\_RCR\_PoCUS\_guidance\_vi1AN2U.pdf.

5. **Lead Author: Owen Gustafson.** Association of Chartered Physiotherapists in Respiratory Care position statement: Physiotherapists use of lung ultrasound. *ACPRC. Issue Name: 2021 Journal (Vol. 53 Issue 2). Article Location: p147-150.* [Online] 31 05 2022. [Cited: 11 03 2025.] https://www.acprc.org.uk/research-publications/journal/2021-journal-vol-53-issue-2/association-of-chartered-physiotherapists-in-respiratory-care-position-statement-physiotherapists-use-of-lung-ultrasound/.

6. **Intensive Care Society.** FUSIC®. *Focused Ultrasound in Intensive Care .* [Online] [Cited: 11 03 2025.] https://ics.ac.uk/learning/fusic.html.

7. —. Children’s Acute Ultrasound (CACTUS). [Online] [Cited: 11 03 2025.] https://ics.ac.uk/learning/cactus.html.

8. **The Society for Acute Medicine.** FAMUS - Focused Acute Medicine Ultrasound. [Online] [Cited: 11 03 2025.] https://www.acutemedicine.org.uk/FAMUS/.

9. **BTHFT - Policy.** Management of Medical Devices. [Online] 18 05 2021. [Cited: 11 03 2025.] http://fcsp.xfyldecoast.nhs.uk/trustdocuments/Documents/CORP-POL-036.docx. CORP/POL/036.

10. **Health and Care Professions Council.** Standards of conduct, performance and ethics. [Online] 2024. [Cited: 11 03 2025.] https://www.hcpc-uk.org/globalassets/resources/standards/standards-of-conduct-performance-and-ethics-2024.pdf.

11. **BTHFT - Procedure.** Continuing Professional Development (CPD). [Online] 09 05 2023. [Cited: 11 03 2025.] http://fcsp.xfyldecoast.nhs.uk/trustdocuments/Documents/THERA-SOP-001.docx. THERA/SOP/001.

| Appendix 1: Equality Impact Assessment Form | | | | | | | | | | | | | | |
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| **Department** | Physiotherapy | | | **Service or Policy** |  | | | **Date Completed:** | | | | 10.10.24 | | |
| **GROUPS TO BE CONSIDERED**  Deprived communities, homeless, substance misusers, people who have a disability, learning disability, older people, children and families, young people, Lesbian Gay Bi-sexual or Transgender, minority ethnic communities, Gypsy/Roma/Travellers, women/men, parents, carers, staff, wider community, offenders. | | | | | | | | | | | | | | |
| **EQUALITY PROTECTED CHARACTERISTICS TO BE CONSIDERED**  Age, gender, disability, race, sexual orientation, gender identity (or reassignment), religion and belief, carers, Human Rights and social economic / deprivation. | | | | | | | | | | | | | | |
| **QUESTION** | | | **RESPONSE** | | | | | | | **IMPACT** | | | | |
| Issue | | | Action | | | | Positive | | | | Negative |
| What is the service, leaflet or policy development?  What are its aims, who are the target audience? | | | Lung ultrasound (LUS) policy  All patients suitable for LUS | | |  | | | |  | | | |  |
| Does the service, leaflet or policy/ development impact on community safety   * Crime * Community cohesion | | | No | | |  | | | |  | | | |  |
| Is there any evidence that groups who should benefit do not? i.e. equal opportunity monitoring of service users and/or staff. If none/insufficient local or national data available consider what information you need. | | | No | | |  | | | |  | | | |  |
| Does the service, leaflet or development/ policy have a negative impact on any geographical or sub group of the population? | | | No | | |  | | | |  | | | |  |
| How does the service, leaflet or policy/ development promote equality and diversity? | | | Applies to all patients | | |  | | | |  | | | |  |
| Does the service, leaflet or policy/ development explicitly include a commitment to equality and diversity and meeting needs? How does it demonstrate its impact? | | | No | | |  | | | |  | | | |  |
| Does the Organisation or service workforce reflect the local population? Do we employ people from disadvantaged groups | | | Not applicable | | |  | | | |  | | | |  |
| Will the service, leaflet or policy/ development   1. Improve economic social conditions in   deprived areas   1. Use brown field sites 2. Improve public spaces including creation of green spaces? | | | Not applicable | | |  | | | |  | | | |  |
| Does the service, leaflet or policy/ development promote equity of lifelong learning? | | | Yes | | |  | | | |  | | | |  |
| Does the service, leaflet or policy/ development encourage healthy lifestyles and reduce risks to health? | | | Yes | | |  | | | |  | | | |  |
| Does the service, leaflet or policy/ development impact on transport?  What are the implications of this? | | | No | | |  | | | |  | | | |  |
| Does the service, leaflet or policy/development impact on housing, housing needs, homelessness, or a person’s ability to remain at home? | | | No | | |  | | | |  | | | |  |
| Are there any groups for whom this policy/ service/leaflet would have an impact? Is it an adverse/negative impact? Does it or could it (or is the perception that it could exclude disadvantaged or marginalised groups? | | | Yes- +ve impact as an alternative imaging option. | | |  | | | |  | | | |  |
| Does the policy/development promote access to services and facilities for any group in particular? | | | No | | |  | | | |  | | | |  |
| Does the service, leaflet or policy/development impact on the environment   * During development * At implementation? | | | No | | |  | | | |  | | | |  |
| **ACTION:** | | | | | | | | | | | | | | |
| **Please identify if you are now required to carry out a Full Equality Analysis** | | | | | | |  | | **No** | | **(Please delete as appropriate)** | | | |
| **Name of Author:**  **Signature of Author:** | | **Simon Hayward** | | | | | | | **Date Signed:** | | | | **28.10.24** | |
|  | | | | | | | | | | | | |  | |
| **Name of Lead Person:**  **Signature of Lead Person:** | |  | | | | | | | **Date Signed:** | | | |  | |
|  | | | | | | | | | | | | |  | |
| **Name of Manager:**  **Signature of Manager** | |  | | | | | | | **Date Signed:** | | | |  | |
|  | | | | | | | | | | | | | | |