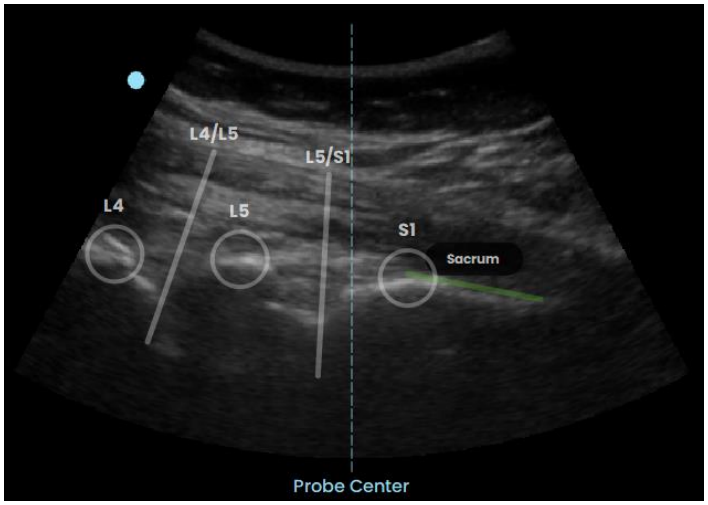
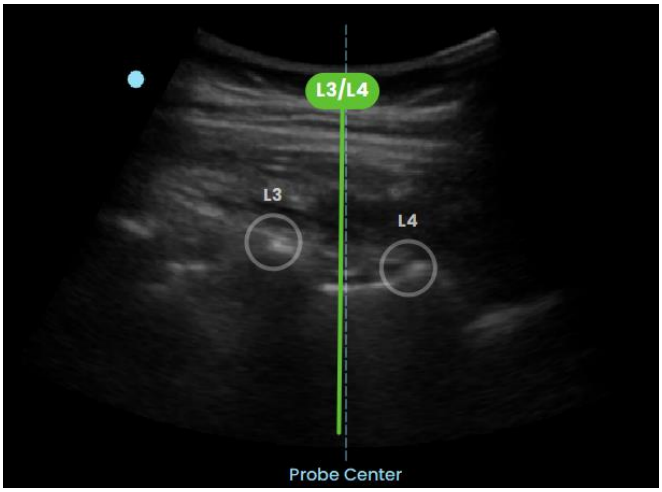
Annexe A

How uSINE® works

- The patient will take a seated position with the lower back exposed.
- Ultrasound gel will be applied to the lower back before the doctor places a curved ultrasound probe at the base of the spine (sacrum).
- The graphical interface of the software, integrated with the ultrasound machine, guides the doctor to first identify the spine as a green line. The ultrasound probe then moves in a steady vertical upward longitudinal direction of the spine and identifies the posterior arch of the vertebral bone (lamina) which will then be marked as a white circle.

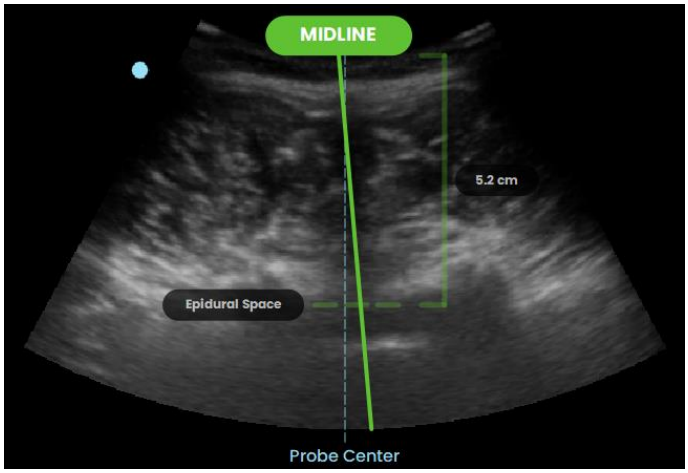


- The spaces between the spine are marked with white diagonal lines.
- The L3-L4 space is demarcated differently for easy identification.
- When the L3-L4 space is aligned with the probe centre, the outline will then turn green and when the readings are stable, an audio cue will be played. The skin marking can then be made on the patient's back at the centre of the probe.



- After the longitudinal section of the scan is completed, the doctor will turn the probe 90 degrees clockwise around the probe centred to the transverse view.
- The transverse scan consists of horizontal movements of the ultrasound probe along the previously marked line at the level of L3-L4 by the doctor with minimal rotational movements to obtain the best view.

- The AI-software programme assists the doctor in finding the best view. The green lines pertaining to the epidural space and depth will then appear if the correct site is identified. The position will then be indicated with a vertical line at the midline of the probe to allow a mark using a surgical skin marker.



- The AI-software programme will give instructions only when all the anatomical landmarks are identified, and the doctor will use the identified needle entry insertion point to attempt spinal anaesthesia insertion.

Scan below or visit https://shorturl.at/fluMX to watch a video on how uSINE® works.