

SCAN STRONG · A STARTING SONOGRAPHY GUIDE

SET UP RIGHT FROM DAY ONE

a gentle guide to ergonomics and positioning for new sonographers

You will spend your whole exam focused on your patient, which is exactly right. This guide helps you take care of yourself at the same time: how to set up the room, where to put your arm, and a few easy habits that keep you comfortable and scanning for a long career.

ALMOST EVERYONE FEELS IT

which is why it is worth learning early

90%

HAVE FELT IT

Close to nine in ten sonographers report aches or symptoms related to scanning at some point.

Evans, Roll and Baker, Journal of Diagnostic Medical Sonography, 2009

80%+

NOT A NEW STORY

More than eight in ten said the same in 1997. Good habits matter just as much as good equipment.

Pike and colleagues, Journal of Diagnostic Medical Sonography, 1997

57%

KEPT IT QUIET

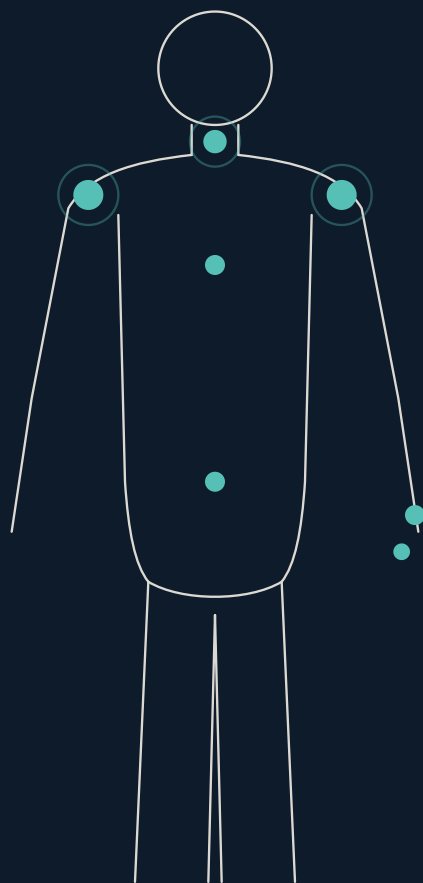
Many never mentioned it at work. Speaking up early is always okay.

SDMS and Sound Ergonomics survey, reported in Radiology Today, 2009

The good news: most of it comes down to setup and habits you can start on your very first day.

WHERE YOU MAY FEEL IT

six areas to keep an eye on



01

SHOULDER

The most reported site. Holding the arm out and away loads the rotator cuff all day.

03

WRIST AND HAND

Twisting and pushing with the transducer, especially in vascular and small parts.

05

UPPER BACK

Leaning toward the patient pulls the shoulder blades forward and up.

02

NECK

A close second. Turning to a monitor that sits off to the side, exam after exam.

04

THUMB

A tight pinch grip strains the tendons at the base of the thumb.

06

LOW BACK

Long standing, bending over portables and reaching across a wide bed.

SMALL HABITS ADD UP

easy to fix once you know them

01

REACHING ACROSS

Stretching across the patient works your shoulder and upper back harder than it needs to.

04

PORTABLE EXAMS

Bedside scans take away your adjustable bed, chair and monitor. Posture is the first thing to go.

02

ARM HELD OUT

An elbow lifted away from your side squeezes the shoulder joint and tires the rotator cuff.

05

TIGHT GRIP

Squeezing the transducer harder than needed tires the thumb, wrist and forearm.

03

HOLDING STILL

Even a good posture hurts when it never changes. Muscles need movement to get blood flow.

06

MONITOR OFF CENTER

A screen too high, too low or off to the side keeps your neck twisted the entire exam.

SIGNS TO PAY ATTENTION TO

your body gives gentle signals first

01

END OF SHIFT SORENESS

Achiness that builds through the day. Notice whether it fades overnight.

02

NUMBNESS OR TINGLING

Pins and needles in the hand or arm can mean a nerve is being compressed.

03

WEAKER GRIP

Dropping things or struggling to hold pressure on the transducer.

04

THUMB PAIN

Pain at the base of the thumb during or after scanning is a classic overuse sign.

05

STIFF NECK

Less range of motion, especially first thing in the morning.

06

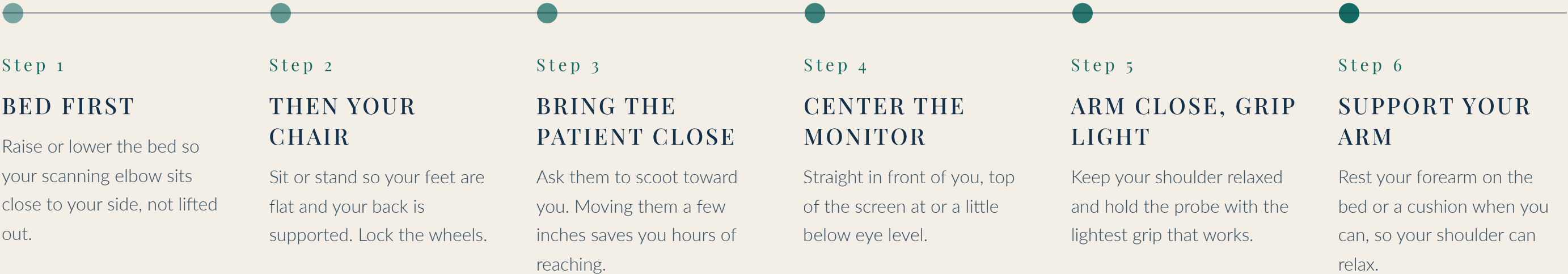
ACHES AT NIGHT

Trouble getting comfortable at night is worth mentioning to a provider.

Any of these lasting more than two weeks? See a healthcare provider. Early care makes the biggest difference.

SET UP THE ROOM FIRST

thirty seconds before the probe touches the patient



Shoulder abduction under 30 degrees and less reaching are the big goals (Murphey, 2017). Everything else follows.

THE FIVE MINUTE ROUTINE

three short resets, every shift

Before your first patient

2 min

Chin tucks, 10 reps
Shoulder rolls, 10 reps
Thoracic extensions, 10 reps

Between patients

60 sec

Chest stretch in a doorway, 20 seconds each side
Wrist stretch, 15 seconds each way
10 slow shoulder blade squeezes

End of shift

2 min

Hip flexor stretch, 30 seconds each side
Upper trap stretch, 30 seconds each side
Slow upper back rotations, 5 each side

Consistency beats intensity. The between patient reset is the one that matters most.

STRETCH LIBRARY

save this to your phone

01

CHIN TUCKS

Undoes the forward head from watching the monitor.
Hold 3 seconds · **Do** 10 reps, 2 to 3 times a day

04

WRIST FLEXOR STRETCH

Relieves the forearm that does all the gripping.
Hold 20 to 30 seconds · **Do** every hour of scanning

02

UPPER TRAP STRETCH

Releases the shoulder you keep hiked up.
Hold 30 seconds each side · **Do** 2 to 3 times a shift

05

THORACIC EXTENSION

Reverses the hunch from leaning toward the patient.
Hold 3 seconds · **Do** 10 reps, twice a shift

03

DOORWAY CHEST STRETCH

Opens the chest that rounds forward while scanning.
Hold 30 seconds · **Do** every 2 to 3 patients

06

HIP FLEXOR STRETCH

Loosens hips that tighten from standing all day.
Hold 30 seconds each side · **Do** at the end of every shift

Stretch gently. Stop anything that causes sharp pain, and check with your provider if you are already injured.

THE 30 SECOND CHECK

eight easy things, every patient

☐ **RAISE THE BED**

High enough that your arm stays close to your side.

☐ **CENTER THE MONITOR**

Straight ahead, top of the screen at eye level or just below.

☐ **SHORTEN THE REACH**

Move your whole body, not just your arm.

☐ **CHECK YOUR POSTURE**

Feet flat, spine neutral, shoulders down.

☐ **BRING THE PATIENT CLOSE**

Move them to you instead of reaching for them.

☐ **ELBOW NEAR YOUR SIDE**

Keep the scanning arm close to your body.

☐ **LOOSEN YOUR GRIP**

The lightest hold that still gives you the image.

☐ **BREATHE**

One slow breath drops tension you did not know was there.