

Exploring the ICU Education Experience Across London During the COVID Pandemic: Survey Results

Nurses Redeployed to ICU

London Transformation and Learning Collaboration (LTLC)

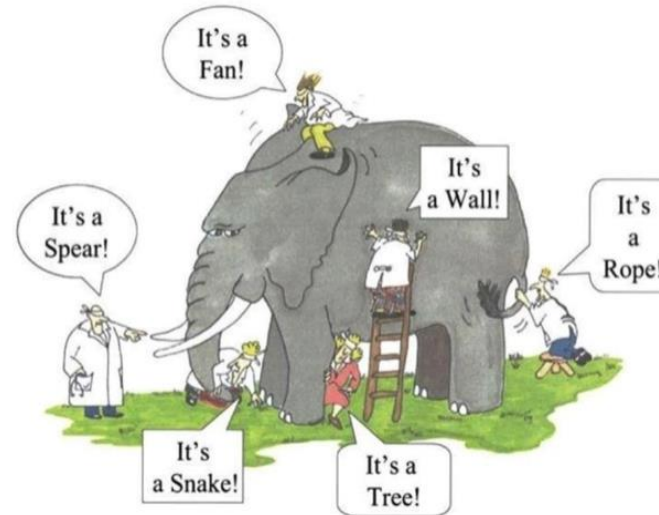
NHS England and NHS Improvement



Purpose of the London Transformation & Learning Collaborative (LTLC)

We want to assist system working and move forward in a way that will support growth and optimise effectiveness.

- Work **collaboratively**
- Share **best practice** across organisations, systems and the region
- Enable colleagues to be more prepared to work in an expanded critical care as well as in the event of a second surge thereby **improving staff experience**
- Support each other in **improving patient outcomes**
- Providing training content and structure that can be delivered **consistently and effectively**



To optimise the performance of the entire system, stakeholders need to shift from trying to optimise their element of the system to improving relationships among its constituent elements. They need to shift towards thinking systemically.

About the LTLC Programme:

Purpose

- To increase the supply and resilience of staffing for critical care across London
- To develop a London plan that seeks to ensure that the NHS workforce is equipped with the skills and capabilities to manage existing demand, potential future spikes in demand as a result of Covid-19 and longer-term permanent expansion of critical care capacity in London.

Primary outcome

- To cross-skill staff to support the London region to expand ICU capacity with the potential to open more critical care beds in surge

Scope

- Develop clinical education transformation capability across the NHS in London: Develop transformation programmes which align to patient need, service model, and workforce models.
- Co-ordinate design and delivery of training to support London's response to Covid-19: Establish innovative education delivery models that will support the development of an agile workforce that has the robust capability to deal with a second surge.

Survey Aims and Research Questions

Aim: Explore education experiences of those who worked in ICUs across London during the COVID pandemic; both those who worked in ICU and those who were redeployed to ICU

Research Questions:

1

ICU staff delivering education

- Demographics
- Education successes
- Education challenges
- Useful professional groups
- Support needed for a second surge
- Would collaborating with other ICUs help?
- Training resources and IT systems used

179 responses

2

ICU staff receiving education

- Demographics
- Useful elements of training
- Elements of preparation that were missing
- What would you do differently?

138 responses

3

Non-ICU/Redeployed staff

- Useful elements of training
- Training that was missing
- Useful things learnt (how and from who)
- Steepest learning curve (how it was overcome)
- Training resources used
- What would you do differently?
- Advice to a colleague going to work in ICU

616 responses

Total = 933 responses

Survey Results: Responses from Nurses that were redeployed to ICU during the pandemic

Total = 218 Responses

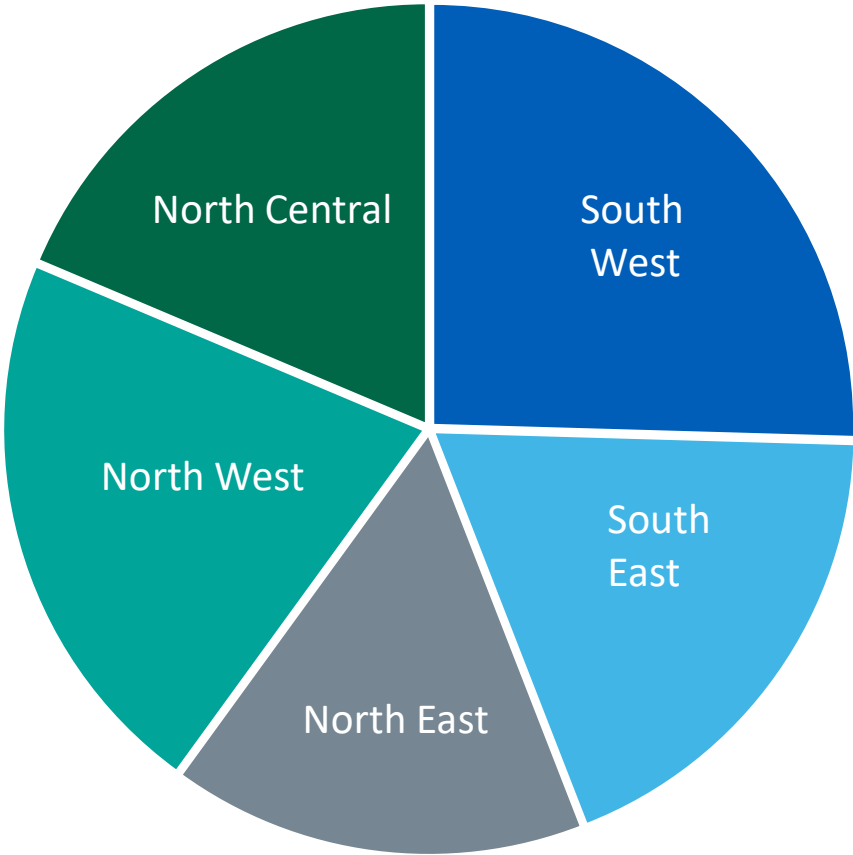
*Resources that were suggested in the survey responses are being collated separately and are not discussed in this summary

Redeployed Nurses: Area and Location

Normal Area of Work	No.
Theatres/Endoscopy	60
Nurse Specialists	53
Surgical Wards	26
Medical Wards	24
Outreach/ED/HDU	18
Education/lecturers	12
Paediatric/PICU/NICU	8
Community	6
Outpatients	6
Other	5
TOTAL	218

Banding	No.
Band 5	69
Band 6	51
Band 7	66
Band 8	31
Other	1

Response Rates by Area of London



Q1: During the initial COVID response what was the most useful and important elements of training you received?*

ICU Skills and Knowledge		General	
Ventilation	41	Introduction/cross-skilling course	61
Interpreting observations	13	No training as ex-ICU nurse	29
Infusion pumps	11	No training received	22
PPE	9	Hands-on training in ICU	10
Suctioning	9	Equipment generally	9
Tracheostomy management	8	Simulation	7
Proning	7	Resilience/stress management	2
ABG (taking and analysing)	7		
ICU drugs	5		
Invasive line management	3		

*Topics mentioned only once are not included

Discussion Q1: During the initial COVID response what was the most useful and important elements of training you received?

- Many nursing staff said that they did not receive any training before redeployment



“Minimal training was given... as my redeployment started very last minute on a night shift once I had already started my regular shift” **Band 6 redeployed nurse, NCL**

- Many of those who did not receive training were ex-ICU nurses - some were not offered training whilst others felt it was not required



“Didn't receive any training, as I had previous experience... and was just expected to remember what I knew from then ” **Band 7 redeployed Nurse, NEL**

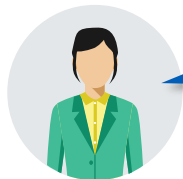
- Elements of training that were deemed most useful were: Ventilation, interpreting ICU observations, using and understanding infusion pumps, PPE, inline suctioning, tracheostomy care, proning and taking and analysing ABGs
- Cross-skilling or introductory ICU courses were deemed to be very useful, however many discussed the need for more hands-on training and shadowing within ICU
- Simulation training was frequently cited as useful

Q2: What do you wish you had known more about / had more specific training before you worked in CC?

ICU Skills and Knowledge		Other	
Ventilation (including NIV)	69	Nothing	21
ICU drugs	31	Technical set-up (omnicell, ABG access, passwords)	18
Renal Replacement Therapy	18	Equipment generally	10
ABG's (taking and analysing)	11	Orientation to ward, role and team structure	10
Tracheostomy	12	ICU computer systems	8
Endotracheal tubes	10	More hands-on training	5
PPE and infection control	10	Everything	2
COVID	8	Wellbeing	1
Suctioning	6	Competency	1
Delirium	2		
End of Life care	1		

Discussion Q2: What do you wish you had known more about/ had more specific training before you worked in CC?

- 21 nursing staff said that there was no additional training that was needed however they were commonly ex-ICU nurses
- Elements of training felt to be lacking were: Ventilation, ICU drugs (including double pumping, inotropes and sedative drugs), renal replacement therapy (mainly use of machines), ABGs, tracheostomy and endotracheal tubes
- Orientation to equipment was a common theme and was felt to be lacking - particularly ventilators which received the highest response rate
- There was a lack of training on ICU computer systems



“How to use the ITU... Computer system. I had no formal training for this and it was where everything about my patient was accessed and recorded” ***Redeployed Nurse, band 5, NCL***

- There was a lack of local induction and orientation including ward layout, computer and equipment passwords and equipment orientation



“There was never time for a proper orientation; I spent a lot of time looking for stuff” ***Redeployed Nurse, band 6, NCL***

Q3. What were the most useful things you learnt whilst looking after patients in CC?* Who did you learn this from and how?

Useful Things Learnt	
Ventilation	32
ABGs (analysis)	22
Tracheostomy management	19
Resilience/supporting others	16
Communication	10
Leadership / delegation	8
Deteriorating patient	8
ICU documentation	6
Nothing	5
Teamwork	5
Nutrition/nasogastric tubes	4
Routine Blood Test Analysis	4

From Who and How	
Nurses	107
Self-directed learning	18
Doctors	17
None	13
Patient	4
Practice development team	3
Operating department practitioner	3
Physiotherapists	2
Health care assistant	2
Occupational therapist	1

*Top 12 responses only

Discussion Q3: What were the most useful things you learnt whilst looking after patient in CC? Who did you learn this from and how?

- It was felt that most learning occurred within ICU as opposed to during training
- Ventilation, ABGs (particularly analysis) and tracheostomies were felt to be the most useful skills learnt on ICU
- Resilience and stress management in relation to both the self and to support others were important
- Non-technical skills including communication (between colleagues as well as with patients), teamwork and leadership skills were also useful skills learned within ICU
- Nursing staff were unsurprisingly the greatest source on knowledge for redeployed nursing staff, although many commented on the importance of self-directed study

Q4a: What were the steepest learning curves you faced on redeployment?*

Skills and Knowledge		Other	
Use of equipment including ventilators	47	Caring for ICU patients generally	58
ICU drugs	26	Coping with psychological stress	47
PPE and infection control	21	New environment and role	17
End of life care	14	Lack of support	14
COVID management	12	Working in a team	12
ICU documentation	11	Receiving no training	10
Technical skills (ABG's, Proning etc)	10	Coping with physical stress	9
Tracheostomy management	9	Workload	9
Refreshing previous ICU knowledge	6	There was no learning curve	4
Providing patient care	4	Time management	4
Endotracheal tube management	4	Staff sickness	4

*Themes with less than 4 responses not included

Q4b: How did you overcome them?

Responses	No.
Colleagues	100
Internet search	46
Books/literature	28
Hospital intranet search	25
None	16
Counselling	3
Online courses	3
Reflection/debrief	2
Self-care	2
Other course	1

Discussion Q4: What were the steepest learning curves you faced on redeployment? How did you overcome them?

- Using ICU equipment including ventilators/ventilation was a common response, along with discussion around the general challenges of caring for ICU patients
- Coping with psychological and physical stress as well as the emotional challenges of end of life care were steep learning curves for many
 - Physical stress included fatigue, dehydration and wearing PPE
- The lack of knowledge about the new working environment was commonly discussed including where things were, how a shift worked and how the ICU team was structured
- Colleagues were crucial to managing the steep learning curves
- Additional training that people undertook was often online



“How to recognise when you weren’t doing so well mentally and how to deal with that and continue to work”
Band 5 redeployed nurse, NWL

Q5: What would you do differently if you had to go back to your initial redeployment?

Responses	No.
Have more Training	73
Nothing	41
Better self-care	13
Supernumerary time/shadowing	12
Consider it more positively	10
ICU leadership skills	8
Improve workforce allocation	7
Would not return	6
Orientation to ICU	4
Be more assertive	4
Utilise ICU networks	2
Debrief	1

- Many nurses mentioned that they would like more training

“I would want to be properly trained for a week or 2, with a designated mentor whilst looking after patients” **Band 6 redeployed Nurse, SEL**



- Many said they wouldn't do anything differently or that they would feel more positive about redeployment



“Take it as a really good new learning opportunity” **Band 6 Redeployed Nurse NWL**

- Look after themselves better with the aim of reducing stress and anxiety were mentioned
- Spending in time in ICU before starting redeployment was considered important
- Many nurses would like training on leadership

Q6: What is the one piece of advice you would give a colleague going to work on CC?

Responses	No.
Utilise ICU Staff/ask questions	64
Improve knowledge/study	39
Prioritise psychological care	25
Prioritise physical Care	13
Remember basic nursing skills	13
Debrief	2
Don't go	1

- Not being afraid to ask questions to ICU staff was the most common advice
- Improving knowledge before and during redeployment was commonly advised
- Looking after yourself psychologically and physically was mentioned and included drinking plenty of water and good sleep hygiene

"It is vital to spend your free time focusing on self care and improving your mental health as it is a very stressful and unsettling experience. Use other redeployed staff as support, to share experiences & learn from." **Band 7 redeployed nurse, SWL**



"Always get advice from seniors Don't worry about asking questions" **Band 6 redeployed nurse, NWL**



Conclusions:

- The majority of redeployed nurses were from theatre and endoscopy departments or were specialist nurses
- There was a lack of training prior to redeployment. The most important elements missing were: ventilation, ICU drugs, renal replacement therapy , ABGs, tracheostomy and endotracheal tube management
- It was commonly mentioned that hands-on training and shadowing/supernumerary days within ICU prior to redeployment would have been useful
- There was a lack of local induction and orientation to the ward prior to redeployment. This included where things were located and computer and equipment passwords
- Equipment training was lacking particularly ventilators, infusion pumps and renal replacement therapy machines
- There was a lack of training on ICU computer systems
- Non-technical skills including communication (within a team as well as to patients), teamwork and leadership skills were deemed important and some mentioned the lack of training on these
- Coping with psychological and physical stress as well as the emotional challenges of end of life care were steep learning curves

The LTLC: Education Workstream

The LTLC are using these survey results (as well as focus groups) to inform the following:

Support role definition

Publish a skills matrix mapped to existing competency frameworks for all critical care roles

This can be used locally to inform learning objectives and avoid “over-teaching”

Share Education Content

Curate existing high quality education content into modules mapped to the skills matrix

Specific areas include:

- Leadership training
- Teamworking
- Wellbeing
- ICU equipment

Create a Skills Passport

Create electronic competency passports, interfacing with IT systems, e-learning and face to face education

Explore compatibility with e-rostering platforms

Further information

If you would like to find out more information about the Learning Transformation & Learning Collaborative (LTLC), programme and content available, please click here:

- <https://www.e-lfh.org.uk/programmes/london-transformation-and-learning-collaborative-ltlc>

Please contact us if you have any questions or comments:

- LTLC@hee.nhs.uk

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