

Managing the COVID surge in ICU



Findings from clinicians working with the National CLEAR Programme and the London Transformation and Learning Collaborative (LTLC), supported by NHS Health Education England (HEE) and NHS England and Improvement

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Contents

- 1. About our work
- 2. How to use these recommendations
- 3. Recommendations 1 10:
 - Communication 1 4
 - Staff wellbeing 5 6
 - Staffing, training and support 7 9
 - Administration 10
- 4. Who's who in the National CLEAR Programme for Intensive Care
- 5. Appendices



About our work

London Transformation and Learning Collaborative (LTLC) Critical Care programme

Broadening the skill base of our NHS workforce to support London's critical care patients

- We are front line clinicians working with the National CLEAR Programme for ICU who have been assigned to four London hospitals to redesign workforce and processes as part of the London Transformation and Learning Collaborative (LTLC) to increase critical care capacity in London.
- The National CLEAR Programme provides training, data analytics and modelling tools for Clinically-Led workforcE and Activity Redesign (CLEAR).
- While working collaboratively across the four trusts during the recent COVID surge, we have identified "quick wins" that we are sharing with colleagues across the NHS, in response to the experience and reflections of staff in the first wave of the pandemic.

- Whilst these recommendations may seem straightforward and "common sense", our evidence shows that they improve communication, staff wellbeing and patient care. They do not solve all the problems of surge, but they enable us to work in the best possible manner.
- In these challenging times, we are also keen to hear from others. We welcome your feedback and findings that will contribute to our shared knowledge and learning.
- Write to us at clear.team@hee.nhs.uk

The National CLEAR Programme is commissioned by NHS Health Education England (HEE) and delivered by 33N, a company of NHS clinicians and data scientists. https://clear-uk.org.uk/home



How to use these recommendations

All of our recommendations can be implemented within 48 hours. They offer a simple checklist that can be discussed in multi-disciplinary planning forums and staff meetings.

In summary:

Communication

- 1. Be inclusive
- 2. Fast and timely communications
- 3. Use communications technology
- 4. Support families

Staffing, training and support

- 7. Increase access to support
- 8. Promote motivation and flexibility
- 9. Improve access to training

Staff wellbeing

- 5. Enhance awareness of wellbeing
- 6. Optimise peer support

Administration

10. Improve efficiency, planning and organisation

If you would like further information or you would like to discuss more complex redesign issues, please contact us by emailing clear.team@hee.nhs.uk





Recommendation 1 – Be inclusive



Do we need to increase accessibility to the ICU?

- Increase accessibility to MDT huddles and aim to do these twice daily (e.g. at 9am and 4.30pm).
- Enhance the inclusion of all staff involved in ICU care.
- Provide swipe card access for a wide range of professionals e.g. radiographers.
- Identify risks and coordinate the appropriate allocation of redeployed and established staff to ensure even distribution of skills mix across shifts.
- Create regular forums for highlighting issues and concerns.



Recommendation 2 – Fast and timely communications



Do we have immediate capability for effective communications?

- Maintain an up-to-date contact list for communications by allocating two members of each MDT to ensure that new members are added to the relevant clinical area.
- Maintain consistent updates e.g. via Microsoft Teams.
- Clarify and disseminate the operational algorithm e.g. preparation for escalating surge; checklist for opening and closing units.
- Use an email stratification system e.g. Red must read; Orange read this week;
 Green read at leisure.
- Laminate accurate contact lists in clinical areas. Include escalation protocol and details of DECT phones, bleeps and bedspaces.





Recommendation 3 – Use communications technology



Are we using communications technology to the full?

- Use Microsoft Teams (or equivalent) which can reach isolated staff in side rooms and bays, to improve global situational awareness; also, staff who may be shielding remotely
- MS Teams can facilitate non-urgent tasks and improve co-ordination. Bleeps can be reserved for urgent enquiries.
- Update the home screen on trust computers e.g. use of screensavers for important messages and links to key guidelines and protocols.
- Ensure team leaders, including those of the wider MDT, are contactable via mobile communications (DECT phone, walkie talkie etc.).
- Try new apps e.g. the "Read" app to provide up-to-date, centralised communications for changes in practice, guidelines and wellbeing measures.
- See appendix 1 for communications algorithm.





Recommendation 4 – Support families



Could we do more to support families?

- Establishing a Family Liaison Team to help families communicate with their loved ones in critical care. The Team can provide non-medical support separate from the daily updates delivered by the medical team. Consider the use of shielding staff to support this.
- Offer a dedicated phone line to families.
- Coordinate and facilitate video calls with both intubated and extubated patients and their close family and friends.
- Support in-person visits at end-of-life.
- See appendix 2 for further details of model Family Liaison Team.



Recommendations – Staff wellbeing



Recommendation 5 – Improve support to wellbeing



Are we providing the right kind of support?

- There are many local and regional initiatives, but staff do not always appreciate that these resources are there for them or may find support difficult to access.
- Support staff engagement though listening and responding to their needs.
- Proactively seek feedback from all staff to ensure initiatives are accessible and responsive
- Institute psychological wellbeing initiatives early and ensure these are appropriately available.
- It is known in other sectors that wellbeing initiatives that encourage good physical and psychological health reduce absenteeism and increase productivity, both in the short and long term.
- See the following website for resources for psychological wellbeing https://www.e-lfh.org.uk/programmes/london-transformation-and-learning-collaborative-ltlc/



Recommendations – Staff wellbeing



Recommendation 6 – Optimise peer support



Do we promote the social fabric of teamwork?

- The most effective teams are built on trust. This is challenging with staff changing daily and where individuals are separated with physical barriers, such as PPE.
- The daily routine should include moments choreographed to support teamwork and break down professional silos, e.g.:
 - Create smaller inter-professional teams within the unit (purple, blue, green, red etc) and indicate on PPE;
 - Rota teams within the same area to increase familiarity for new staff;
 - Use technology, such as MS Teams, to have a team channel.
- Create a proactive "wellbeing support hub" and engage shielding staff to lead for wellbeing. The role to include:
 - Monitoring and updating the MS Teams channel with relevant information;
 - Telephone check-in with staff of all levels once a week and screening for required support, liaising with psychological support;
 - Proactively providing access to support and creating wellbeing touchpoints for individuals and teams;
 - Supporting team building and remote debrief, if required;
 - Supporting staff in practical matters, working with the administration hub to ensure that logistical matters are dealt with efficiently and proactively;
- See an example model of a "wellbeing support hub" in appendix 3.



Recommendations – Staffing, training and support



Recommendation 7 – Increase access to support



Can we increase clinical and management support?

- Ensuring a medical presence on the unit at all times. Stagger breaks to ensure continuous cover.
- Consider the experience of AHPs to support ICU tasks and training e.g. supporting rolling, proning and drawing arterial blood gases.
- Ensure redeployed staff are clear about their roles. Categorise redeployed medical staff in a visible way according to their expertise e.g. Category A - airway trained, lines trained, ICU-experienced. This encourages staff to ask for help and reduces anxiety of medical staff being asked to perform tasks they are not trained to do. See example in appendix 4.
- Increase senior management visibility on the unit e.g.:
 - Support senior leadership, such as matrons and consultants, to spend time on the unit during clinical shifts.
 - Non-ICU leaders have taken bank shifts in some London hospitals, including consultants performing a registered support clinician's role.



Recommendations – Staffing, training and support



Recommendation 8 – Promote motivation and flexibility



Can we do more to promote motivation and flexibility?

- Ensure staff are paid promptly for overtime and communicate agreements for future overtime.
- Stagger shift times with 15-minute intervals to support the flow of staff on and off the unit, within corridors and changing rooms. This will reduce frustration and improve morale, as well as reducing overtime required for the process.
- Support communications between staff groups. Ensure shared rest areas e.g. coffee room for all staff together.



Recommendations – Staffing, training and support



Recommendation 9 – Improve access to training



Do we do enough to keep training up to date?

- Consider increasing Clinical Practice Educators through utilising shielding staff and the interprofessional team.
- Engage shielding staff in providing virtual support.
- Release staff to be trained. This could be both before and after redeployment and may be continued throughout surge.
- Update the skills set database for all staff e.g. London-wide skills passport.
- Review induction processes and annual "MAST".
- Provide a central repository of "how to" videos and refresher training e.g. London Transformation and Learning Collaborative (LTLC) microsite https://www.e-lfh.org.uk/programmes/london-transformation-and-learning-collaborative-ltlc/



Recommendations – Administration



Recommendation 10 – Improve efficiency, planning and organisation



Could we be more strategic with our administration?

- Support senior leadership to plan to use bank and agency staff to maintain performance and reduce absenteeism.
- Develop a proforma for requesting the workforce to fill vacant shifts, including shift type, date, remuneration payment processes and contact details. Clarity of this information will encourage people to volunteer to fill vacant shifts see appendix 5.
- Streamline remote induction processes. A protocol and task list may be drawn up by the ICU manager to support new redeployed staff in a smooth induction and ICU orientation.
- Streamline paperwork. Ensure the list of staff deployed to ICU is sent to the ICU manager as soon as known so that they can pre-emptively organise access to the department, computer systems, create ID badges and remotely complete paperwork e.g. voluntary and paid contracts.
- Consider the use of space e.g. to ensure space for work, rest, lockers and computer access.
- Streamline the process for tracking patient belongings.
- Create an administration hub for support and cross cover between wards. Identify appropriate individuals to support the ICU manager with the increased administration burden.



Who's who in the National CLEAR Programme for Intensive Care

University College Hospitals NHS Foundation Trust

CLEAR fellows:

- Angela Chang
- Anna Welch
- Kerry van Zyl Clinical sponsor:
- Alice Carter
 Executive sponsor:
- Geoff Bellingham

Royal Free Hospital NHS Foundation Trust

CLEAR fellows:

- La-Vaughn Bell
- Suzanne Murray
- Jenna Thondee
- Nasiral Ekbal Executive sponsor:
- Rebecca Longmate

Imperial College Healthcare NHS Trust

CLEAR fellows:

- Kiran Chima
- Alison Cotton
- Claire Gorham
- Julian Jayasingh-Jacob

Clinical sponsor:

Melanie Denison

Executive sponsor:

Janice Sigsworth

Barts Health NHS Trust

CLEAR fellows:

- Niromila
 Nadarajan
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- Mark Westwood Executive sponsor:
- Charles Knight

National CLEAR Faculty

Matt Camilleri, Eve Corner, Andrew Donovan, Noor Elahi, Michelle Hayes, John Jeans, James Kelly, Alexandra Monkhouse, Aoife Mulcahy, Mike Skene, Sophie Tang.



Appendix 1 – Example communication algorithm for ICU

Non-urgent, non-coordinated Requests which may be completed by an individual.

e.g. venipuncture, peripheral line insertion, invasive line insertion, prescriptions and medication review, discharge summaries, imaging requests.

Non-urgent – co-ordinated

Requests which require the coordination of a team.

e.g. head-turns, proning, controlled extubation, intrahospital transfers.

Urgent

Requests which require an immediate response.
e.g. assessment of a deteriorating patient, acute desaturation, intubation, cardiac arrest.

MS Teams: Central Task List

Requests prioritised remotely by a designated shielding staff member and allocated for completion to:

- Tasks for individuals listed by area (to minimise PPE use)
- Team tasks scheduled sequentially (e.g. proning team schedule)

Approximate times communicated back to bedside to ensure preparation prior to team arrival.

Direct communiciation

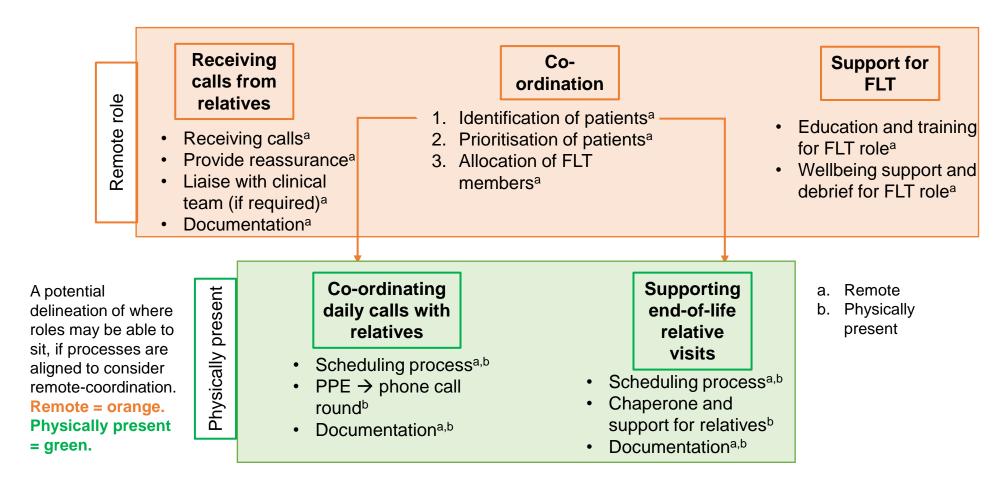
Use direct contact via team leader (e.g. nurse in charge) to alert the appropriate team for immediate assistance.

e.g. via bleep, DECT phone or walkie-talkie (depending on trust)

The communication algorithm supports the streamlining of communication, to support tasks being prioritised in response to clinical urgency. Experienced shielding staff members may support this process through global oversight of tasks, coordination of teams and remote communication with bed-space nursing staff.



Appendix 2 – A model for the Family Liaison Team (FLT)

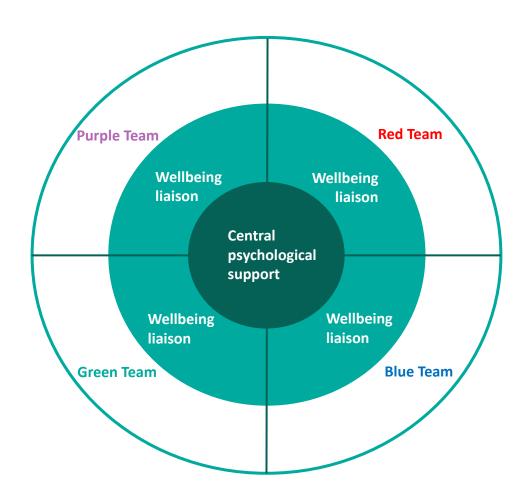


Things to consider

- What equipment would be required to make this work?
- What support would be needed?
- What materials would be useful to coordinate these roles?
- How much time do the different tasks take?



Appendix 3 – An example "Wellbeing Support Hub"



The "wellbeing support hub" may be built around a central resource for psychological support based locally.

Shielding staff may be allocated as the "wellbeing liaison" for each clinical team. In this role, they would:

- Monitor and update the team's MS Teams channel with relevant information;
- Telephone check-in with staff of all levels once a week and screen for required support;
- Proactively organise access to support and create wellbeing touchpoints for individuals and teams;
- Support team building and remote debrief, if required;
- Supporting staff in practical matters, working with the administration hub to ensure that logistical matters are dealt with efficiently and proactively.



Appendix 3 – Screening for wellbeing support



If you answered YES to all three, consider talking to your line manager or someone you trust about the impact of your work. You may want a referral to your local employee wellbeing service.



www.lcs.ac.uk

Screening may be used at the direction of the local psychologist and with appropriate training.

The local Wellbeing Support Hub may access resources designed for the support of staff at the Intensive Care Society's Wellbeing hub, available here:

https://www.ics.ac.uk/ICS/Education/Wellbeing/ICS/Wellbeing.aspx

Wellbeing resources from the LTLC are available here: https://www.e-lfh.org.uk/programmes/london-transformation-and-learning-collaborative-ltlc/



Appendix 3 – Stratifying wellbeing support

Enhanced individual to having to have conversations about death. It really takes a huge emotional toll.

Level 2
Wellbeing support for groups/staff with increased risk

Level 1
Wellbeing support package accessible for all staff throughout the hospital

Using screening and stratification will help to ensure that individuals requiring support are able to access it in a timely fashion.



Appendix 4 – Example categories of medical roles

The categorisation of redeployed medical roles is intended to increase the visibility of the available skills on the unit. This is particularly important in understanding those who are trained to intubate and insert invasive lines independently. Ensuring this is visible will support tasks being performed by the correct roles. A more detailed example is delineated in the following slides.

Redeployed Medical Category	Definition	Example backgrounds		
Α	Experienced within intensive care. Can independently assess patients, intubate patients and insert lines.	Intensive care trainee Anaesthetic ST3+ Anaesthetic staff grade		
В	Experienced within acute specialties. Can independently assess patients, insert lines and prescribe appropriately.	Acute medical ST3+ Acute surgery ST3+		
С	Limited experience (less than 3 months) within ICU. Can assess patients and prescribe appropriately with support.	FY1/FY2 Core trainee Speciality trainees ST1-ST3		

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Critical Care Nurse (CCN) - Pod Leader

Who can they be?

Registered nurse recently or currently working in critical care (completed Step1 NCF, progressing to Step 2)

What do they do?

- Act in a supportive role to oversee the specialist critical care aspects of direct patient care within their assigned pod.
- Act in a pivotal role to also support the nurse in charge and medical team as required. Escalate any care or safety concerns appropriately using clear communication and appropriate escalation pathways.
- Encourage, support and educate registered support clinicians (RSC) within their pod to effectively and safely manage their workload.
- Ensure pod team members collaboratively plan workload, such as proning or medications, as well as regular breaks.
- Regularly review all patients in their pod, together with the individual registered support clinicians and wider team (when necessary) to plan priorities of patient care and deliver specialised treatment interventions.
- Support the registered support clinician during the morning ward round and actively communicate any recommendations to the medical team.
- Continually review the patient's condition and support the registered support clinician to initiate management or escalate as appropriate.
- Forward plan patient consumables required for next 24hrs and escalate to appropriate teams as required e.g. medication, CVVHDF fluid.
- Be aware of signs of stress in themselves and colleagues and seek help. Be kind to themselves during a time of significant changes in practice.

Who can they ask to help them?

Nurse-in-charge (NIC)
Anaesthetist/intensivist for urgent clinical review Pharmacist/tech for medication supplies
Support staff - restocking, running ABGs, turns and general help
Other registered support clinicians /CCNs

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Critical Care Nurse Checklist

High Priority Tasks	Tick when complete		
Review patient care from previous shift for each patient considering –			
Noradrenaline requirements, time double pump/syringe change due Ventilation			
settings 6mls/kg (IBW), ventilating adequately			
Airway secure			
Safety checks and alarm settings (monitor and vent) done			
Other medication requirements, time syringe changes due, check latest ABG			
If on CVVHDF check requirements (ie, effluent dose vs plan)			
Continue to re-review the above regularly throughout the shift			
Plan staff breaks for the shift, min 30 mins every 4 hours			
(Remember to check in with each other regularly, how are you doing?)			
Actively participate in your pod ward round and communicate your recommendations for ongoing care			
Check consumables required for next 24hrs ie CVVHDF fluid, antibiotics			
Handover any prominent patient issues to NIC as they occur			
Speak with family or allocate registered support clinician to discuss any issues			

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Registered Support Clinician (RSC)

Who can they be?

Category A – Nurses and AHPs with previous critical care experience Category B – Nurses with no critical care experience Doctors who are not critical care or airway trained/competent

What do they do?

- They are responsible for direct basic patient care 1:1 or 1:2.
- Carry out bedside safety checks as per checklist (observation chart).
- Continually monitor patient condition, including regular observations and fluid balance and escalate any changes or concerns to the Critical Care Nurse (CCN) pod leader, nurse in charge (NIC) or critical care medical team.
- Continually monitor noradrenaline and other critical drug infusions, ensuring communication in good time (hour before end) with CCN when syringe changes are due.
- Monitor and if trained administer where appropriate infusions, medications, blood products and enteral feed.
- Actively contribute to the patient's daily plan of care by communicating relevant patient information at each ward round with the support of the CCN pod leader as required.
- Deliver personal care, including wash, mouth/eye care, suctioning, turns, etc. as per checklist (frequency may be reduced during periods of increased workload)
- Recognise and escalate changes in patient clinical conditions to the CCN pod leader, NIC or CC Medical team and ensure parameter targets are achieved.
- Document patient care in ICU chart as per checklist.
- Work within your limitations but use any additional non-critical care skills you are trained for within your professional role as required e.g., prescribing, physiotherapy, SALT assessment.
- Be alert to signs of stress in yourself and colleagues and seek help early.
- Liaise with CCN pod leader or NIC to discuss the plan for communication with the patient's family.

Who can they ask to help them?

Pod Leader CCN or NIC

Named anaesthetist/intensivist for urgent clinical review Support staff - restocking, running ABGs, turns and general help

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Daily tasks	Tick
Take handover from bedside nurse (patient chart, drug chart, infusions)	1
 Safety checks – Green bag/filter/facemask (attached to working oxygen) Air ports identified and covered Suction working ETT measure at lip and check against previous Trachy (if present) safety check on chart Check infusions are correct/labelled/secure If on norad – check time of next double pump and ensure full 2nd syringe present (CCN to support) Set cardiac monitor parameter alarms are appropriate for your patient CCN to check and set ventilator alarms 	
Document all observations hourly (where possible) or if any significant changes	
Document and calculate fluid balance hourly (where possible)	
Give prescribed medications and blood products as required (if qualified and competent)	
Take blood gases as required (or on advice of CCN or medical team)	
Monitor patient condition and immediately escalate any changes, concerns or issues to your CCN, NIC or medical team	
Give personal care as able, ideally - • Turns and pressure area check 2 -4hrly (where possible and only if patient deemed stable by CC team) • Mouthcare/eyecare 2-4hrly (where possible) • ETT Suctioning (PRN) • Wash (once every 24hrs or PRN) Dressings (PRN)	
Continually monitor infusions, anticipate and communicate with pod CCN when syringe changes are due	
Participate in the ward round to give basic information to the team about your patient	
Ensure relative information is up to date in folder and check with pod CCN/NIC before speaking with family	
Document significant events and elements of care on the observation chart	
Carry out patient care assessments/care plans as able (ask pod CCN/NIC for support as required)	

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Support Staff (SS)

Who can they be?

Unqualified staff members
Anyone who has been asked to act as support staff
Anyone that doesn't have another role

What do they do?

- Monitor stock levels at the patient bedside and restock as required. Monitor levels of stock in central areas and replenish as required.
- Run arterial blood gases through the analyser as required (if trained). Empty and replace overflowing bins and sharps bins as required.
- Help registered support clinicians with patient care including position changes, hygiene needs etc.
- Be proactive and available to help with a variety of general tasks.
- Be alert to signs of stress in themselves and colleagues, and seek help.

In addition, those with appropriate skills can, as required -

- Collect vital medications for registered support clinicians
- Run ABGs through the analyser Help prone patients
- Provide family support when appropriate
- Check, sign in and store patient property on admission (ensure good document)

Who can they ask to help them?

Named critical care nurse section leader for all queries Registered support clinicians

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COVID-19 Registered Support Clinician Skills Passport

Critical Care Skill	Skill overview and demo by faculty in training	Participant Demonstrated skills procedure in training	Watch online video (if available)	Observe skill by CCN in practice	Observed in practice 1	Observed in practice 2
In line suction ETT						
Taking ABG from arterial line						
Mouth and eye care						
Bedside safety Checks						
Setting safe cardiac monitor parameters						
Managing infusion pumps						

This skills passport is <u>NOT A COMPETENCY DOCUMENT</u> but is designed to be used during your initial journey working in critical care, to ensure you are aware of the indications and risks and begin to feel confident of a number of essential skills required to look after level three patients



Appendix 5 – Example template to request shifts

Template

Dear all,

[Insert trust] needs [insert role] cover for ICU.

- [Date and shift]
- [Date and shift]
- [Date and shift]

[Insert rate to be paid]

Are you able to help with any of these?

Please respond asap as shifts will fill on a first come, first served basis.

Many thanks,

[Insert name]

The trust deems all roles to be inside-IR35 legislation and therefore the appropriate employment tax and national insurance deductions need to be made.

Example

Dear all,

Goodwill Hospital needs Anaesthetic SPR cover for ICU.

- 10th January 07:30 20:30
- 11th January 07:30 20:30
- 12th January 07:30 20:30

Enhanced rate £65/hour offered.

Are you able to help with any of these?

Please respond asap as shifts will fill on a first come, first served basis.

Many thanks,

A Name

The trust deems all roles to be inside-IR35 legislation and therefore the appropriate employment tax and national insurance deductions need to be made.