London Transformation and Learning Collaborative (LTLC)
Critical Care programme

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

NHS

Health Education England

The roles of HCS in a surge

A description of what roles healthcare scientists performed in the first surge and details around role responsibilities.

NHS England and NHS Improvement

Healthcare scientists

- HCS are well placed to keep routine services running and may have opportunity to take on responsibilities from medics/nurses/AHP if staffing is reduced.

- The group is too varied to consider as one
  - Laboratory sciences
  - Physiological sciences – likely to be routinely very clinical in their work
    - Best considered as either RSC or NRSS perhaps with some niche functions depending on background e.g. cardiac scientists, vascular scientists.
  - Bioinformatics
  - Physical sciences – divide into two routes
    - Route 1 – redeployed to support clinical engineering services
    - Route 2 – redeployed into a safety/QA/educational role within ICU

Three key areas we can support

- ***Clinical engineering support***

  - Equipment maintenance demands are high, many new pieces of equipment have been introduced in the past year.

  - HCS can, and did, support these teams – either picking up BAU tasks or helping with commissioning, testing of new kit.

- ***ICU tech support***

  - Supporting the technical teams within ICU with some BAU tasks as well as COVID specific tasks

  - Different in different trusts depending on the structure and management – some good case studies here.

- ***Nightingale floating Clinical scientist team*** (mainly clinical engineers, some other HCS and medical physicists)

  - Rapid re-training – NHSE funded

    - Divided the group into clinical engineering support and 'clinical' clinical scientists

Medical equipment safety/QA officer role (Potential role for redeployed HCS)

- *Quality assurance*
    - Collaborate and verify SOP's and protocols relating to equipment use, including responding to national guidance.
    - *Data management and re-representation of data– to be defined in collaboration with medical and nursing colleagues.*
    - Evaluation of trends in management in the unit – generating evidence base for system level decision making.

- *Safety*
    - Ensure equipment is being used correctly and efficiently, calibration and routine safety checks are carried out.
    - Support nursing staff in monitoring patient ventilation parameters for safety concerns – reporting to doctors in charge.
    - Support staff in reporting of incidents and support clinical engineering in rapid incident investigation, ensuring rapid dissemination of findings.
    - First line trouble shooting, maintenance and repair of equipment.

- *Education/training*
    - Clinical bedside educator for medical equipment +/- IT systems.
    - Model specific device training at the bedside.
    - Support trust wide medical equipment training programmes.

- *Additional assistance*
    - Where other staff groups are understaffed, assist in patient transfers, breathing circuit checks, ventilator swaps, proning etc. when there is a staffing need to do so.
    - Support/conduct beside and bed bay safety checks.

Skills matrix

- Three different roles/functions identified and a board set of skills associated to each role

- Mapping to HCS competencies from different disciplines

- In time learner and trainer resources will be mapped

- Significant portion of the challenge in HCS is identifying the requirements /skills as the roles are less well defined than other professions

For more info: https://www.e-lfh.org.uk/programmes/london-transformation-and-learning-collaborative-ltlc/

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