

# Role of the research nurse in Critical Care



Clair Harris

Research Matron for Anaesthetics, Critical care,  
Emergency and Trauma (ACET)



@ACETresearch



[www.acetresearch.org](http://www.acetresearch.org)



clair.harris@nihr.ac.uk

- Insight into the critical care research nurse role
- Research nurse role development – experiences from ACET research team



Anaesthetics ICU ED Trauma

ACET Research Team

1. The research nurse role – opportunities and challenges
2. The challenges of research delivery in the critical care setting
3. ACET team experience of delivering critical care research and developing the research nurse role

- Historical evolution of role – good practice guidelines
- Link between patient and study sponsors

Fig 5: Domains of clinical research nursing



## Skills

- Project management
- Service development
- Proficient novel therapies
- Advanced patient assessment
- Excellent communication
- Laboratory techniques
- Managerial e.g. budget management
- Teaching
- Consent

## Knowledge

- Research Legislation
- UK policy framework for health and social care research
- Expert clinical
- Organisational
- Research methodology and practice

# The research nurse role – opportunities and challenges

**“I helped a gentleman, who was enrolled in a research study, to have a shave. He was on the ward by this time and hadn't had a shave since discharged from ICU. He was very please to be back to his normal self”**

**“I put a family in touch with a support charity for peer support following encephalitis diagnosis”**

**“A pt feeling depressed because of his recovery progress ( things are not going as fast as he thought) and nurses are always busy so we've spent 45 mins chatting about that and he said he felt much better after”**

**“Patients and relatives being more aware of research and why projects are being undertaken. Makes them feel more involved in both their care and passing on new knowledge to look after patients that come after them”**

**“I arranged follow-up appointment for someone worried about what happened in ICU after discharge”**

- Disparity with models of working, support systems and level of responsibility.
- Role set-up and line management
  - Fixed term contracts
  - Inappropriate line manager
- Role isolation
- Role not understood by clinical colleagues seen as “non-clinical”
- Lack of training, support and career development opportunity

# The challenges of delivering research in critical care

- Consent – challenges with incapacitated patients
- Complex course of illness
- Urgency of interventions
- Collaborative models of care
- Unpredictability
- Continuous interventions
- Funding models



# ACET team experience

- Collaboration based on common challenges and patient care pathways – supported by clinical leads
  - Skill mix
  - Flexibility
  - Improved communication and integration
  - Patient experience



Anaesthetics ICU ED Trauma

ACET Research Team

Hopkins P, Kunst G, Keep J

# ACET team experience

- Embedding research (operational)–
  - Research on agenda of senior departmental meetings
  - Unit inductions
  - ACET medical
  - Safety huddle
  - Unit education and audit days
  - Large network of GCP trained staff enrolling patients on shift
  - Research awareness weeks
  - International clinical trials day
  - website
  - Link nurses

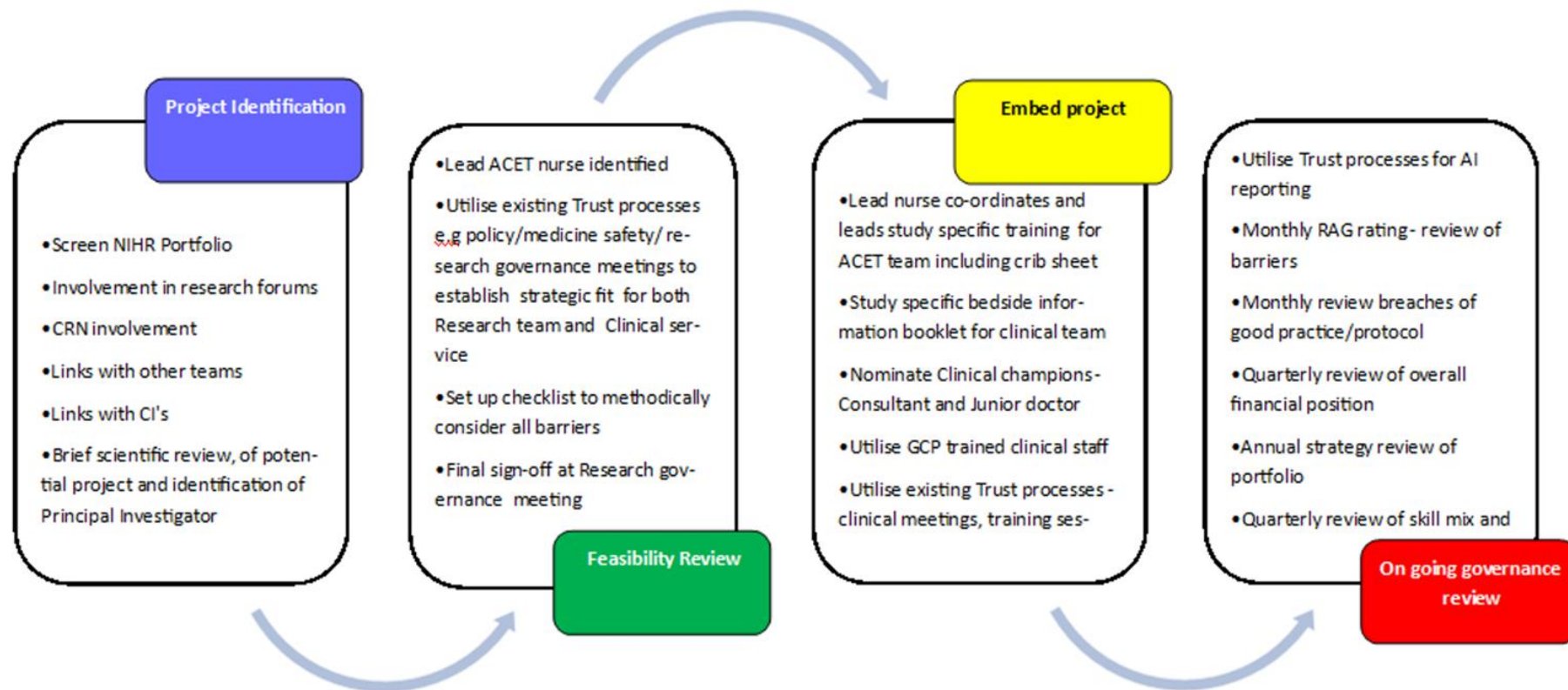


*#WhyWeDoResearch Campaign*



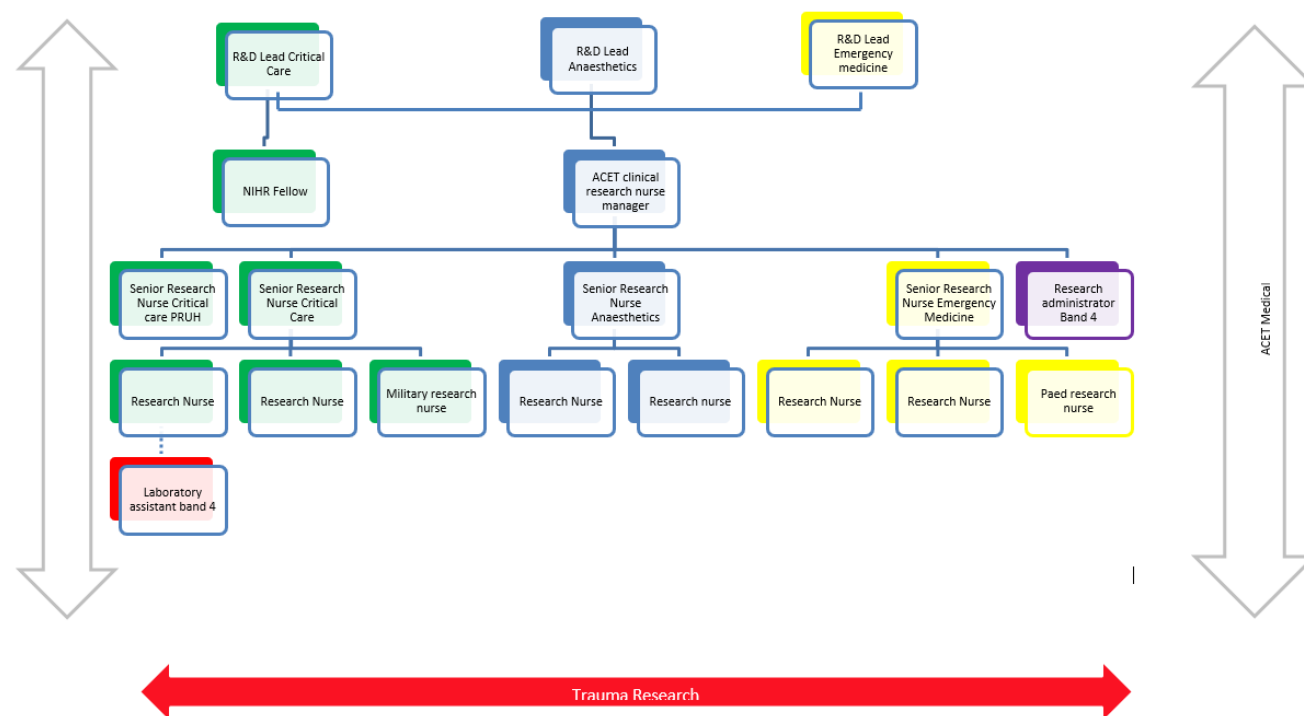
# ACET team experience

- Embedding research (strategic)–
  - Clear governance structure and process
  - Choosing the right research – balancing our portfolio



# ACET team experience

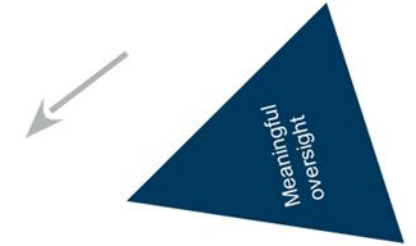
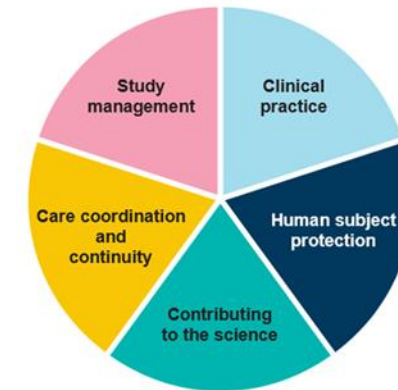
- Developing the research nurse role
  - permanent contracts (majority – not yet 100%)
  - formal remuneration for OOH
  - progression structure
  - Management structure
  - Supervision



- Role clarification
- Practice standards
- Induction
- Competencies
- Specific training relating to Critical care research nursing – for network role out
- Back to the floor days
- Mixed model roles – full-time, part-time, 50:50 (both clinical or academic)

- Meaningful oversight
- Significant interest in our posts
- Progression for team members – clinical, research and academic
- PhD and academic fellowships
- Year on year improvement in performance metrics
- 8am to 8pm weekday service with 24/7 on-call

Fig. 6. Adapted domains of clinical research nursing



# Summary

- Defend role of critical care experienced nurses in research delivery
- Critical Care nurses involved in protocol design
- Routine collaborator status for research nurses
- More creative, mixed posts to promote professional development
- Critical care research nurses taking PI role
- National networking





- Birch S and Harris C (2017) What does the increasing prevalence of critical care research mean for critical care nurses. *Nursing in Critical care* •Vol22 No1.
- Hardicre J (2014) Embedding the 6C's into clinical research practice and management. *BJN* 23(7), 365-6
- [Finch J 2009 The importance of clinical academic careers in nursing \*Journal of research nursing\* 14 \(2\) 103-105 https://doi.org/10.1177/1744987108101143](https://doi.org/10.1177/1744987108101143)
- [NIHR nursing strategy – The impact CRN's have on the 6C's https://www.nihr.ac.uk/our-faculty/documents/6Cs%20Flyer.pdf](https://www.nihr.ac.uk/our-faculty/documents/6Cs%20Flyer.pdf)
- Fink, Mitchell P., Hayes, Michelle, Soni, Neil (Eds.) (2008) *Classic Papers in Critical Care*. Springer-Verlag London.
- HSJ Supplement (19<sup>th</sup> Dec 2014) *Clinical Research Evolved: The future of trials in the NHS*. HSJ Research.
- Ozdemir BA et al. (2015). Research activity and the association with mortality. *PLoS One*; 10: e0118253. DOI: 10.1371/journal.pone.0118253.
- Whitehouse report (2018) Review of research nursing and midwifery across the UK and Ireland in 2017: Structures, strategies and sharing available: [file:///C:/Users/Clair%20Harris/Dropbox/articles%20and%20guidelines/the whitehouse report 2018.pdf](file:///C:/Users/Clair%20Harris/Dropbox/articles%20and%20guidelines/the_whitehouse_report_2018.pdf)
- Vincent JL (2013) Critical care – where we have been and where we are going? *Critical Care*. 2013;17(suppl 1):S2.
- Jones HC (2017) Exploring the experience of Clinical Research Nurses working within acute NHS trusts and determining the most effective way to structure the workforce A mixed methods study available <https://kclpure.kcl.ac.uk/portal/>



# The impact and challenges of research in the critical care setting

## THE LANCET

Volume 261, Issue 6749, 3 January 1953, Pages 37-41

THE LANCET



Special Articles

### A PRELIMINARY REPORT ON THE 1952 EPIDEMIC OF POLIOMYELITIS IN COPENHAGEN WITH SPECIAL REFERENCE TO THE TREATMENT OF ACUTE RESPIRATORY INSUFFICIENCY

H.C.A. Lassen M.D. Copenhagen (PROFESSOR OF EPIDEMIOLOGY IN THE UNIVERSITY OF COPENHAGEN ; CHIEF PHYSICIAN, DEPARTMENT FOR COMMUNICABLE DISEASES, BLEGDAM HOSPITAL, COPENHAGEN)

## The New England Journal of Medicine

© Copyright, 2000, by the Massachusetts Medical Society

VOLUME 342

MAY 4, 2000

NUMBER 18



### VENTILATION WITH LOWER TIDAL VOLUMES AS COMPARED WITH TRADITIONAL TIDAL VOLUMES FOR ACUTE LUNG INJURY AND THE ACUTE RESPIRATORY DISTRESS SYNDROME

THE ACUTE RESPIRATORY DISTRESS SYNDROME NETWORK\*

**KNOW YOUR SEPSIS SIX.**

1. GIVE HIGH-FLOW OXYGEN
2. TAKE BLOOD CULTURES
3. GIVE IV ANTIBIOTICS
4. GIVE A FLUID CHALLENGE
5. MEASURE LACTATE
6. MEASURE URINE OUTPUT

BY DOING THESE SIX SIMPLE THINGS IN THE FIRST HOUR, YOU CAN DOUBLE YOUR PATIENT'S CHANCE OF SURVIVAL.

THE UK SEPSIS TRUST

WWW.SEPSISTRUST.ORG TEL: 0145 606 0228 INFO@SEPSISTRUST.ORG

**Table 3** The Ventilator Bundle—introduced by Patient Safety First, a national campaign launched in June 2008

- Elevation of the head of the bed to between 30° and 45°
- Daily 'sedative interruption' and assessment of readiness to extubate
- Peptic ulcer disease prophylaxis
- Venous thromboembolism prophylaxis

CRASH trial collaborators

**Effect of intravenous corticosteroids on death within 14 days in 10 008 adults with clinically significant head injury (MRC CRASH trial): randomised placebo-controlled trial.**

*Lancet.* 2004; **364**: 1321-1328

*Curr Opin Crit Care.* 2002 Dec;8(6):594-9.

**Critical care without walls.**

Hillman K<sup>1</sup>.

ORIGINAL ARTICLE FREE PREVIEW

## A Randomized Trial of Epinephrine in Out-of-Hospital Cardiac Arrest

Gavin D. Perkins, M.D., Chen Ji, Ph.D., Charles D. Deakin, M.D., Tom Quinn, M.Phil., Jerry P. Nolan, M.B., Ch.B., Charlotte Scomparin, M.Sc., Scott Regan, B.A., John Long, Anne Slowther, Ph.D., Helen Pocock, M.Sc., John J.M. Black, M.B., B.S., Fiona Moore, M.B., B.S., et al., for the PARAMEDIC2 Collaborators\*

Ozdemir BA, et al (2015). Research activity and the association with mortality. PLoS One; 10: e0118253. DOI: 10.1371/journal.pone.0118253.