ROLE OF CLINICAL NURSE SPECIALIST IN ANAESTHESIA

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CNS in Pain Management

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Clinical Nurse Specialists (CNS) are registered nurses who have graduate preparation (Master’s or Doctorate) in nursing.

Clinical Nurse Specialists are expert clinicians in a specialised area of nursing practice. The specialty may be defined in terms of:
- **Population** (e.g. pediatrics, geriatrics, women’s health)
- **Setting** (e.g. critical care, accident & emergency room)
- **Disease or Medical Subspecialty** (e.g. diabetes, oncology)
- **Type of Care** (e.g. psychiatric, rehabilitation)
- **Type of Problem** (e.g. pain, wound)
Clinical Nurse Specialists practice in a wide variety of health care settings.

In addition to providing direct patient care, Clinical Nurse Specialists influence care outcomes by providing expert consultation for nursing staffs and by implementing improvements in health care delivery systems.

Clinical Nurse Specialist practice integrates nursing practice, which focuses on assisting patients in the prevention or resolution of illness, with medical diagnosis and treatment of disease, injury and disability.
CNS practice is conceptualised across three spheres in which the CNS exerts influence:

- Patients/clients
- Nursing standards and nursing personnel
- Systems

Expert nursing practice in the patient sphere provides the underpinnings for CNS practice.
Selected Outcomes of CNS Practice

- Reduced Medical Complications in Hospitalised Patients
- Reduced Hospital Costs and Length of Stay
- Improved Pain Management Practices
- Increased Patient Satisfaction with Nursing Care
- Increase Professional Development of Nurses
- Reduced Frequency of Emergency Room Visits
What nurses spent their time on

- Direct Patient Care
- Consultancy
- Research/audit
- Education
- Management
- Other
Acute pain services

- Developed from a joint working party document in 1990 by Surgeons and Anaesthetists
- Multi-disciplinary structure - CNS, Anaesthetist, physio, junior anaesthetists
- Daily ward rounds
- Staff education
- Manage sophisticated analgesia systems on general wards (PCA and Epidural infusions)
- Employ the multi-model approach/the WHO analgesic ladder
The role of the nurse specialist in:-

- Pain management
- The intensive care out-reach team
- The anaesthetic pre-assessment clinic
- The Post Anaesthetic Recovery unit
Reasons

- Humanitarian
- Avoidance of patho-physiological consequences of untreated pain
- Avoidance of chronicity
- Financial
Roles of the nurse in the team

- Daily visits to all case load
- Stepping down analgesia from systems to orals
- Drug manipulation - nurse prescribing of opioids
- Advising re complex patients
  - High opioid users - oncology
  - Intravenous drug users
Role of the nurse cont

- Audit of service
- Participate in research
- Education of
  - Ward nurses
  - Junior surgical doctors
  - Junior anaesthetists
  - Patients/relatives
  - Teaching in university
The Intensive Care Outreach Team

Patient Emergency Response Team
PERT
Audit findings

- Mortality rates in patients who were managed less than optimally prior to admission to intensive care was significantly increase from 42% to 65% (p<0.0001)

- Detectable indicators were found to be present for up to a week prior to admission

McGloin, Adam, Singer 1999
Definition of sub-optimal care

- Non recognition of abnormality
- Inappropriate treatment
- Concerns recorded by nursing or medical staff but no appropriate action taken
PERT Team members

- Intensive Care Nurse
- Anaesthetist
- ICU Consultant
- Physiotherapist
- Night CNS
- Physiotherapist (on call)
Objectives of the Team

To improve the ability of clinical ward staff to recognise and respond to detectable indicators of deterioration in patients on general wards.

To increase the incidence of early recognition of acutely ill patients who require intensive interventional management.

To provide a 24 hour service for acutely ill patients.

To contribute towards decreasing acuity, associated morbidity and length of stay on ward patients requiring admission to ICU.

To facilitate immediate skilled attention for patients who are deteriorating acutely outside ITU.
Clinical role of PERT Nurses

- Member of Cardiac Arrest team
- Triage & initial management of the acutely ill ward patient
- Ensuring optimum care prior to & following ICU admission in liaison with the multidisciplinary team
- Education & support to multidisciplinary team as necessary
PERT Calling Criteria

- Respiratory Rate > 25 or < 8 breaths/min
- Oxygen Saturation < 90% on 35%+ Oxygen
- Heart Rate >125 or <50 beats/min
- Systolic blood pressure <90 or >200 mmHg (or sustained fall >40 mmHg from normal value)
- Sustained alteration in conscious level
- Patient looks unwell or you feel worried about their clinical condition
Nursing assessment

- Respiratory
- Cardiovascular
- Neurological
- Renal
- Endocrine
Assessment of the Sick Patient

Look

- Overall status – confused, restless, obtunded, moribund, able to answer questions
- Colour – cyanaosis (central – lips, buccal mucosa, peripheral – fingers, toes, legs, arms)
- Ankles, sacrum – swollen, oedematous
- SOB – dyspnoeic or laboured breathing
Assessment of the Sick Patient

Feel

- Skin – clammy & cool (poor perfusion) pink and warm with low BP (sepsis)
- Pulse – rate, volume, rhythm – pulsus paradoxus, alternans, collapsing

Listen

- Breath sounds – fluid overload / LVF
- Complaints of pain, tightness, nausea
Assessment of the Sick Patient

Measure
- Blood Pressure
- Urine output
- Heart Rate
- Blood results
- Oxygen Saturations
- Respiratory Rate
Aims of Nurse-led Pre-Admission

- Designing care around the patient
- Team approach with physiotherapy, nutritionist, community services, hospital staff
- Reducing DNA’s and cancelled operations as unfit
- Improving patient satisfaction
Pathway to Care

- All initial assessments performed by nurse
- All tests performed by nurses
- Used for inpatients and day surgery
- 4-6 weeks in advance
- Consultant anesthetist present for all clinics, for referral for pre defined criteria
Nurse led ..

- **Assessment**
  - Cardiovascular *(listen to heart & Lungs)*
  - Past medical history
  - Airway assessment *(Mallampatti)*
  - Drugs
Continued

- Information and education (hand outs)
  - Surgical procedure
  - Anaesthetic
  - Post operative pain management
Tests

- ECG (all seen by anaesthetist)
- Bloods
- Urine
- MRSA
- Height/Weight
Abnormal findings-who to refer to?

- Consultant anesthetist
- For medical conditions either GP, or hospital clinician present for all clinics
- Pain team
- Surgical team
- Anesthetic department
Evaluate & Monitor

- Audit patient satisfaction
- In our DTC clinic 746 patients responded, with 99.7% patient satisfaction
- 100% of patients felt it was useful in preparing them for surgery
- Look at other trusts for good practice models & Modernisation guidance
Guidance on Pre-operative tests

- NICE-Clinical Guideline 3, www.nice.org.uk,
- Sets out recommendations for chest X-rays, ECG, Blood tests, Lung function tests,
- NHS Modernisation Pre-operative assessment guidance on Day Surgery & In-patients:
  - www.modern.nhs.uk/theatreprogramme/preop
Post Anaesthetic Recovery

- Established area of nursing practice in UK
- Facilitates optimisation of theatre time (allows lists to run faster)
- Facilitates safe transition from theatre to fit to return to ward
- Monitor the patients more closely than on wards
- Situated in the operating theatres
Post Anaesthetic Recovery Nurse

- Specialists in airway management
- Prioritising care whilst patient is emerging from anaesthesia
- Specialist knowledge of anaesthesia and surgical techniques
- 1:1 nursing
- Optimise pts analgesia detect and treat early possible complications (recognise the abnormal)
Recovery nurse skills

- Airway/respiratory
  - Safe maintenance of all types of airways - Laryngeal mask airways/Endotracheal tubes/ Guedal airway, oxygen therapy
  - Ventilated patient
  - Extubation

Cardiovascular
- Heart rate
- ECG
- Blood pressure (invasive & non invasive)
Fluid management
- Blood loss
- Intravenous

CNS
- Assessment of level of conscious
- Sedation
- Pain score

Operation specific monitoring
- Pedal pulses for vascular/orthopedic surgery
Thermoregulation
  - Warm patient/fluids

Documentation
  - Correct prescription
  - Postoperative instructions
And of course nurse anaesthetists