A Review of the Recent NICE and National Guidelines for Pharmacists Working in Acute Medicine

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Aims and Objectives

- Review the key priorities for implementation of the guidance for:
  - VTE,
  - Neutropenic Sepsis,
  - Alcohol use disorders,
  - Delirium,
  - AF.

- Abolition of 4 hour A&E targets.
VTE

- Acute VTE is responsible for 5 times the number of deaths each year compared with MRSA deaths.
- 0.5 million people die each year at an annual cost of £40 million a year associated with a £68 million NHS (LA) cost.
- The House of Commons Health Committee reported in 2005 that an estimated 25,000 people in the UK die from preventable hospital-acquired VTE every year.¹
- It is positive that VTE has been prioritised and NHS LA and CQC will make this part of the registration and overall quality agenda.

1. Venous thromboembolism: reducing the risk. NICE Clinical guideline 92, January 2010
A UK survey suggested that 71% of patients assessed to be at medium or high risk of developing deep vein thrombosis did not receive any form of mechanical or pharmacological VTE prophylaxis.¹

VTE is an important cause of death in hospital patients, and treatment of non-fatal symptomatic VTE and related long-term morbidities is associated with considerable cost to the health service.²

2. Venous thromboembolism: reducing the risk. NICE Clinical guideline 92, January 2010
VTE

Key Priorities for Implementation

- Regard medical patients as being at increased risk of VTE if they:
  - have had or are expected to have significantly reduced mobility for 3 days or more or
  - are expected to have ongoing reduced mobility relative to their normal state and have one or more risk factor.

- Assess all patients for risk of bleeding before offering pharmacological VTE prophylaxis

- Reassess patients’ risks of bleeding and VTE within 24 hours of admission and whenever the clinical situation changes

- Before starting VTE prophylaxis, offer patients and/or their families or carers verbal and written information

- Do not allow patients to become dehydrated unless clinically indicated.

- Encourage patients to mobilise as soon as possible.
VTE

Strengths

- Commercial electronic systems available for assessment.
- Treatment and prophylaxis: dose, renal fx, communication at admission and discharge, concordance, patient counselling

Weaknesses

- Heterogeneous population
- Driver: surgery

Opportunities

- Pharmacist prescribing
- Pharmacist led assessment
- Education and Training
- NPSA: LMWH

Threats

- Bleeding risk
- Over prescribing
- Long term prophylaxis
- Opt out policy?

2. Samama et al. A comparison of enoxaparin with placebo for the prevention of VTE in acutely ill medical patients. NEJM Volume 341 Number 11. 793
What happens in your hospitals?
Neutropenic Sepsis

- Neutropenic sepsis is a recognised and potentially fatal complication of anticancer treatment; particularly chemotherapy.¹
- Mortality reported as between 2-21%.

1. Neutropenic sepsis: prevention and management of neutropenic sepsis in cancer patients. NICE Clinical guideline SCOPE, September 2010
Neutropenic Sepsis

- Signs and symptoms in people with suspected neutropenic sepsis in the community that necessitate referral to secondary/tertiary care.
- Education and support for patients and carers on the identification of neutropenic sepsis.
- Emergency assessment in secondary/tertiary care of a person with suspected neutropenic sepsis.
- Appropriate initial investigations of suspected infection in a neutropenic patient in secondary care:
  - Definition of neutropenia and fever.
  - Investigations appropriate for risk stratification and management.
Neutropenic Sepsis

- Risk stratification and management of suspected bacterial infection:
  - Clinically applied risk stratification scores or algorithms.
  - Inpatient versus ambulatory (non-hospitalised) management strategies.
  - Oral antibiotic therapy, intravenous antibiotic monotherapy or intravenous antibiotic dual therapy.
  - Timing of initial antibiotic therapy.\(^1\)

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Neutropenic Sepsis

- Risk stratification and management of suspected bacterial infection:
  - Switching from intravenous to oral antibiotic therapy.
  - Management of unresponsive fever. Duration of empiric antibiotic therapy (antibiotics chosen in the absence of an identified bacterium).
  - Duration of inpatient care.
  - Management of unresponsive fever.
  - Duration of empiric antibiotic therapy (antibiotics chosen in the absence of an identified bacterium).
  - Duration of inpatient care.
Neutropenic Sepsis

- Primary and secondary prophylaxis in people at risk of neutropenic sepsis during anti-cancer treatment:
  - Primary prophylaxis with growth factors (for example granulocyte colony stimulating factor) and/or antibiotics (for example fluoroquinolones).
  - Secondary prophylaxis with growth factors, granulocyte infusion and/or antibiotics.

- Role of empiric glycopeptide antibiotics (antibiotics chosen in the absence of an identified bacterium) in patients with central lines and neutropenia or neutropenic sepsis.

- Indications for removing central lines in patients with neutropenia or neutropenic sepsis.

- Information and support for patients and carers.

- Training of all healthcare professionals on the identification and management of neutropenic sepsis.
Neutropenic Sepsis

Strengths
- Rationalisation of antibiotics

Weaknesses
- Delays to treatment.

Opportunities
- Pharmacist Prescribing
- Education and Training

Threats
- Over treatment and risk of resistance.
What happens in your hospitals?
Alcohol Use Disorders

- In the UK, it is estimated that 24% of adults drink in a hazardous or harmful way.
- Hazardous and harmful drinking are commonly encountered among hospital attendees; approximately 20% of patients admitted to hospital for illnesses unrelated to alcohol are drinking at potentially hazardous levels.¹

¹ Royal College of Physicians (2001) Alcohol — can the NHS afford it? Recommendations for a coherent alcohol strategy for hospitals. London: Royal College of Physicians
Alcohol Use Disorders

- Acute alcohol withdrawal (symptom triggered or fixed dosing)
- Alcohol-related liver disease
- Alcohol-related pancreatitis
- Management of delirium tremens
- Management of alcohol withdrawal seizures
- Wernicke’s encephalopathy
- Nutritional support and enzyme supplementation

1. Alcohol Use disorders. NICE Clinical guideline 100, June 2010
Alcohol Use Disorders

**Strengths**
- Protocols for assessment and monitoring in acute alcohol withdrawal

**Weaknesses**
- Pharmacist prescribing – CD regulations
- Designated regimens

**Opportunities**
- Pharmacist prescribing
- Out-patient detox

**Threats**
- Violence and aggression
- Over treatment in designated populations
What happens in your hospitals?
Delirium

- Older people and people with dementia, severe illness or a hip fracture are more at risk of delirium. The prevalence of delirium in people on medical wards in hospital is about 20% to 30%.¹

- Compared with people who do not develop delirium, people who develop delirium may:
  - need to stay longer in hospital or in critical care
  - have an increased incidence of dementia
  - have more hospital-acquired complications, such as falls and pressure sores
  - be more likely to need to be admitted to long-term care if they are in hospital
  - be more likely to die.

¹ Delirium: diagnosis, prevention and management, NICE Clinical guideline 103, July 2010
Delirium

- Risk factor assessment
- Medication Review
- Prevention of elements that may exacerbate:
  - Dehydration
  - Constipation
  - Hypoxia
  - Infection
  - Pain control
  - Nutritional support
Delirium

Strengths
- Medication review
- Prevention of elements that may exacerbate

Weaknesses
- Sometimes unwillingness to stop medications that may be contributing

Opportunities
- Pharmacist prescribing

Threats
What happens in your hospitals?
AF

- AF is the most common sustained cardiac arrhythmia, occurring in 1–2% of the general population. Over 6 million Europeans suffer from this arrhythmia, and its prevalence is estimated to at least double in the next 50 years as the population ages.¹
- The prevalence of AF increases with age, from 0.5% at 40–50 years. The prevalence of AF is 10% at the age of 80 years, and 18% in those aged ≥85 years.
- Men are more often affected than women.
- AF confers a 5-fold risk of stroke, and one in five of all strokes is attributed to this arrhythmia.

¹ Guidelines for the management of atrial Fibrillation. The Task Force for the Management of Atrial Fibrillation of the European Society of Cardiology (ESC) European Heart Journal 2010
AF

- Long Term Management Objectives:
  - Prevention of thrombo-embolism.
  - Symptom relief.
  - Optimal management of concomitant cardiovascular disease.
  - Rate control.
  - Correction of rhythm disturbance.
AF

**Strengths**
- Anticoagulation
- Risk assessment

**Weaknesses**
- NPSA

**Opportunities**
- Pharmacist prescribing
- Near patient/home testing
- Factor Xa inhibitors
- Direct thrombin inhibitor.
- Dronaderone
- Vernakalant

**Threats**
What happens in your hospitals?
4 Hour A&E Targets

- DOH: 4 hour targets abolished in April 2011
- It provides an incentive to move patients through A&E quickly, but does nothing to ensure that patents are receiving the highest quality care. It is time to take a more balanced approach to measuring quality of care provided by A&E departments and makes sure that the needs of each individual patient is at the heart of the urgent and emergency care system.\(^1\)
- I agree that the timeliness of care is an important element of quality of care. There is clinical evidence that timeliness affects both outcomes and mortality. It would therefore be unacceptable for the timeliness of care to deteriorate. Moreover I would expect the NHS to continue to take action to reduce unnecessary delays. In particular, once a patient is ready to leave the A&E for the ward there should be no delay.\(^1\)

- Letter 21\(^{st}\) June 2010 Andrew Lansley Secretary of State for Health.
Impact on the AMU

- The council of the Society for Acute Medicine along with other National groups is concerned about this proposal as we feel this will adversely affect the quality of care for acute medical patients.

- Virtually all acute hospitals in the UK now have an AMU, and more than 80% of patients admitted to hospital as emergencies require initial treatment by a multidisciplinary team on the AMU that can provide high quality care to medical patients in the period following their admission.

- Delaying this would have an adverse impact on their care.
Impact on the AMU

- It has been suggested that the 4-hour target has had a detrimental impact on patient care due to difficulties with initial assessment and treatment in this time period.
- However there is little evidence to support this assertion indeed published evidence demonstrates that overall <0.05% of breaches are for clinical reasons.
- The key is to ensure patients are moved promptly from the emergency department into a ward area where high quality care can be delivered in an environment that provides comfort, safety, privacy and dignity.
- Current evidence shows that a delay in reaching medical specialty opinion and beds correlates significantly with mortality.
- The Acute Medical Unit and the acute medical team are ideally placed to provide such care for patients.

Impact on the AMU

- The report of the Acute Medicine Task Force in 2007 emphasised the improvement in patient care that would result from the development of acute medical units as the ‘hub’ of acute medical care within all UK hospitals.

- It has been suggested that the increase in the number of patients admitted to hospital for less than one day indicates a rise in ‘inappropriate’ hospital admissions.

- In reality this increase is likely to reflect a reduction in length of hospital stay as a result of improvements in the process of care on the AMU.

- Published data have demonstrated the benefits of an acute medical consultant presence within an AMU in reducing hospital stay for patients admitted as emergencies.


Impact on the AMU

- Advances in the provision of ‘ambulatory’ care have enabled patients who would previously have required a prolonged hospital stay to be managed in a community setting.
- Ambulatory care is a key component of the curriculum for training in Acute Medicine and most AMUs have developed an ambulatory care unit to enable provision of this service.
- We know that the 4 hour target has an evidence base that demonstrates an improvement in the speed with which patients are assessed and treated.
- There are no other evidence based quality measures defined for the undifferentiated patient who presents with acute medical illness that can readily replace this target. In addition SAM raised this important issue as part of the National Consensus Conference.

Any Questions?