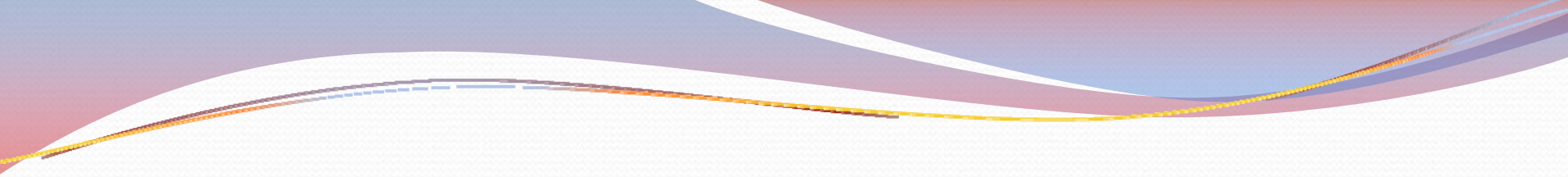


# Acute Medicine – facts and future

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***“Experience is the worst teacher  
– it gives the test first and the  
instruction afterward”***

**Benjamin Franklin**

# DISCLAIMERS

- ❖ Lessons learnt from UK
  - ❖ Some myths dispelled
    - ❖ “Sharing experience”, not “instructing”
- ❖ There’s more than one way to skin a cat [*in fact, not all cats are the same*]

# DEFINITIONS

❖ Acute Medical Unit

❖ Acute Medicine

# What do you mean by “Acute Medical Unit” or “AAU, EAU, MAPU CDU”??

❖ Do **you** mean:

1. *An all-embracing receiving unit from ED? or....*
2. *A specialist acute medical unit taking selected patients from ED (and perhaps direct from the Community)*

❖ Should **Functionality** dictate terminology rather than the converse?



# What is Acute Medicine?

- “Acute medicine is that part of general (internal) medicine concerned with the immediate and early specialist management of adult patients with a wide range of medical conditions who present to, or from within, hospitals as urgencies or emergencies”
- *RCP Task Force 2007*

# But, how about starting with “Functionality”?

Q. What’s the case-mix on your average acute medical intake?

A. (Norwich UK, 2000):

- ❖ Aged and Palliative Care – {40%}
- ❖ Exacerbation of chronic disease – {40%}
- ❖ Acutely ill medical patients – {20%}



# HISTORY

# The Historical Model for Acute Care in UK

- ❖ >80% medical admissions are emergencies
- ❖ Junior doctors deliver the service
- ❖ Consultant physicians practise acute medicine alongside “organ-based” specialty service
- ❖ No specific consultant time is assigned to acute care
- ❖ Emergency work is fitted around elective activities

## McQuillan: *BMJ* 1998

- ❖ 41% of ITU admissions are avoidable
- ❖ Sub-optimal care contributed to mortality in
  - 32.5% definitely
  - 21% probably
  - 32.5% possibly

# Weekend v. Weekday Mortality

*Bell CM et al NEJM 2001;345: 663*

3.8 million emergency admissions in Canada 1988-1997;  
Weekend mortality commoner in:

- ❖ Ruptured aortic aneurysm (42 v 36%,  $p < 0.001$ )
- ❖ Acute epiglottitis (1.7 v 0.3%,  $p = 0.04$ )
- ❖ Pulmonary embolism (13 v 11%,  $p = 0.009$ )

**23 of the 100 leading causes of death were greater at weekends:**

# Royal College of Physicians (London)

- ❖ 2000: “Acute Medicine, the physician’s role. Proposals for the future”
- ❖ 2002: Working parties on interface of:
  - acute / emergency medicine
  - acute / critical care medicine
- ❖ 2004: “Acute Medicine, a practical guide for the next 10 years”
- ❖ 2007: RCPL “Task Force on Acute Medicine”  
([www.rcplondon.ac.uk](http://www.rcplondon.ac.uk))

# UK Acute Medicine

- ❖ Early 1990's: first acute medical units developed
- ❖ 1998: Society for Acute Medicine UK launched
- ❖ 2003: Sub-specialty status conferred
- ❖ Now: 400 members SAMUK
  - 200 acute physicians
  - 300 trainees

# Great Britain and the “4-hour wait”

Starting points:

- ❖ Emergency Medicine in UK
- ❖ Hospital management in UK
- ❖ Consultant contracts in UK

Introduction (?“Imposition”!) in UK:

- ❖ The Emergency Services Collaborative
- ❖ Resource
- ❖ Sanctions for failure

# Persisting challenges – *as of Dec 2008*

- ❖ 24/7 senior staffing



- ❖ Provision of 24/7 diagnostic services
- ❖ Integration of 'Front-Door' Departments – *A&E, Acute Medicine, Acute Surgery* – excessive duplication and delay

**“Cart–before–Horse”**

# “Cart–before–Horse” ...the dialogue:

1. “Let’s have an AMU” ..... “OK”
2. “How shall we staff it” .... “Well there’s always Nigel Fortescue-Smyth.....”
3. “So, what do we actually want it to do” .....*long pause..*

In other words:

**Structure > Personnel > Functionality**

# “Cart–before–Horse” .....result:

- ❖ Heterogeneity of function
- ❖ Inadequate staffing
- ❖ A confused “raison d’etre”
- ❖ “Units” become default “Facilities”

# Acute Medicine: *a vision for the future*

- ❖ A holistic, patient-orientated approach  
*where*
- ❖ Sick patients are seen by experienced physicians, **early**  
*and care is delivered*
- ❖ By a truly multidisciplinary and multiprofessional team  
*providing*
- ❖ An ideal environment for learning and training  
*and*
- ❖ A scientific evidence base for uniform clinical care

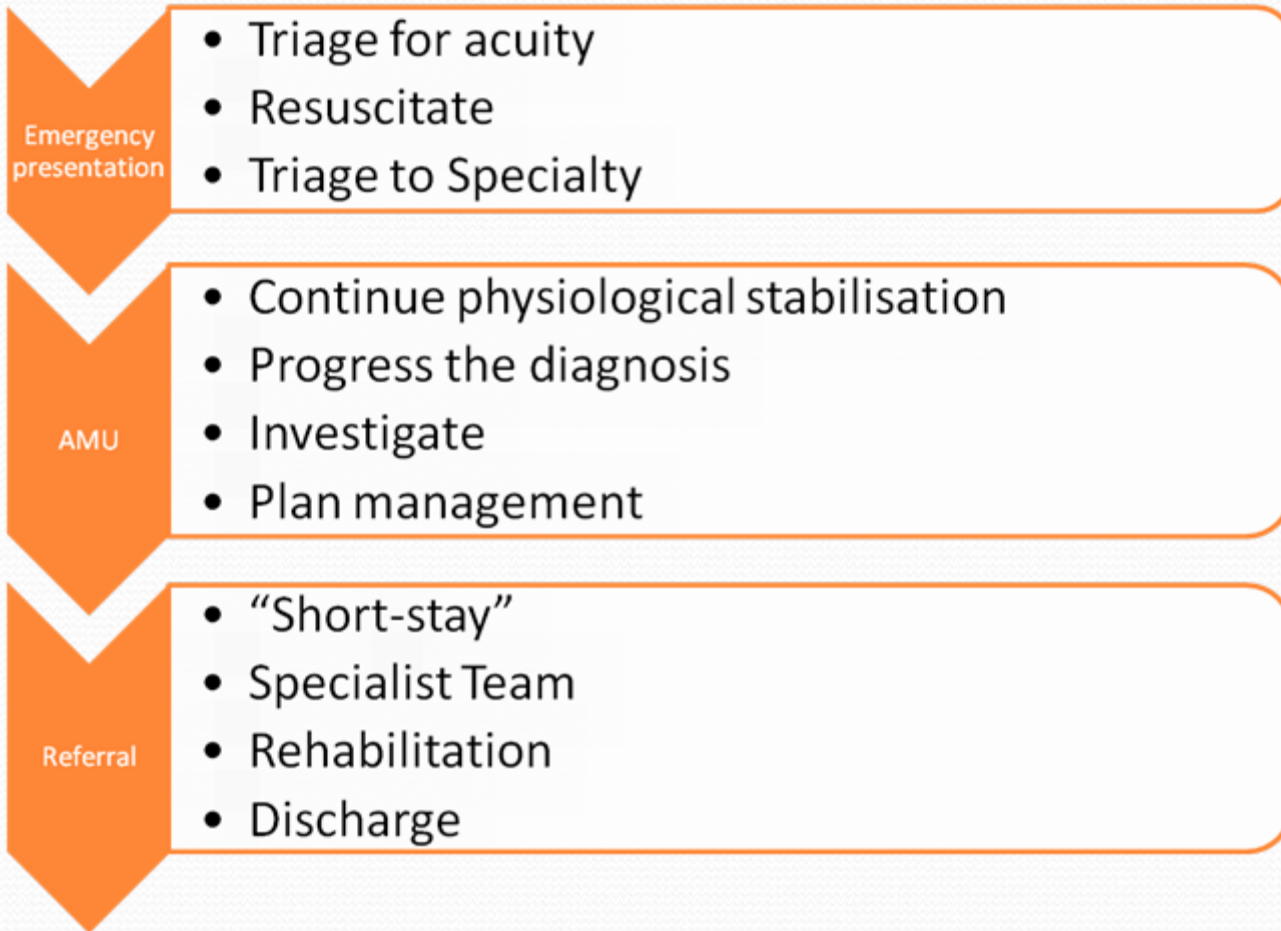
# “Horse- before Cart”: Suggested Strategic Steps

1. Define the clinical area by **functionality** (*and remove the obsession with terminology*)
2. Determine the **personnel** required to deliver the functionality
3. Design the **position, shape and content** of the clinical area

**Functionality > Personnel > Structure**



# FUNCTIONALITY



# “Functionality” of AMU

To provide care for patients who:

- ❖ Require physiological stabilisation
- ❖ Have an uncertain diagnosis
- ❖ Have correctable illness?

Of the latter:

- ❖ 50% minimum will stay <48 hours
- ❖ A proportion may need specialist referral



**WHAT ARE THE BARRIERS?**



# The non-acute patient with urgent needs

- ❖ Complex needs
- ❖ Elderly
- ❖ Mental health problems
- ❖ Potentially ambulatory problems

# Tricks

## Maintain throughput:

- ❖ Speedy diagnostics Tick
- ❖ Prompt Specialist opinion Tick
- ❖ Discharge planning +/-
- ❖ Rehabilitation and allied health  
(*culture of "help not hinder"*) +/-
- ❖ Community services not ideal
- ❖ Liaison staff +/-

# CONTINUITY OF CARE

Specialist  
referral

- The first 24 hours of treatment

Continuity

- Sub-specialty
- Geriatric medicine

- General Medicine – what's left?



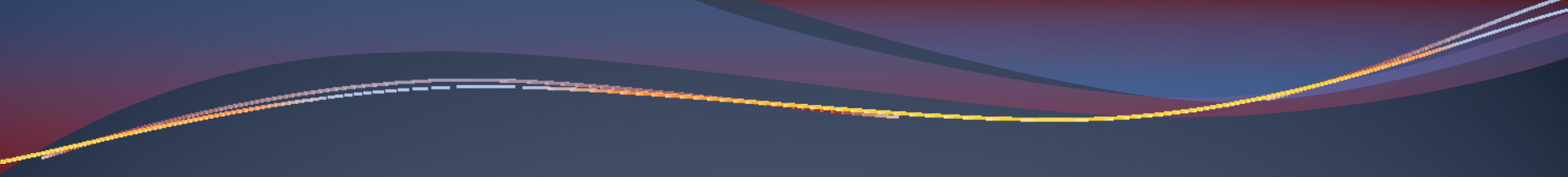
**PERSONNEL**

# AMU Personnel

- ❖ Traditional clinical team with 24/7 "senior" cover
- ❖ Trainee grades with dedicated rotational attachments to the area
- ❖ Inter-specialty representation (ICM)
- ❖ Shift working at all grades of medical staff
- ❖ Skilled nursing staff led by senior nurse(s)
- ❖ ? Number of hours of senior presence on shop-floor
- ❖ What is "senior"?

# The Acute Physician's Role

- ❖ Leadership role in AMU
- ❖ Direct clinical contribution
- ❖ Education
- ❖ “Sanity Sessions” - education
  - Academe
  - Procedures
  - Specialty interest (HDU, ICU, ED)
- ❖ ? Acute Response Team (with ICU), providing 24/7 critical care outreach



# TRAINING ACUTE PHYSICIANS

# Acute Medicine, who should do it?

- *‘correcting physiology, making the diagnosis’*

- ❖ **INTENSIVISTS: correct physiology, seek underlying cause, treat and aim to cure.**
- ❖ **PHYSICIANS: diagnose, correct physiology, treat and aim to cure.**
- ❖ **ACUTE PHYSICIANS: combine correction of physiology with traditional diagnosis.**



# Acute Medicine, who should do it?

## - 'outside the box'

- ❖ Forget job titles
- ❖ Experience and skill should dictate
- ❖ Collaborative working is the key

# Acute Medicine Training Programmes:

- ❖ Registrar training since 2003
- ❖ 4-year programmes
- ❖ Mandated periods in
  - Critical care
  - Medical specialities
  - (ED)
- ❖ Dual Training opportunities (acute/critical care medicine)
- ❖ Skill acquisition – endoscopy, echo, ultrasound



# BRICKS AND MORTAR

# Bricks and Mortar

- ❖ Size – dictated by:
  - Functionality
  - In turn, equates to putative length of stay
  - (Guidelines)
- ❖ Proximity to *and communication with*:
  - E.D.
  - Imaging
  - High Dependency Areas

# Potential Threats

- ❖ **“Throughput, throughput, throughput”**
- ❖ Must **retain** and **train** senior staff – *this has implications for remuneration, pattern of clinical work, specialty sessions etc*
- ❖ Nursing expertise and adequate nurse staffing ratios are crucial
- ❖ Delayed (and unnecessary) diagnostics
- ❖ Delayed Specialist help.

## It is essential to avoid...

- ❖ Becoming a default area for others' deficiencies . . . *it's very easy to become a victim of one's success*
- ❖ The culture that pathways can be optimised by concentrating on the Front Door . . . *on the contrary, the Back Door is the starting-point to flow*

# THE “WHOLE SYSTEM” CULTURE

❖ AMU ? - that's the easy bit!

# Whole-system culture

- ❖ Inappropriate referrals
- ❖ Chronic disease better cared for in the community
- ❖ AMU is the default for delayed outpatient consult
- ❖ *“But it’s the weekend”*
- ❖ Nursing homes
- ❖ Lack of community support

*A Service cannot function safely or efficiently if it is a default for other (failing) systems...*

***“Correct what needs to be corrected, don’t expect someone else to pick up the pieces”.***

# Whole-system culture

- ❖ Bed-blocking – sort out:
  - The “Back-Door”
  - Community services

*“Hospital isn’t necessarily the safest place to be. Indeed, it becomes less so as it is increasingly over-subscribed”*



***“Experience enables you to recognise  
a mistake when you make it again”***



Or, perhaps we can do  
better than that?