

CHANGING CULTURE, OVERCOMING SENSITIVITY

Multiprofessional Engagement and
Antimicrobial Stewardship

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Saving Lives: reducing infection, delivering clean and safe care

Antimicrobial prescribing

A summary of best practice



- Expert “antimicrobial stewardship” team
 - Trust Board *via* Drug & Therapeutics
 - Microbiology and Pharmacy
- Challenges
 - Antibiotic prescribing pathways
 - Intravenous +/- oral therapy
 - Treatment review including stopping/changing
- Antimicrobial Strategy and Formularies

YORK APPROACH

- Membership

- Directorate link clinicians (“Stewards”)
- Microbiology
- Pharmacy
- Data manager

- *Modus operandi*

- “Traditional” governance
 - *Sub-Committee of Drugs & Therapeutics Committee*
- “Modern” proactive (including virtual network)

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**ANTIMICROBIAL
STEWARDSHIP**

York Teaching Hospitals **NHS**
NHS Foundation Trust

Elderly Medicine Antimicrobial Formulary



- Narrow Spectrum
- Essential Principles
- No Cephalosporins
- Limit Quinolones
- No Co-Amoxiclav
- Clear guidance
- Simple
- Restrictive
- Facilitatory



CLARITY

Define a *clear pathway for use of antibiotics* which ensures that data on reasons for initiating therapy, regular review during use, consideration of oral switch and use of narrower spectrum agents and appropriate duration of therapy are fully recorded in all patient notes

ELDERLY FORMULARY

Summer
2008

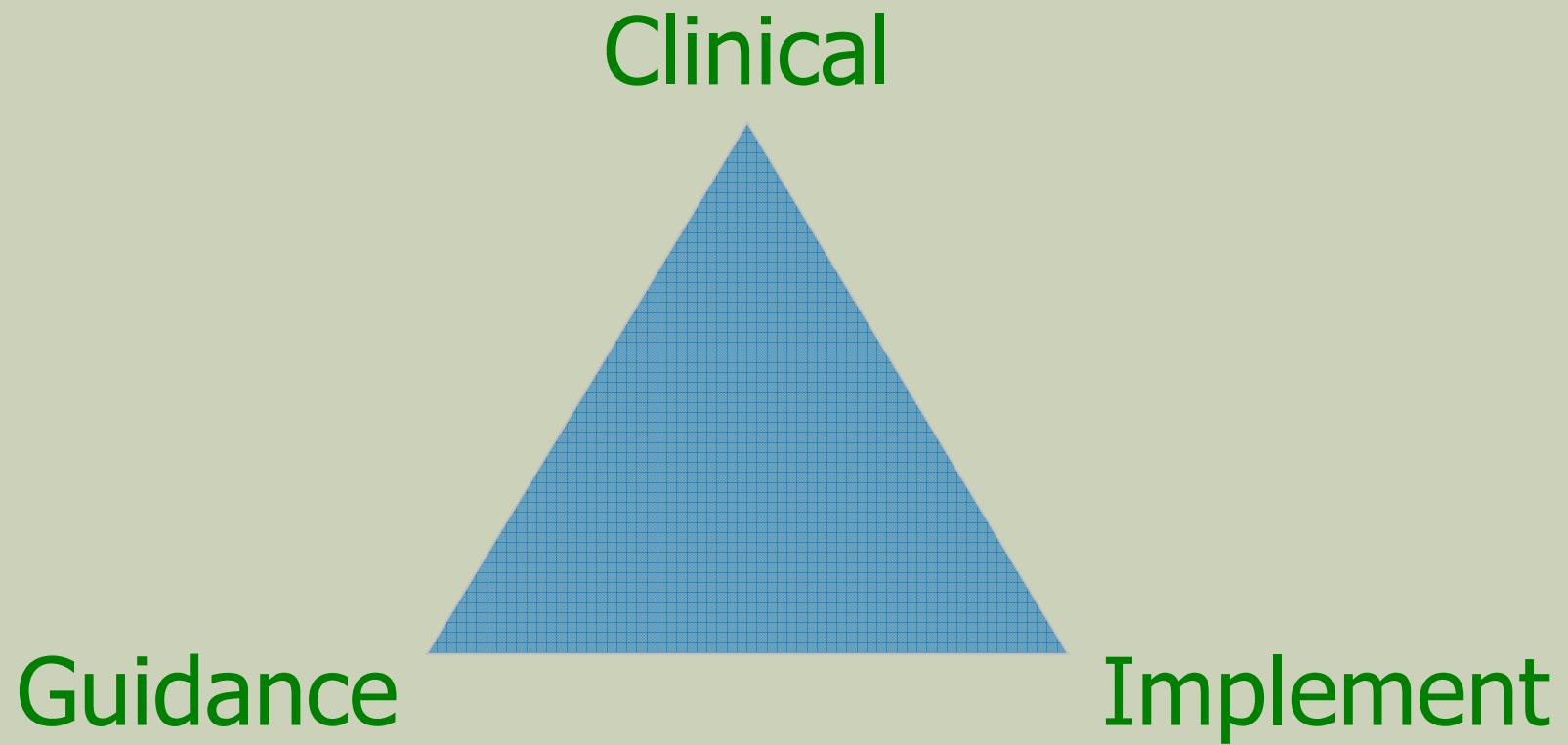
TEAM +

- Elderly Directorate Consultants
- Consultant Microbiologists
- DTC Chair & members
- Respiratory Physicians
 - BTS Guidelines
- Gastroenterologists
 - *Clostridium difficile*
- Nephrologists
 - Aminoglycosides & toxicity
- Consultant Biochemist
 - Renal function monitoring
- ABx Pharmacy Team

TRIANGULATION



ANTIMICROBIAL STEWARDSHIP



INTEGRATED GOVERNANCE

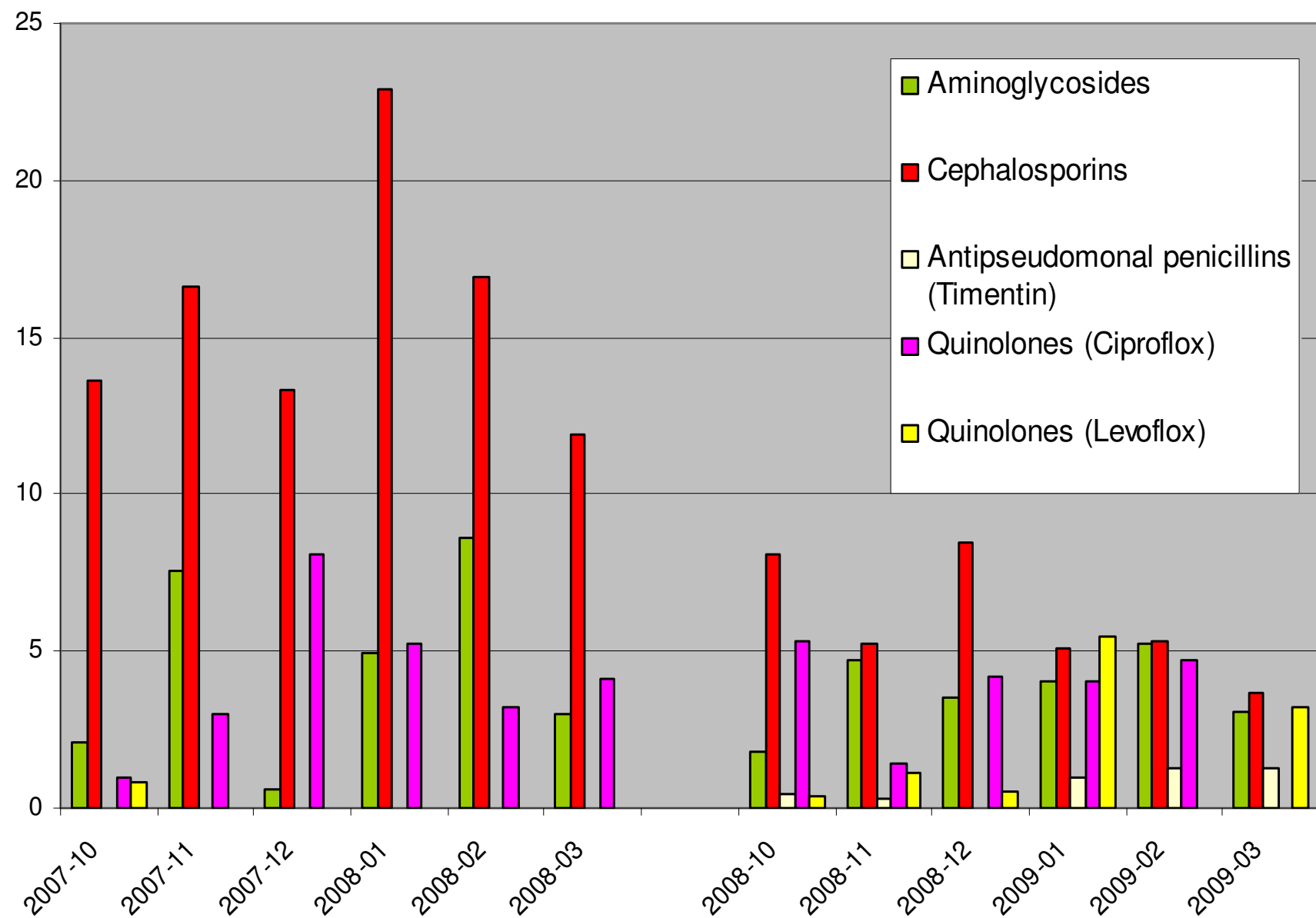
- Clear Pathway Charter
- Gentamicin handbook
- Revised allergy guidance
- I.V. Monographs
- Stock management
- Communication



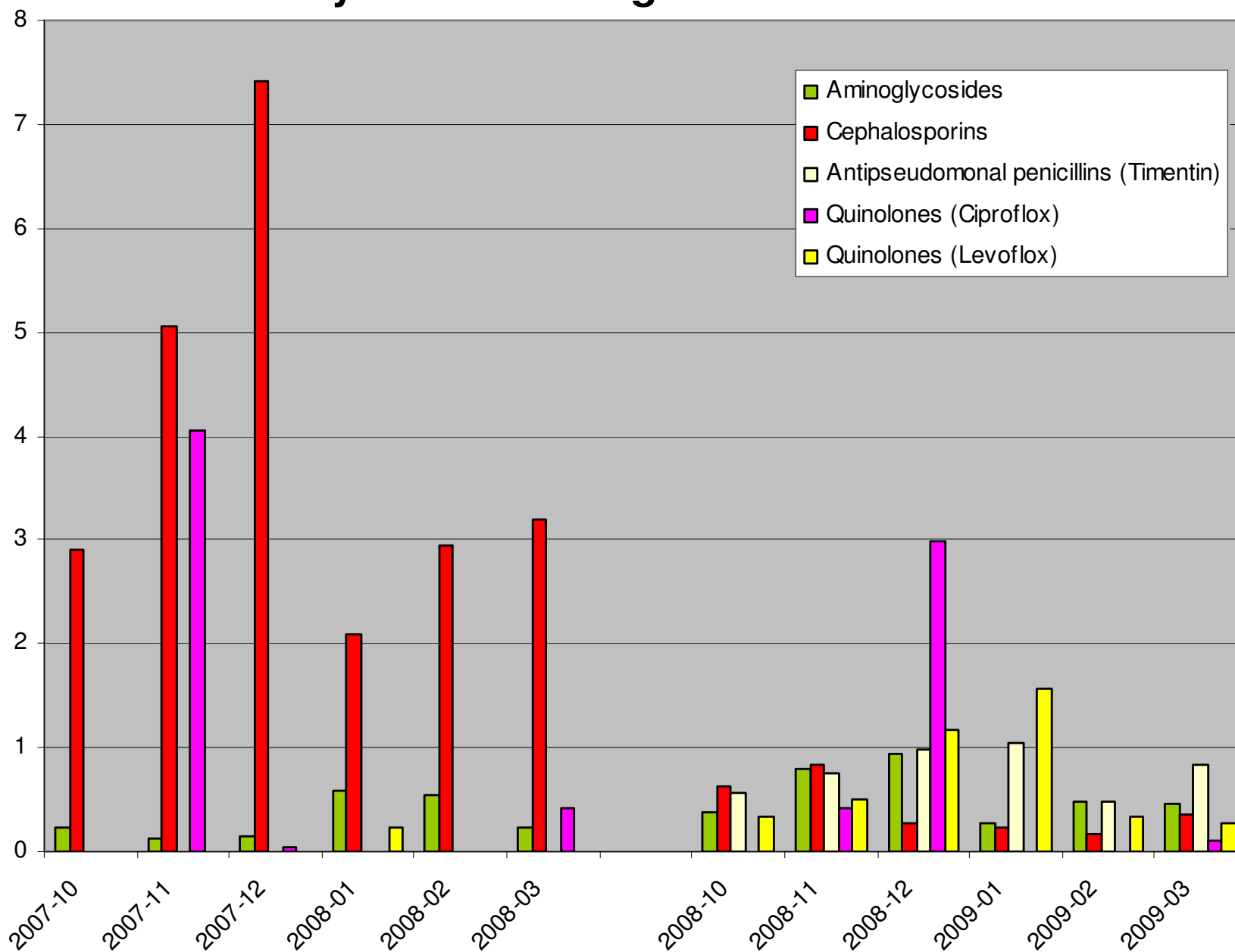
DATA MANAGEMENT

The establishment of measurements is absolutely essential for any initiative that is intended to improve **patient care**... They should enable and motivate the team involved to understand the extent and nature of the issue and should facilitate the demonstration of progress after the interventions have been introduced.

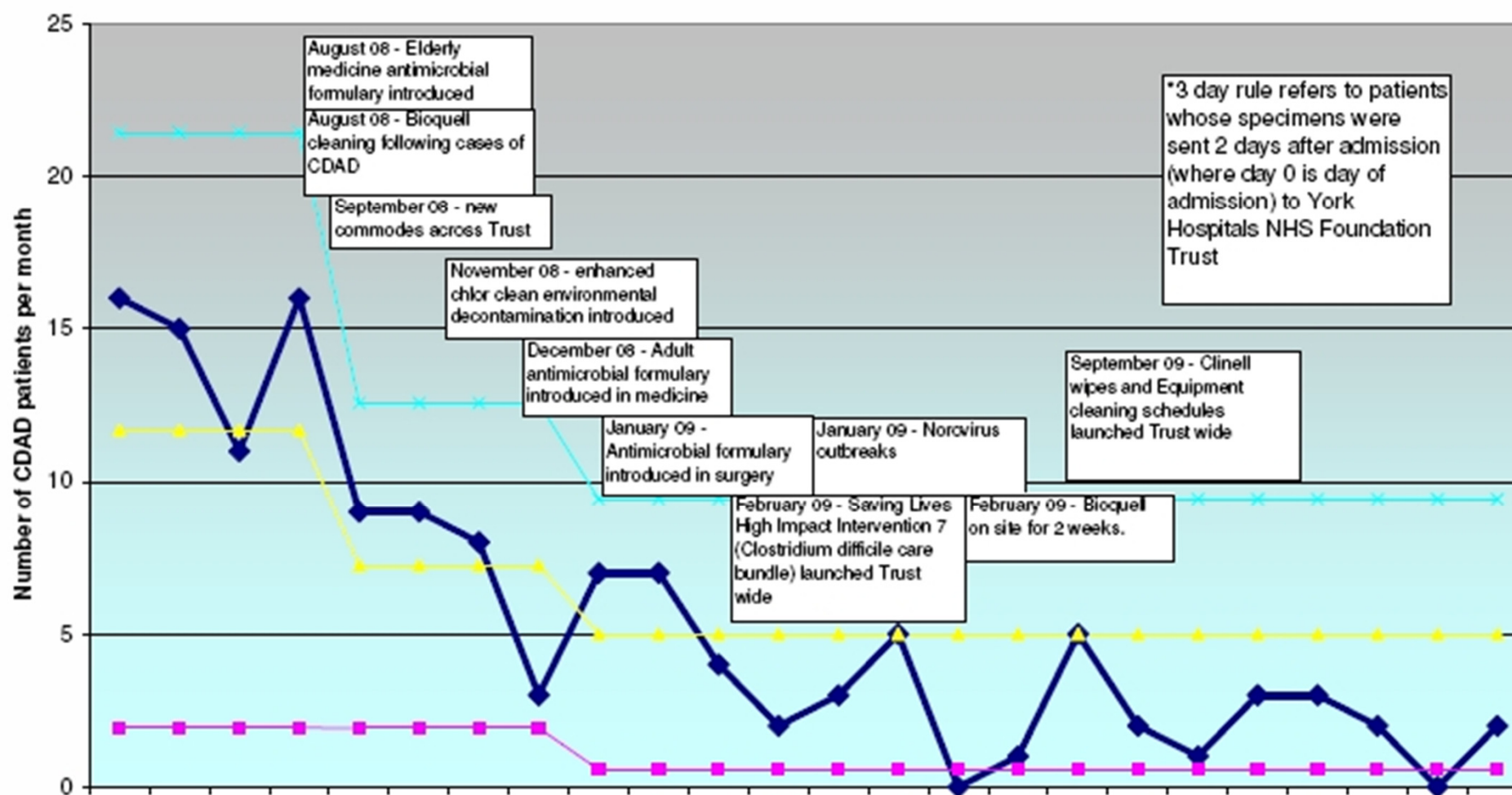
Wds 33 & 34 Selected DDDs/100 OBDs



Elderly Selected Drugs DDDs/100 OBDs



Trustwide monthly Clostridium difficile toxin positive patients (outside 3 day rule*) - from April 08 - York Hospitals NHS Foundation Trust





SLIPSTREAM EFFECT

ADULT MEDICAL & SURGICAL FORMULARY

First
Edition
December
2008,
February
2009

SURGICAL PROPHYLAXIS FORMULARY

- Importance of *fully* engaged Directorate Steward(s)
- Beyond obvious
 - Anaesthetic Steward
 - Renal Steward
- Joint governance presentations
 - General surgical
 - Orthopaedic
 - Anaesthetics
- Publication
 - Location

SURGICAL PROPHYLAXIS FORMULARY

First
Edition
February
2010

REFLECTION IN ACTION

[SEE CHRIS ARGYRIS, DONALD SCHÖN]

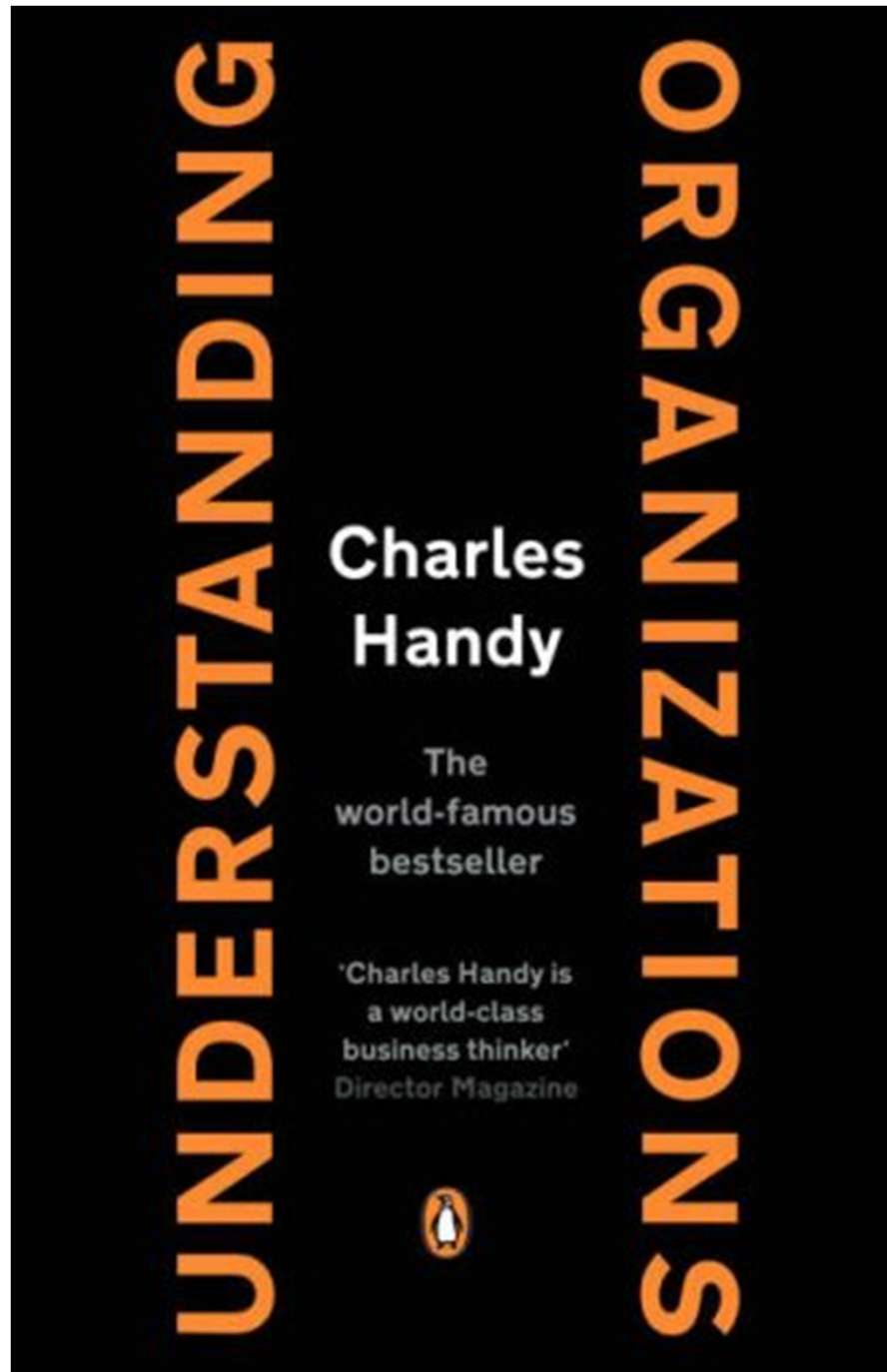
- Pneumonia – especially upgrading therapy
- Influenza – adequacy of cover for concurrent CAP
- Pneumonia audit – fit for purpose?
- Aminoglycosides
 - “Never be first to use a new drug, never be last to use an old drug...”
 - Facilitating safe prescribing – “New” Hartford nomogram
- C-diff 027 concern
 - Timentin usage & resistance monitoring
 - Zero tolerance – course length

ADULT MEDICAL & SURGICAL FORMULARY

Fifth
Edition
July 2010

**“EVERYTHING I KNOW,
I LEARNT FROM
ORGANISATIONS”**

**Charles Handy
[1932 -]**



Penguin Books

First
publication
1976

Reprints++

4th Edition
1993

7 KEY CONCEPTS

- Motivation
- Roles & Interactions
- Leadership
- **Power & Influence**
- Workings of groups
- Cultures & structures
- Politics & management of differences

POWER & INFLUENCE

- Links individuals with organisations
- Lay (unfashionable): **Power = Influence...**

- *Charles Handy however:*

Influence (*active process*) separate from the ability to influence, *i.e.* Power which is a *resource*

POWER SOURCE?



EXPERT POWER

- Most socially acceptable
 - Therefore most sought after - and attracts blaggers!
- Major (linked) qualifications:
 - Can only be given by those over whom it will be exercised
 - Cannot exert until expertise is recognised – explicitly (or implicitly)
- Comparative:

**“In the land of the blind, the one-eyed man is king
– until he with two eyes comes!”**

INFLUENCE METHOD

OVERT

Force

Exchange

**Rules &
procedures**

Persuasion

**UNSEEN
(covert)**

Magnetism

Ecology

RESPONSE TO INFLUENCE

■ Compliance

- Agree because “have to”, or seen as worthwhile
- Onus *always* with initiator
- Implication – choice or rejection by individuals = chaos
- Short-term quick results - BUT high effort to maintain

■ Identification

- Nice for influencer(s) – often when magnetism /personal influence
- BUT low flexibility – tightly bound to influencer(s)
- “Commando managers”

■ Internalisation

- Commitment *self-maintaining* and *independent* of influence source
- If truly desired, must be no pressure to accept influence[?]

ATTITUDE CHANGE

- Dissonance Theory (Festinger 1956)
 - Useful framework to understand attitude change
 - Familiarity in lay (e.g. marketing) & professional (e.g. negotiation)

“When two cognitive inputs to our mental processes are out of line, are dissonant, we experience psychological discomfort”



RESPONSE TO DISSONANCE

1. **Accept** new evidence - change views or behaviour
 - but can create dissonance as to why original view was held
 - **Group majority** accept – **minority** accept (or leave)
 2. **Downgrade** source of dissonant or discrepant information
 - If dissonant information not highly regarded, dissonance is low and attitude not changed (*even perversely reinforced*)
 - **Group majority** do not accept – **minority** who do accept either fall in line, remain and seen as somewhat maverick - or leave
 - Group becomes even more self-sufficient and very resistant
- Common strategy = **separation**, even to extent of seeking non-dissident information - “**Evidence**” ...

SURGERY: BI-PHASIC IMPLEMENTATION

■ Phase One

- Agreeing support
- Recognising risk
- Evidence
- Use it

■ Phase Two

- Emerging concerns
- Uncovering risk
- Investigation
- Evidence – including case-based
- Clinical engagement

GENERAL SURGEONS

- Surgical site and wound infections
- Deep examination - beyond email “cluster bombing”!
- Demonstrating serious intent
- Practical solutions – especially perceived gaps in cover (G+ve)
- “Real-time” patient review, ward interventions
- Weekly Grand Round
- AST adoption of changes
 - Logistics
 - Hardcopy & digital – dilemma++

OBSTETRICS & GYNAECOLOGY

- Real and valid clinical & litigation sensitivity
 - Separating the issues
- Confronting individuals' (group's?) comfort zone
- Demand for evidence
 - In-depth review of sources – systematic reviews, learned bodies ++
- Email
 - Dissonance to dialogue
- Face-to-face meeting
 - Agreed work plan – sourcing evidence
 - Email follow-up
- Face-to-face meeting
 - Agreed solution – *or is it...?*

EVIDENCE

- Evidence-based Medicine: How to practice and teach EBM

David Sackett et al (2000) London, Churchill Livingstone ISBN: 0443062404

- **Clinical situation A** – in possession of necessary knowledge:

- Reinforces mental & emotional responses

= Cognitive *Resonance*

- Rapid decisions, feeling of achievement++

- **Clinical situation B** – do not have necessary knowledge:

- Mental & emotional responses in disarray

= Cognitive *Dissonance*...

- Negative response – hide, argue, refute need
- Positive response – open to learning, realign understanding

VASCULAR SURGERY

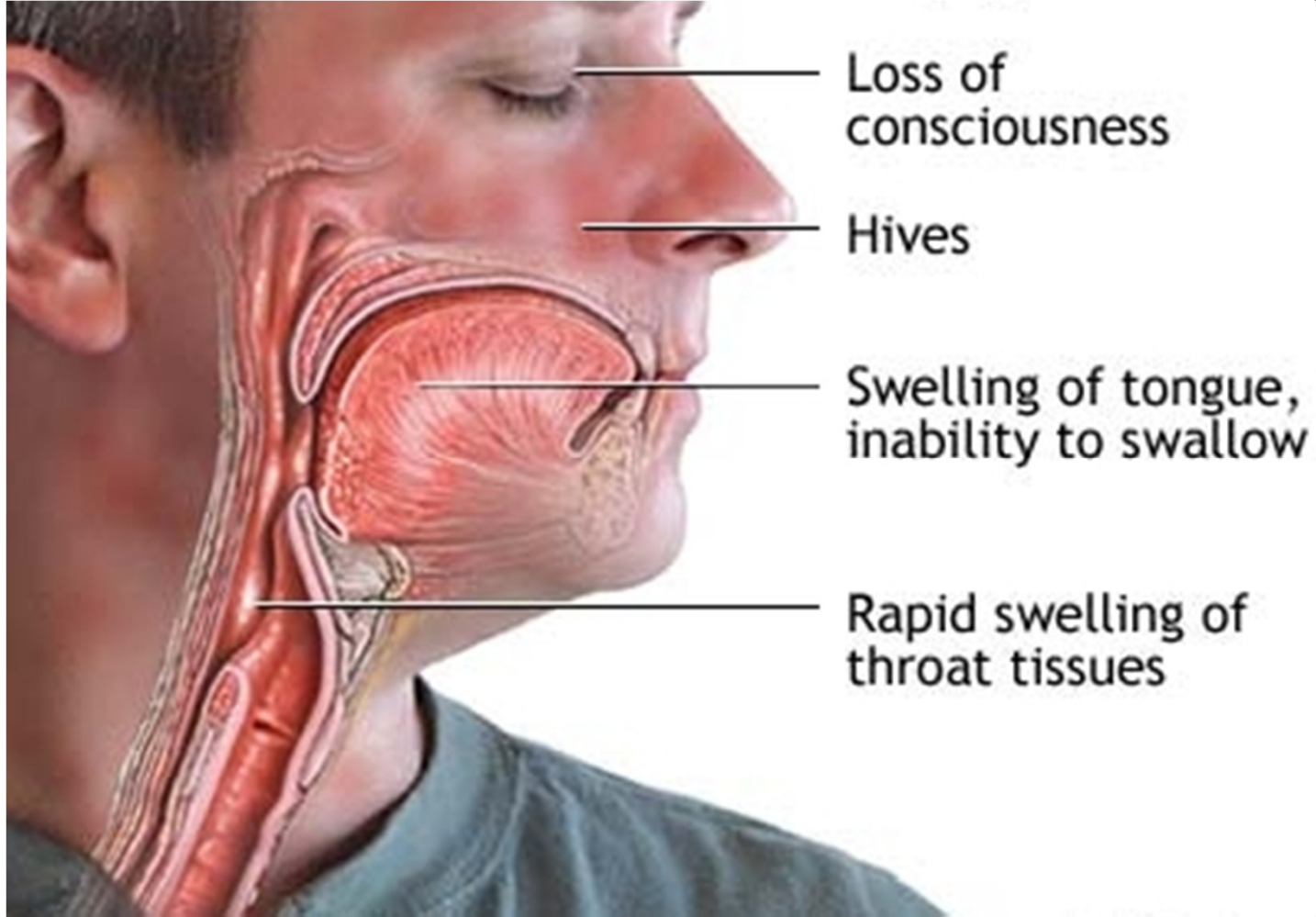
- **Staunch supporters**
- Emerging specific concerns
- Abdominal Aortic Aneurysm (AAA) open repairs and endovascular stent repairs (EVAR)
- Wake-up call: clinical ward pharmacist challenge...
 - Concern for renal function protection
 - Synergy from nephrotoxic contrast – Real? Theoretical?
- **Collaborative “solution”**
 - Case reviews
 - Designing appropriate cover

SURGICAL PROPHYLAXIS FORMULARY

Version 2
Summer
2011

BENEATH THE SURFACE

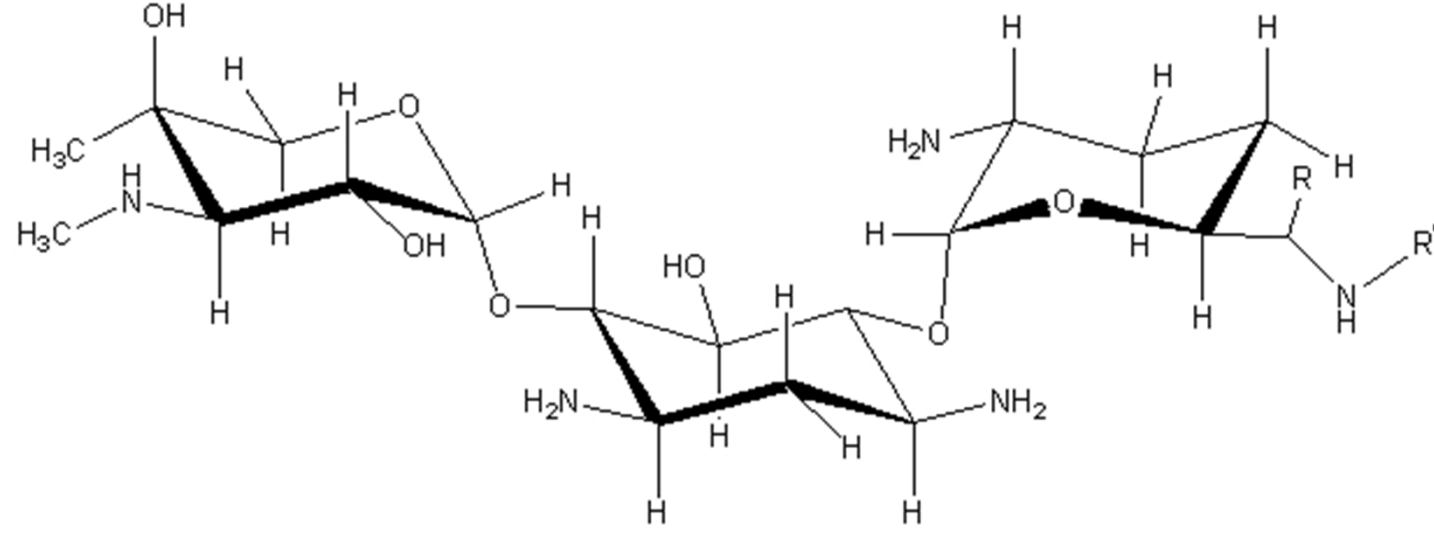




ALLERGY

AND

2-[4,6-Diamino-3-[3-amino-6-(1-
methylaminoethyl)oxan-2-yl]oxy-2-
hydroxycyclohexyl]oxy-5-methyl-4-
methylaminoxane-3,5-diol

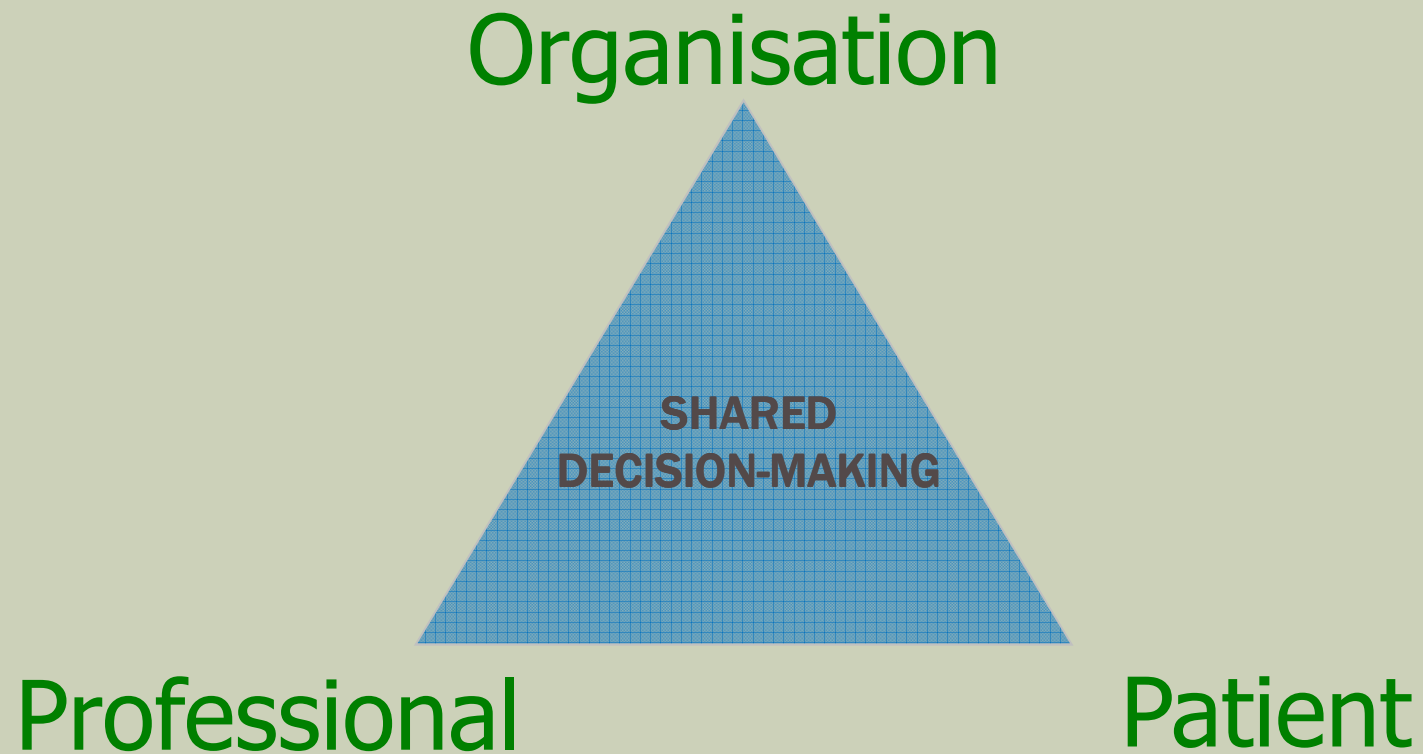


GENTAMICIN

TRIANGULATION

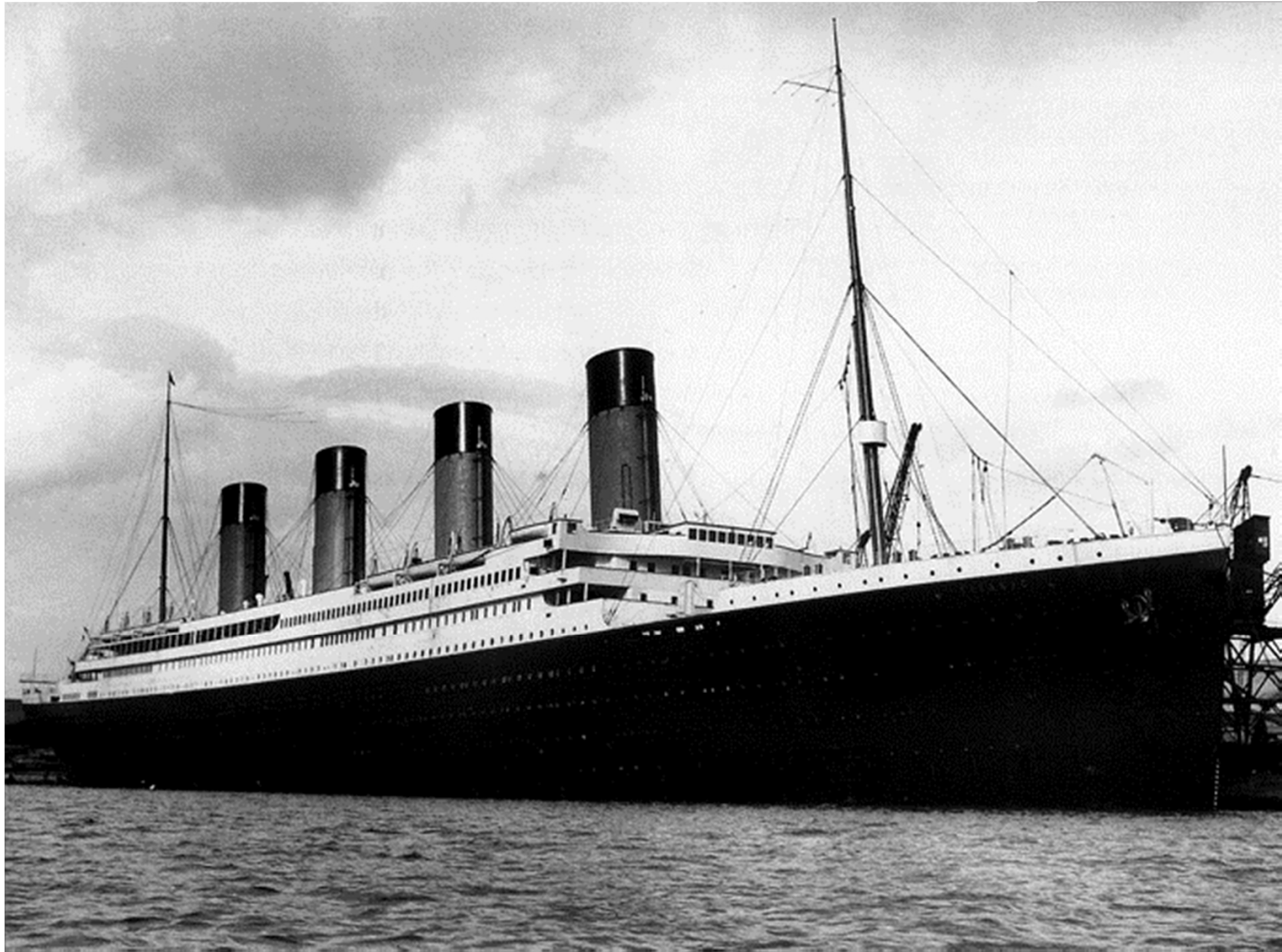


[NEAR] FUTURE





UNCHARTED
WATERS



LEST WE
FORGET