CHANGING CULTURE, OVERCOMING SENSITIVITY

Multiprofessional Engagement and Antimicrobial Stewardship

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

Clinical

Guidance

Implement
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

- Aminoglycosides
- Cephalosporins
- Antipseudomonal penicillins (Timentin)
- Quinolones (Ciproflox)
- Quinolones (Levoflox)
Elderly Selected Drugs DDDs/100 OBDs

- Aminoglycosides
- Cephalosporins
- Antipseudomonal penicillins (Timentin)
- Quinolones (Ciproflox)
- Quinolones (Levoflox)
Trustwide monthly Clostridium difficile toxin positive patients (outside 3 day rule*) - from April 08 - York Hospitals NHS Foundation Trust

- August 08 - Elderly medicine antimicrobial formulary introduced
- August 08 - Bioquell cleaning following cases of CDAD
- September 08 - new commodes across Trust
- November 08 - enhanced chlor clean environmental decontamination introduced
- December 08 - Adult antimicrobial formulary introduced in medicine
- January 09 - Antimicrobial formulary introduced in surgery
- January 09 - Norovirus outbreaks
- February 09 - Saving Lives High Impact Intervention 7 (Clostridium difficile care bundle) launched Trust wide
- February 09 - Bioquell on site for 2 weeks.

*3 day rule refers to patients whose specimens were sent 2 days after admission (where day 0 is day of admission) to York Hospitals NHS Foundation Trust
SLIPSTREAM EFFECT
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
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
“EVERYTHING I KNOW, I LEARNT FROM ORGANISATIONS”

Charles Handy
[1932 - ]
7 KEY CONCEPTS

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

<table>
<thead>
<tr>
<th>OVERT</th>
<th>Force</th>
<th>Exchange</th>
<th>Rules &amp; procedures</th>
<th>Persuasion</th>
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</thead>
<tbody>
<tr>
<td>UNSEEN</td>
<td>Magnetism</td>
<td>Ecology</td>
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(covert)
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
- 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++
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-based Medicine: How to practice and teach EBM

- **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
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
BENEATH THE SURFACE
- Loss of consciousness
- Hives
- Swelling of tongue, inability to swallow
- Rapid swelling of throat tissues
AND

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

Organisation

Professional

Patient

SHARED DECISION-MAKING