

Laboratory use of authorisation codes to influence prescribing

David Griffith

Consultant Microbiologist

Antimicrobial Management Team Lead

NHS Fife



Restricted antibiotics

- When?
 - 2009
- Why?
 - Carbapenem use
 - C diff rate
- Who?
 - Nobody knows...



Restricted Antimicrobial List for ward-based Prescribing

Issued by NHS Fife Antimicrobial Management Team

Restricted antimicrobials

- Preserving efficacy
 - Carbapenems
 - Temocillin
 - Linezolid
 - Daptomycin
- C diff risk
 - Cephalosporins
- Antimicrobials that suggest complicated management decisions
 - Echinocandins
 - Vori / posaconazole
 - Teicoplanin
 - Fidaxomicin
 - Tigecycline

Restricted Antimicrobial	Approved use
Anidulafungin	<ul style="list-style-type: none"> • Patients under the care of a Consultant in Critical Care
Caspofungin	<ul style="list-style-type: none"> • Patient under the care of a Consultant Haematologist
Cefalexin	<ul style="list-style-type: none"> • Microbiologist or Infectious Disease Consultant approval required
Cefotaxime	<ul style="list-style-type: none"> • Patient under the care of a Consultant Paediatrician
Ceftazidime	<ul style="list-style-type: none"> • Patient has a proven/suspected pseudomonal chest infection, has failed to respond to alternative antipseudomonal agents <u>and</u> is under the care of a Consultant in Respiratory Medicine. • Patient under the care of a Consultant Paediatrician
Ceftriaxone	<ul style="list-style-type: none"> • Suspected meningitis / meningococcal sepsis
Cefuroxime	<ul style="list-style-type: none"> • Only as per Orthopaedic surgery prophylaxis guidelines for a maximum of 24 hour duration. • Empirical treatment of sepsis in obstetric patients
Daptomycin	<ul style="list-style-type: none"> • Microbiologist or Infectious Disease Consultant approval required
Ertapenem	<ul style="list-style-type: none"> • Microbiologist or Infectious Disease Consultant approval required
Fidaxomicin	<ul style="list-style-type: none"> • Microbiologist or Infectious Disease Consultant approval required
Fosfomycin	<ul style="list-style-type: none"> • Microbiologist or Infectious Disease Consultant approval required
Linezolid	<ul style="list-style-type: none"> • Patients under the care of a Consultant in Critical Care • Patient with a MRSA infection under the care of a Vascular Surgeon
Meropenem	<ul style="list-style-type: none"> • Patient under the care of a Consultant Haematologist or a Consultant in Critical Care • 1st dose for suspected necrotising fasciitis; further doses require Microbiologist approval • 1st dose for suspected neutropenic sepsis; further doses require Microbiologist approval
Piperacillin-tazobactam	<ul style="list-style-type: none"> • Neutropenic sepsis • Patients under the care of a Consultant in Critical Care • Cystic fibrosis or Bronchiectasis (when advised by a Consultant in Respiratory Medicine or Paediatrics)
Posaconazole	<ul style="list-style-type: none"> • Patient under the care of a Consultant Haematologist
Rifaximin	<ul style="list-style-type: none"> • Patient under the care of a GI Consultant and only for the prevention of hepatic encephalopathy (2nd line agent)
Teicoplanin	<ul style="list-style-type: none"> • Patient under care of ECAS or Hospital at Home • Surgical prophylaxis – single dose as per protocol
Tigecycline	<ul style="list-style-type: none"> • Microbiologist or Infectious Disease Consultant approval required
Voriconazole	<ul style="list-style-type: none"> • Patient under the care of a Consultant in Respiratory Medicine or a Consultant Haematologist • Patient under the care of a Renal Consultant only for fungal PD peritonitis

Meropenem

- Patient under the care of a Consultant Haematologist or a Consultant in Critical Care
- 1st dose for suspected necrotising fasciitis; further doses require Microbiologist approval
- 1st dose for suspected neutropenic sepsis; further doses require Microbiologist approval

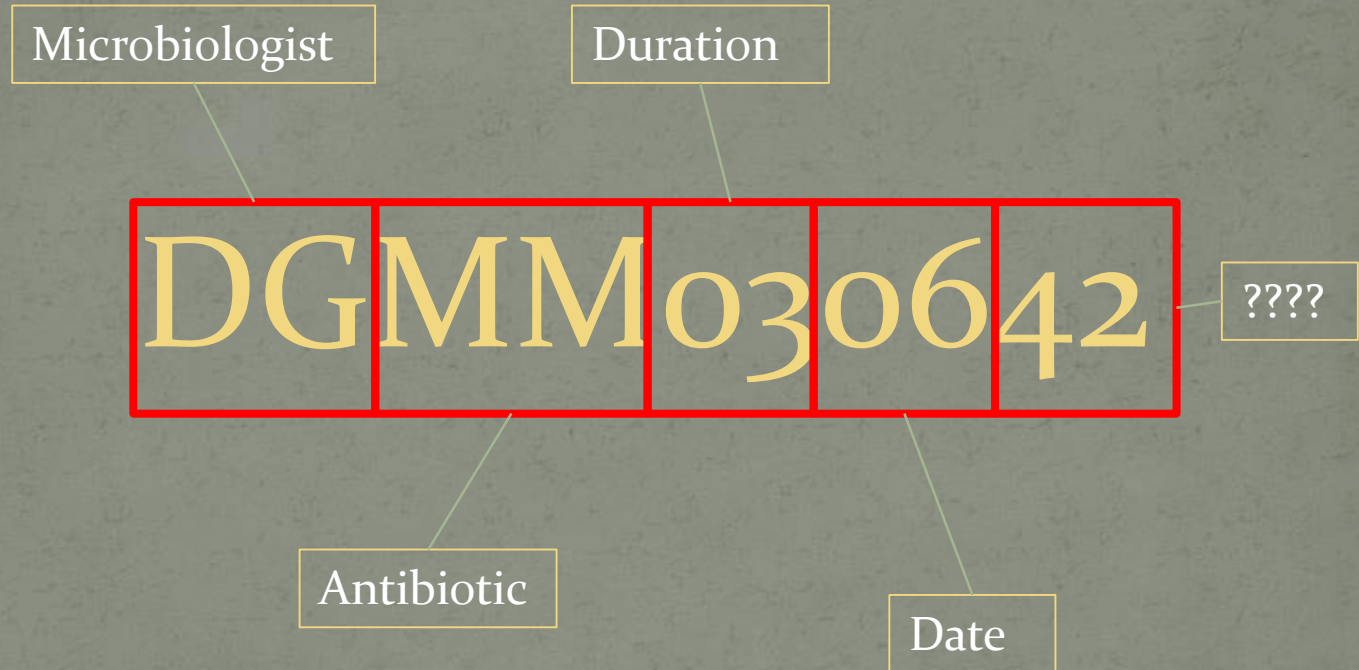
Ceftazidime

- Patient has a proven/suspected pseudomonal chest infection, has failed to respond to alternative antipseudomonal agents and is under the care of a Consultant in Respiratory Medicine.
- Patient under the care of a Consultant Paediatrician

Piperacillin-tazobactam

- Neutropenic sepsis
- Patients under the care of a Consultant in Critical Care
- Cystic fibrosis or Bronchiectasis (when advised by a Consultant in Respiratory Medicine or Paediatrics)

How does it work?

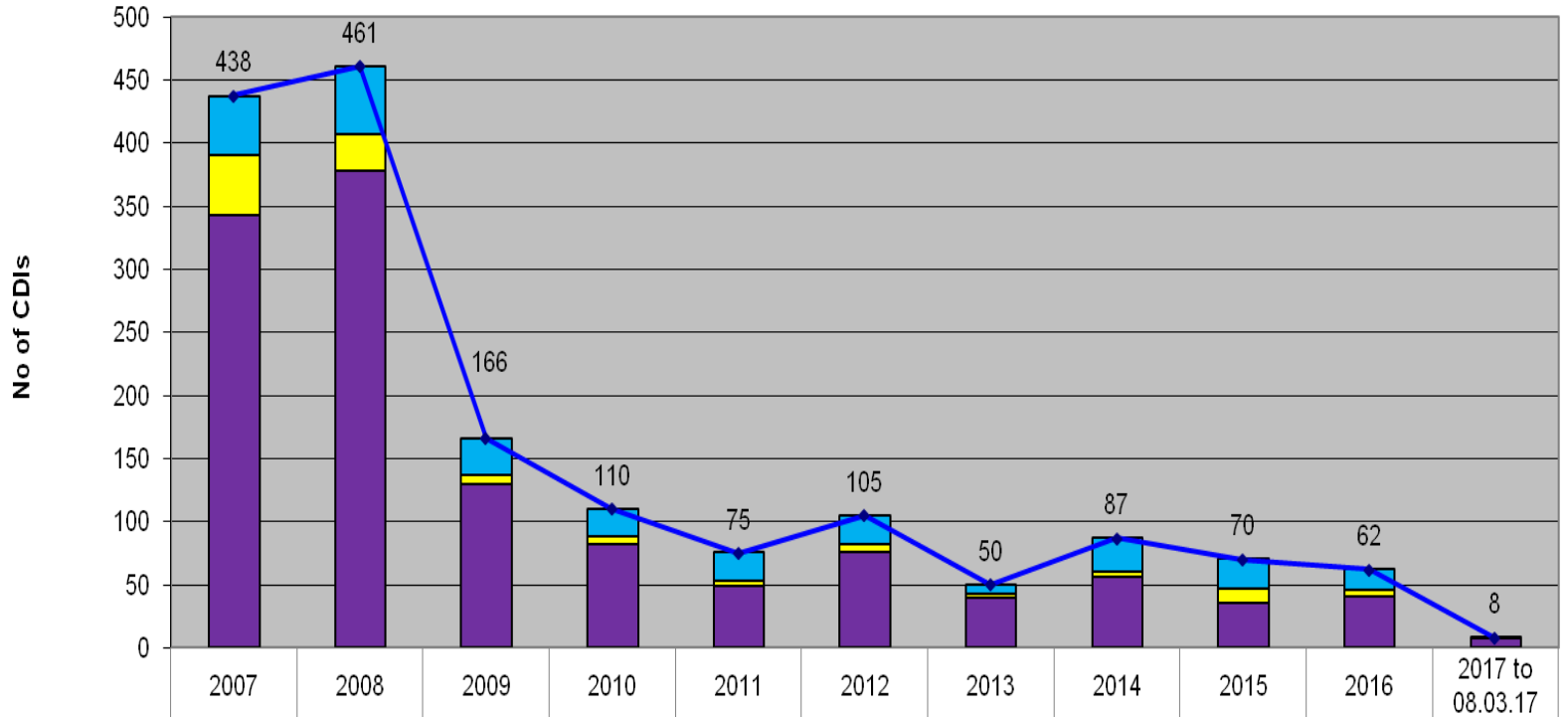


Pharmacy

- Antibiotics issued according to code
- No extra doses of restricted agents dispensed
- Reviewed by ward pharmacists



Clostridium difficile Infections (CDIs) 2007- 2017 (Up to 8th March)
by NHS Fife Total & Acute Services, Community wards, & GPs



	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017 to 08.03.17
GP	47	54	29	22	22	23	8	27	24	17	1
Community wards	47	29	8	6	4	7	3	4	11	5	0
Acute Services	343	378	129	82	49	75	39	56	35	40	7
TOTAL NHS Fife	438	461	166	110	75	105	50	87	70	62	8

Other benefits

- Standardised practice
- Prescription review

Drawbacks

- More work for Microbiology?
- Training time / resources?
- Can we be hacked?

Why does it work?

- Small-ish Health Board
- One main acute site
 - Scaling up may be more difficult
 - ePrescribing may help
- Engagement – crucially with pharmacy and pharmacy stores staff

Thank you to my colleagues....

- NHS Fife Pharmacy
 - Elspeth Boxall
 - Alan Timmins
 - Niketa Platt
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 - Lizzie Dunstan