1st December 2017 – Antimicrobial stewardship quality indicators for hospital and primary care – progress, outcomes and future strategy

Quality indicators and outcomes in the devolved nations - Wales

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Conflicts of Interest

- None
National Performance Indicators

• Primary care since April 2012:
  – Total antibacterial items per 1000 STAR-PU
  – Quinolones as percentage total antibacterials
  – Cephalosporins as percentage total antibacterials
  – Co-amoxiclav as percentage total antibacterials

• Secondary care since April 2017:
  – Percentage elective colorectal surgical prophylaxis >24 hours
Total Volume Antimicrobial Usage in Wales (Primary Care)

* Data source: primary care prescribing data. Interpret with caution as y axis do not start at zero
*charts show Items/1000 PU for each health board in Wales.
Data source: primary care prescribing data. Interpret with caution as y axis do not start at zero.

Total Volume Antimicrobial Usage in Wales (Primary Care) showing Health Board Variation

April 2012 launch of NPI indicators
*charts show Items/1000 PU for each health board in Wales. Interpret with caution as y axis do not start at zero

**Data source: primary care prescribing data

Total Volume Antimicrobial Usage in Wales (Primary Care) showing Health Board Variation
Total antibacterial items per 1000 STAR-PU for Welsh HBs and English CCGs, Q2 2017
Wales 3C as Proportion of Total Antibacterials

*Data source: primary care prescribing data
Co-amoxiclav items as a percentage of total antibacterial items – Quarter ending September 2016

Percentage

England Average
Wales Average

BCU
Cardiff and Vale
Aneurin Bevan
Powys
ABMU
Cwm Taf
Hywel Dda
Cephalosporin items as a percentage of total antibacterial items – Quarter ending September 2016

- England Average
- Wales Average

[Graph showing percentage distribution across different regions]
4C items as percentage of total antibacterials for Welsh HBs and English CCGs, Q2 2017
4C items as percentage of total antibacterials for Welsh HBs, Q2 2015 – Q2 2017
Chart 1. All Wales monthly numbers of *C. difficile*, for the period Apr 10 to Oct 17

Chart 2. All Wales monthly rates of *C. difficile* per 1,000 hospital admissions, for the period Apr 10 to Oct 17
Wales surgical prophylaxis >24 hours

* Data source: annual national point prevalence study
Wales surgical prophylaxis >24 hours showing health board variation

* Data source: annual national point prevalence study
National Annual Point Prevalence Surveys

- Annually (Nov) since 2008
- All acute and non-acute hospitals
- 9 quality measures + full data
- Provides longitudinal data
- National and local reports
Future strategy
Total Volume Antimicrobial Usage in Wales (Secondary Care)

* Data source: secondary care supply data. Chart shows DDD/1000 Bed days for Wales. Interpret with caution as y axis does not start at zero.
Total Volume Antimicrobial Usage in Wales (Secondary Care) showing Health Board Variation

* Data source: secondary care supply data. Charts shows DDD/1000 Bed days for each health board in Wales. Interpret with caution as y axis do not start at zero.
Total Volume Antimicrobial Usage in Wales (Secondary Care) showing Health Board Variation

*charts show DDD/1000 Bed days for each health board in Wales. Interpret with caution as y axis do not start at zero
National targets
• *E coli* bacteraemia / CDI / SAB
• Inappropriate prescribing

Supported by
Effective Prescribing Indicators
• Antimicrobial usage data
• Clinical measures (SSTF / Audit+)
• Clinical outcomes
• Unintended consequences
PHW web-portal

• Primary care antimicrobial prescribing data down to practice level
• Secondary care antimicrobial supply data down to hospital level
• Resistance data based on annual report and nationally agreed bug/drug combinations
• Point prevalence quality indicators at HB level

• Separate section to enter SSTF audits
Front Page

Content to be supplied as text rather then data derived.
Primary care usage data: Local Authority, HB and Wales
Secondary care usage data: two hospital comparisons in a HB
Antimicrobial resistance within acute hospitals in Wales

Select the organism group and/or individual organism together with the specimen type.

Organism Group
- All
- Escherichia coli
- Haemophilus influenzae
- Neisseria gonorrhoeae
- Pseudomonas aeruginosa
- Staphylococcus aureus
- Streptococcus pyogenes
- All Co-families
- Campylobacter spp.
- Enterobacter spp.
- Enterococcus spp.
- Klebsiella spp.
- Proteus spp.
- Serratia spp.
- Streptococcus pneumoniae

Select any patient details required.

Finally, select the drug to be displayed.

... across these locations.

Hospital
- Bronglais Hospital
- Glan-yr-Wy Hospital

Add a new comparison target.

Perform A Comparison With Selected Options.

3rd Generation Cephalosporin resistance report for Escherichia coli [Blood Culture, Escherichia coli] (All Age Groups, All Genders) for all patient categories based on hospital data

Rolling 4 Quarters

Resistance data selection screen
Resistance data: comparing two hospitals in a HB
PHW Antimicrobial Audit Tools

Welcome back Nicholas, hope you are super, smashing and / or great!

Add New Audit Information

Review Existing Audit Information

Unit Of Interest Management

System developed within Public Health Wales by the informatics team. For technical support please email: phwinformatics@wales.nhs.uk

Public Health Wales, 2 Capital Quarter, Tynwald Street, Cardiff CF10 4BZ
PHW Antimicrobial Audit Tools

Welcome back Nicholas, hope you are super, smashing and / or great!

Part 1: Select Audit Background Information

Select audit period

Select Healthboard

Select Unit

Select Hospital

You must select a hospital and specialism to continue...

Part 2: Start Smart

Q1 Is the antimicrobial indication recorded on the drug chart or in the medical notes?

Q2 Is antimicrobial prescription according to HB guidelines, in response to C+S results or following advice from a Consultant Microbiologist/ID Physician?

Q3 Is the intended duration or review date recorded on the drug chart or in the medical notes?

Part 3: Then Focus

Q4 Was a senior review carried out at 48 – 72 hours and recorded on the drug chart or medical notes?

Q5 What was the outcome of this review?

Select Review Outcome

Send This Survey

SSTF audit questions
PHW Antimicrobial Audit Tools

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Part 1: Please select the healthboard and hospital of the unit
- Cardiff & Vale University HB
- University Hospital Of Wales
- Ward 4 (Surgical Dentistry)

Part 2: Please select the Question to review
- Is antimicrobial prescribed according to HB guidelines, in response to C-S results or following advice from a Consultant Microbiologist/ID Physician?

Review This Unit

Performance Of Selected Unit Over Time
In Comparison With Other Units

% Compliance

January 2017 to October 2017

- Selected Unit
- Unit Hospital
- Unit Healthboard
- All Wales

SSTF measure: comparing unit, hospital, HB and Wales
Acknowledgements

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All Wales Therapeutics and Toxicology Centre

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