

How Primary care in Leeds has
reduced Antibiotic prescribing to
tackle HCAI's and antibiotic
resistance

Heather Edmonds
Lead Medicines Optimisation Pharmacist
Leeds North CCG
Lead Antimicrobial Pharmacist, 3 Leeds CCG

Together
we're better



Outline

- Background & Challenges
- Actions taken
- Results
- Unresolved issues
- Key take home messages

Background & Challenges

- In 2008 NHS Leeds were getting around 80 cases of CDI a month.
- LTHT did a considerable amount of work in this area and by April 2009, the number of cases had drop to 45.
- Attention shifted to primary care.
- Getting primary care prescribers to recognise HCAI was not just a hospital problem.

Background & Challenges


During the period October 2008 to March 2009 NHS Leeds were the;-

- 3rd highest prescribers of Quinolones within Yorkshire & Humber
- 3rd highest prescribers of Cephalosporins within Yorkshire & Humber
- One of the lowest prescribers of Co-amoxiclav within Yorkshire and Humber
- Other antibiotics were used similarly to other areas.

Actions within Primary care

Guideline development

- 2008 - primary care antibiotic guidelines were in one document together with the secondary care antibiotic guidance
- 2009 – developed simplified guideline layout via web based portal for easy access
- Only available for N3 connection
- 2014 developed smart phone app based guidance.



Leeds Health Pathways

Primary and Secondary Care Working Together

[Guidelines](#) | [TSD](#) | [Referral Pathways](#) | [Consultants](#)

[Home](#) | [Leeds Teaching Hospitals](#) | [Referral Pathways](#) | [Guidelines/Policies/Care Pathways](#) | [Primary Care](#) | [Links to Other Websites](#) | [Comments](#)

- Leeds Clinical Guidelines ➔
- Referral Pathways & Forms ➔
- Leeds Antimicrobial Guidelines ➔
- Leeds VTE Guidelines ➔
- Laboratory Services ➔
- LTHT Leeds Wide Results Service ➔

Leeds Management of Infection Guidance for Primary Care

The Leeds Management of Infection Guidance for Primary Care is now available via Leeds Health Pathways. The guidance is a result of collaborative working between the HPA, primary and secondary care and NHS Leeds. The aim of the guidance is to ensure a consistent approach to antibiotic prescribing across the whole Leeds health economy and to promote the appropriate use of antimicrobials by prescribers.

[Please click here to view](#)

Contact details for the Leeds Health Pathways team

Please note: All pictures and text on this website are protected by copyright law.


Latest news

Guidance for Primary Care

- End Violence Against Women Day
- [Telecare - A guide for health and social care professionals in Leeds](#)
- [Children's Primary Care Access Line - New telephone number - \(0113\) 392 8928](#)
- [Now Open - Leeds Health Stars](#)

What's new this month?

- [Imatinib for the treatment of unresectable and/or metastatic gastrointestinal stromal tumours \(part review of TA86\) TA196](#)
[Click here for more new additions to the Guidelines Database.....](#)
- [Childrens Services](#)
[Click here for more new additions to the Referral Information Database.....](#)



Leeds Antimicrobial Resource Page



Guidelines

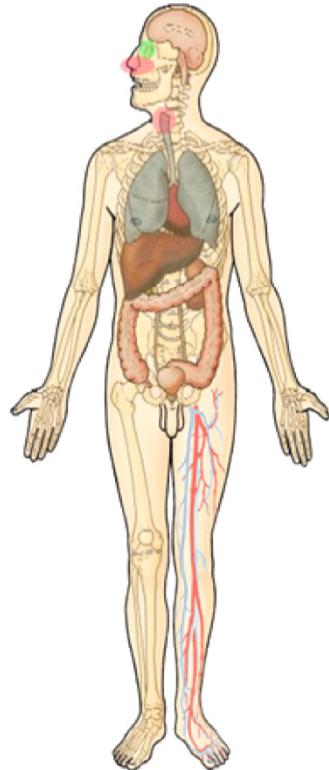
- [Adults](#) →
- [Paediatrics](#) →
- [Neonatal](#) →
- [Primary Care](#) →

Medicines

- [Antibiotics](#) →
- [Antimicrobial Allergy](#) →
- [Restricted Antimicrobials](#) →
- [Calculators](#) →
- [Antimicrobial Codes & Policies](#) →

Process

- [Draft Guidance Under Review](#) →
- [Guideline Development Pack](#) →
- [Audit](#) →
- [Performance Data](#) →
- [Education](#) →



Search by keyword

Search

[Back to Leeds Antimicrobial Resource Page](#)

Genito-urinary Tract - Primary Care Treatment Guidelines

- Acute Prostatitis
- Bacterial Vaginosis
- Catheter Associated Urinary Tract Infection
- Chlamydia Trachomatis
- Lower Urinary Tract Infection in children
- Lower Urinary Tract Infection in Men
- Lower Urinary Tract Infection in Women (no fever or flank pain)
- Pelvic Inflammatory Disease
- Recurrent Urinary Tract Infection in Women (≥ 4 UTIs in 12 months)
- Trichomonas Vaginalis Infection
- Upper Urinary Tract (Acute pyelonephritis) in Adult Men
- Upper Urinary Tract (Acute pyelonephritis) in Adult Women
- Urinary Tract Infection in pregnancy
- Vaginal Candidiasis

View Guidelines By System

[Ear, Nose and Throat - Primary Care Treatment Guidelines](#)

[Genito-urinary Tract - Primary Care Treatment Guidelines](#)

[Respiratory Tract - Primary Care Treatment Guidelines](#)

[Skin - Primary Care Treatment Guidelines](#)

[Eye - Primary Care Treatment Guidelines](#)

[Gastro-intestinal Tract - Primary Care Treatment Guidelines](#)

[Central Nervous System - Primary Care Treatment Guidelines](#)

[General - Primary Care Treatment Guidelines](#)

[Back to Leeds Antimicrobial Resource Page](#)

Ignaz App (antibiotic guidelines app)

The screenshot shows the Ignaz Handbook app interface. At the top is a blue header with the NHS logo and the text 'Ignaz Handbook'. Below the header is a search bar with the placeholder text 'Enter search term'. The main content area is a list of navigation options on the left side, including 'Back', 'LHHT Microbiology Contacts', 'Principles of Antibiotic Treatment', 'Ear Nose & Throat', 'Genito-Urinary Tract', 'Respiratory Tract', 'Skin, Soft Tissues & Bone', 'Gastro-intestinal Tract', 'CNS / Eyes', and 'Dental'. A message in the center of the page reads: 'Please navigate the application using the options on the left.'

The screenshot shows the Ignaz Handbook app interface for the 'LOWER UTI IN MEN' guideline. The top header is blue with the NHS logo and the text 'Ignaz Handbook'. Below the header is a search bar with the placeholder text 'Enter search term'. The main content area is a list of navigation options on the left side, including 'Back', 'Acute Prostatitis', 'Bacterial Vaginosis', 'Catheter-associated UTI (CA-UTI)', 'Chlamydia Trachomatis', 'Lower UTI in Children', 'Lower UTI in Men', 'Lower UTI - Women (No Fever or Flank Pain)', and 'Trichomonas Vaginalis Infection'. The right side of the page displays the guideline content for 'LOWER UTI IN MEN'. The content includes a 'Comments' section with the following text: 'People > 65 years: **do not treat asymptomatic bacteriuria**; it is common but is not associated with increased morbidity. Lower UTI in Men (no fever or flank pain) Always send a pre-treatment MSU. 50% recurrent UTI's and 90% of febrile UTI's in adult men have prostatic involvement - if symptoms recur or fail to respond to treatment consider referral to a specialist. Rationalise antibiotics therapy according to culture and sensitivity.' Below the comments is a 'Preferred Option' section with the following text: 'Trimethoprim 200mg BD for 7 days OR Nitrofurantoin Modified Release 100mg BD for 7 days'. Below the preferred option is a 'Second Line' section with the following text: 'Perform culture in all treatment failures.' At the bottom of the page, the review date is listed as 'Review date: 30/09/2014'.

Education sessions

- Individual practices as part of annual prescribing meeting or as additional training
- TARGET sessions – GP & Practice staff
- Consortia prescribing meetings
- Leeds HCAI's conference – evening event
- Community matrons and practice nurses
- Repeated sessions over the years.

Education session aims

- Key messages around antibiotic prescribing and the affects on HCAI and resistance rates
- Results and feedback from the reflective review audits
- Changes to prescribing rates as a result of the reflective reviews
- Antibiotic guidance – changes, how to access and feedback
- Themes and trends for RCAs of HCAIs

Reflective review audits

Since 2009/10 – Antibiotic reflective review audits have been part of local prescribing schemes or as part of QOF Med 6 & 10

- 2 audits 6 months apart, reviewing compliance against current guidance & the development of practice improvement plan.
- 1st year covered Quinolone
- 2nd year Cephalosporin
- Subsequent year covered all antibiotics

Current audit within LN CCG

- A group of antibiotics are reviewed by GPs each month.
- Each group reviewed twice a year & trends compared
 - 10 randomly selected patients are reviewed each month for each antibiotic group
 - Results submitted to Meds Opt team for review of trends, & learning to be fed back to prescribers
- Criteria reviewed are:
 - Correct antibiotic for the condition
 - Correct dose and frequency
 - Correct length of course
 - Did the condition require immediate treatment or could delayed scripts be used etc.
 - Comments/action plan to address any out of guidance prescribing

Investigations of all HCAI within primary care

All MRSA and CDI infections which were attributed to primary care were investigated

This involves:

- Reviewing GP computer notes, documentation
- Looking at antibiotic usage history in the patient
- Microbial sensitivity data for the patient
- Other contributing factors, such as
 - other drugs, eg PPIs
 - Enteral feeding; other GI conditions
 - Foreign travel
 - Own home / care home
 - Contact with other HCP – DN, community matrons, outpatient/ community clinics appt.

Investigations of all HCAI within primary care

- Results from these investigations
 - Identification of root cause
 - Identified any changes in practice
 - Lessons learnt shared (monthly reports)
 - Individual feedback with prescribers and services involved, with improvement plans where required.
- Changes made as a result
 - Clearer guidance
 - Development of catheter prophylaxis guidance
 - Improved communication pathways
 - Improved prescriber awareness

GPs sign up as antibiotic guardians

- Poster for all practices – including waiting rooms and consulting rooms
- All prescribers within GP practice to sign up
- Leeds CCG clinical teams signed up too
- Part of nudge theory.



my actions protect antibiotics
 **ANTIBIOTIC
GUARDIAN**
UK SUPPORT FOR EUROPEAN ANTIBIOTIC AWARENESS DAY
join me at antibioticguardian.com

Working with secondary care

- Consistency of Antibiotic guidance across the interface
- Better understanding of primary care issues
- Sharing learning from RCA's
- Microbiologist agreement to report in line with guidance – UTI
- Joint antibiotic campaigns – European antibiotic awareness day.
- Dedicated microbiologist to link with GPs

Patient awareness campaigns

- Moxy Malone campaign
- Annual European antibiotic awareness day and winter campaigns carried out
- 2014 – patient engagement exercise undertaken to identify if all communities within Leeds were aware of the key issues around antimicrobial treatment, HCAI and resistance.
- Winter 2014/15 – targeted campaign developed from results of patient engagement exercise, especially communities where English is not the first language or may not access healthcare in the “normal way”,
 - Campaign involved Multi media approach:
 - Education sessions in identified communities, leaflets, life-channel in various languages, mumsnet, Asian radio etc.

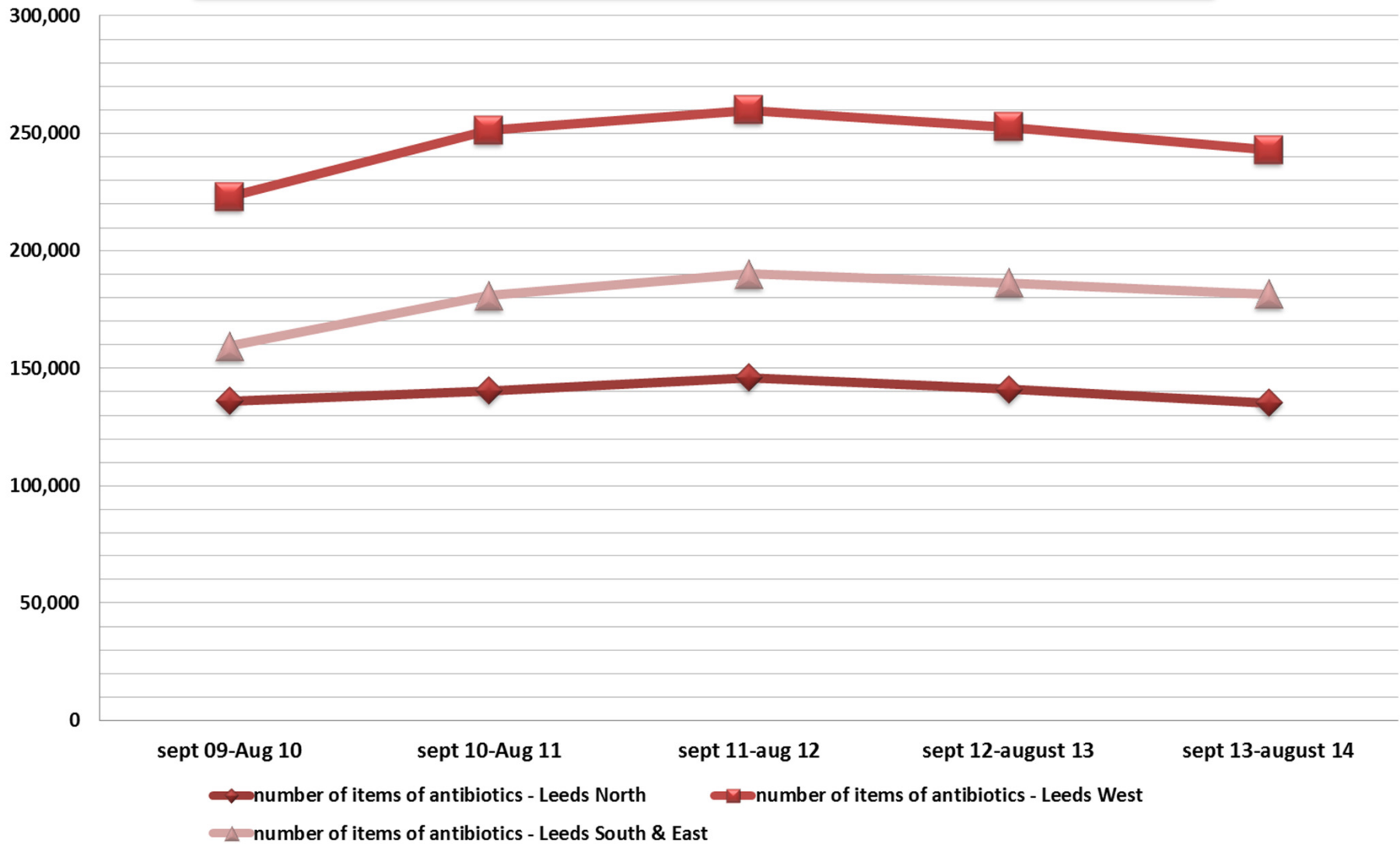
Results

Antibiotic prescribing trends

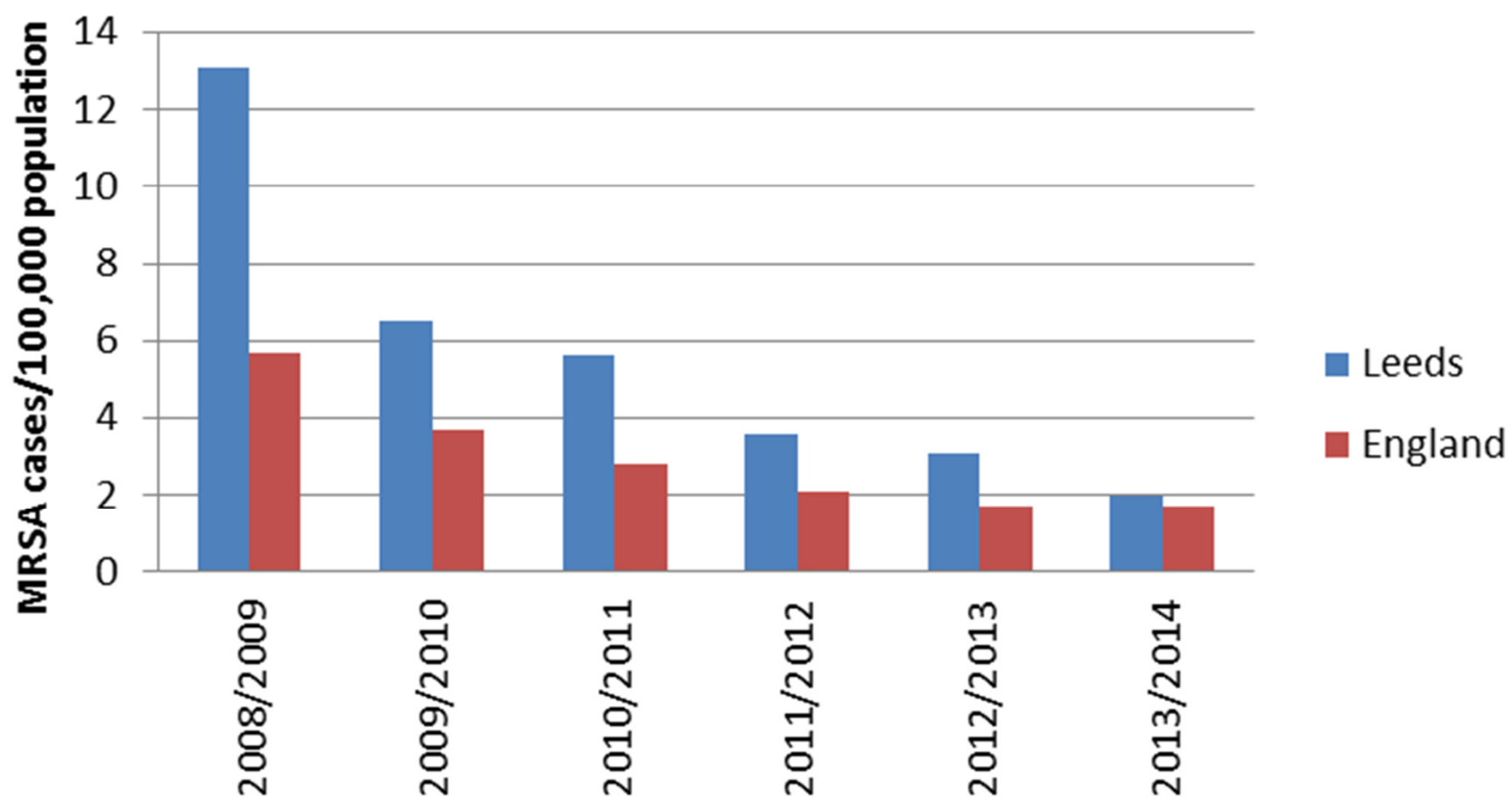
For the period April to September 2014 compared to same period 2013

- Nationally antibiotic item growth was 0.7%
- Yorkshire and Humber item growth was 0.05%
- Leeds S&E item growth was 0.29%
- Leeds West item growth was -1.83%
- Leeds North item growth was -4.15%

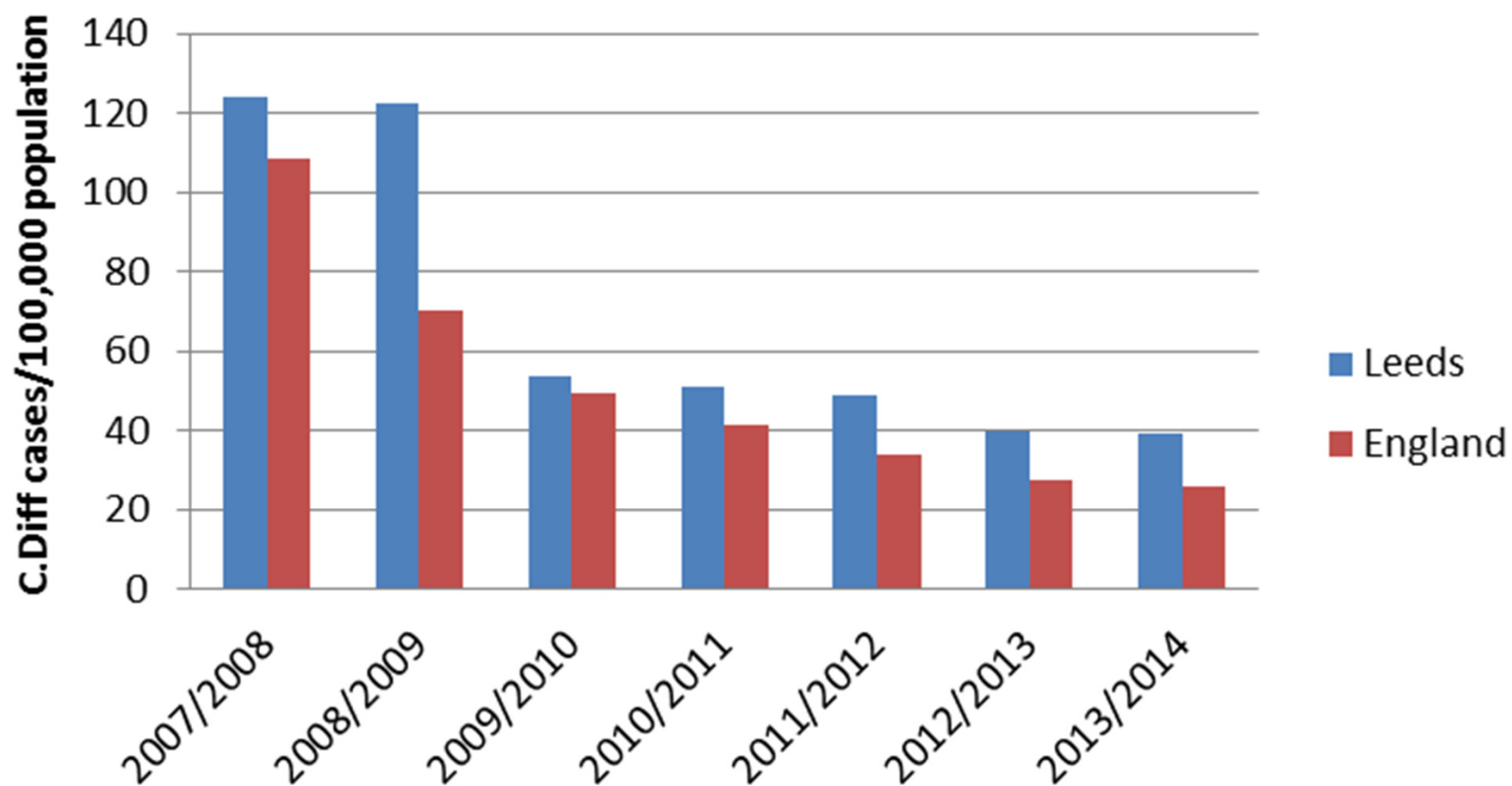
Total antibiotic prescribing trends for the 3 Leeds CCGs (not weighted)



Leeds MRSA rates v England average



Leeds C.difficile rates v England average



Future or outstanding challenges

- Dental prescribing
- Private prescriptions and private healthcare
- Foreign travel and private antibiotics for foreign travel
- Rotating or long term antibiotic for recurrent UTIs
- Telephone prescribing
- Topical antibiotic prescribing
- Limited coverage of the Minor ailment scheme
- Organisational change

Take home messages

- Clear consistent messages across the health economy
- Clear and accessible antimicrobial guidance
- Ensure microbiology reporting is in line with guidance
- Regular reflective review audits with regular updates and feedback for all providers
 - Including OOH, walk-in centres, community providers and mental health trusts
- Patient awareness – making sure covering all communities
- Repeated interventions, not just one offs



Contact details

heather.edmonds@nhs.net



www.facebook.com/nhsleedsnorthccg



@nhsleedsnorth



leedsnorthccg@nhs.net



www.leedsnorthccg.nhs.uk

