Public Policies:
Influence of regulators and targets
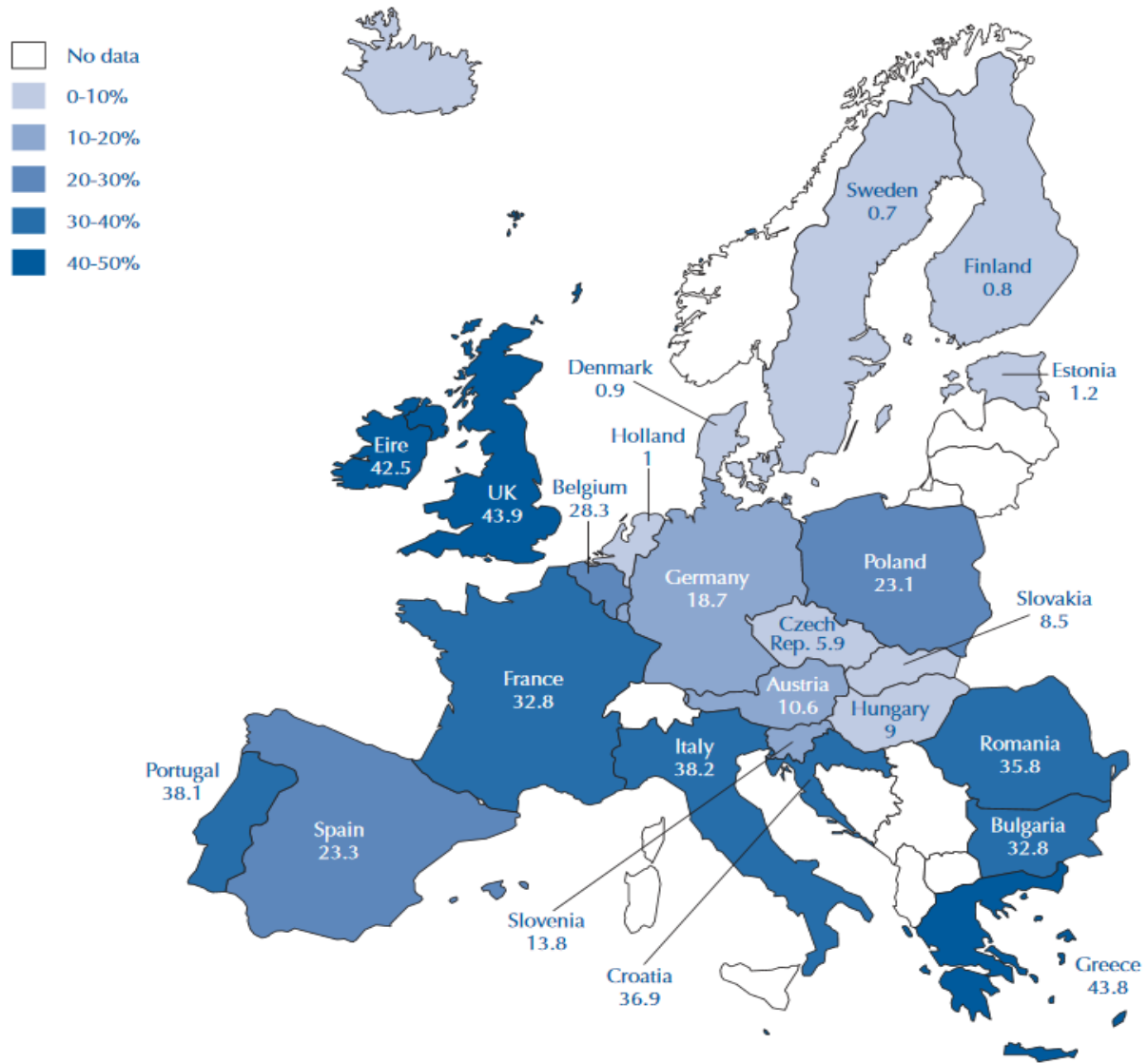
Dr J Richards,

Formerly CMM & DIP&C, Norwich, UK

Past president, IFIC

A brief look back…

Legend:
- No data
- 0–10%
- 10–20%
- 20–30%
- 30–40%
- 40–50%

Sweden 0.7
Finland 0.8
Estonia 1.2
Denmark 0.9
Holland 1
Eire 42.5
UK 43.9
Belgium 28.3
Germany 18.7
Poland 23.1
Slovakia 8.5
Czech Rep. 5.9
France 32.8
Austria 10.6
Hungary 9
Romania 35.8
Portugal 38.1
Italy 38.2
Bulgaria 32.8
Spain 23.3
Slovenia 13.8
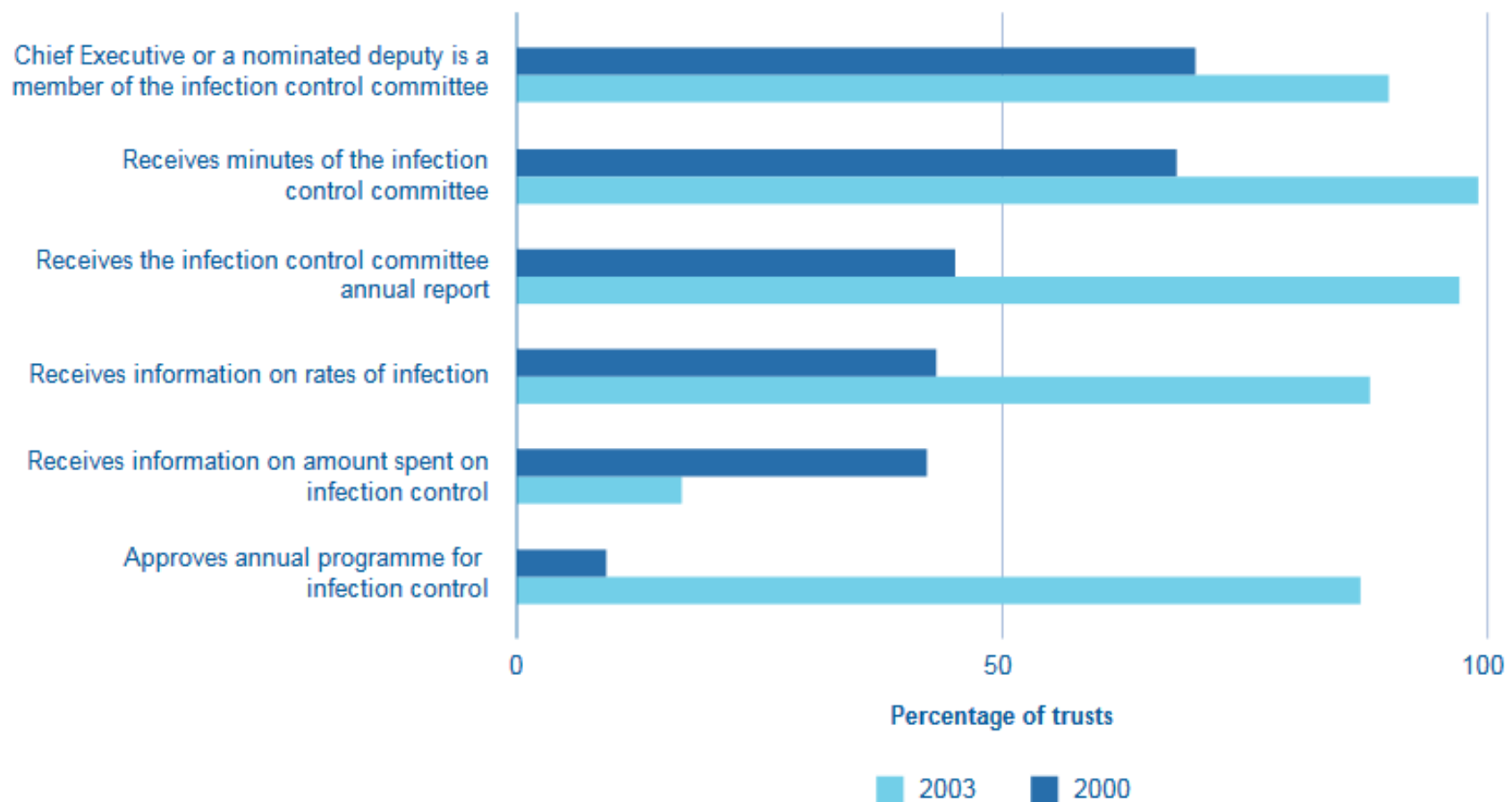Croatia 36.9
Greece 43.8

NOTE

Data on levels of MRSA bloodstream infections as a proportion of all *Staphylococcus aureus* bloodstream infections show that the United Kingdom is amongst those with the highest levels in Europe.

Improving patient care by reducing the risk of hospital acquired infection: A progress report

In general, the chief executives' awareness of infection control has increased in the last five years

Horizontal bar chart comparing 2003 and 2000 results:

Category	2003	2000
Chief Executive or a nominated deputy is a member of the infection control committee	~90	~72
Receives minutes of the infection control committee	~99	~70
Receives the infection control committee annual report	~97	~45
Receives information on rates of infection	~88	~44
Receives information on amount spent on infection control	~18	~43
Approves annual programme for infection control	~88	~11

Percentage of trusts

Legend: 2003, 2000

Media & Patient expectations

FIRST PAGE 3 GIRL STRUCK BY MRSA

Stefanie: I thought I was d...

By JACQUI THORNTON
Health Editor

THE Sun's first top-less Page 3 girl told of her agony at catching an killer MRSA from isolation ward.

Stefanie Marrian raised the nation's heart-rate in 1970 when she stripped off in a sunlit field. She continued to pose regularly for the paper and went on to appear in Hollywood films becoming a Bond girl in For Your Eyes Only.

Babe . . . topless
Stefanie graces
Page 3 in 1976

MRSA hit us too

May 12 2005

By Louise Redvers, The Evening Chronicle

A Tyneside hospital has been accused of an MRSA cover-up.

The Chronicle revealed how two-day-old Soshone Peart, from Teams, Gateshead, was one of three babies to test positive for the superbug in Gateshead's special care baby unit (SCB) in March.

The Telegraph

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Politics | Investigations | Obits | Education | Science | Earth | Weather | Health | Royal | Ce

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Superbugs MRSA and Clostridium difficile killing record numbers of patients

nhs 'paid £10m in clinical negligence compensation for superbugs last year'

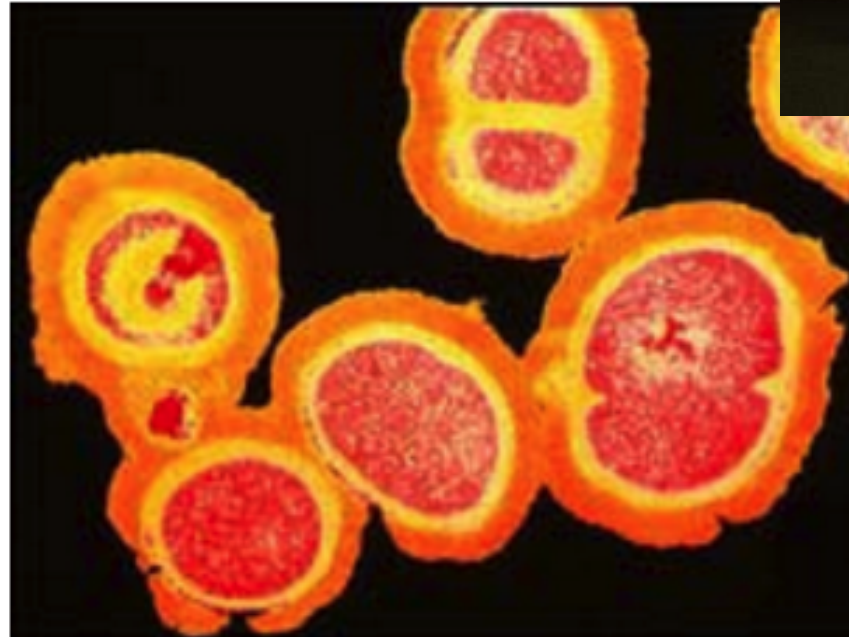Last Updated: Friday, 5 November, 2004, 12:39 GMT

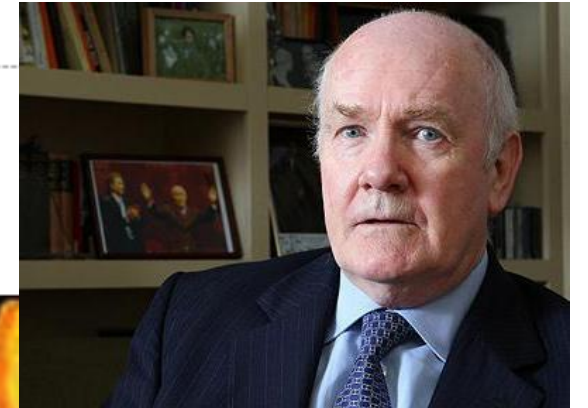✉ E-mail this to a friend   🖨 Printable version

Hospital superbug must be halved

Bloodstream infections with the hospital superbug MRSA must be halved in three years, the government has said.

Health Secretary John Reid tasked NHS hospitals with achieving a year on year reduction up to and beyond March 2008.

Infection rates are increasing

Winning Ways

Working together to reduce Healthcare Associated Infection in England

Report from the Chief Medical Officer

Dec 2003

Winning Ways

7 key action areas

- Active surveillance and investigation
- Reducing the infection risk from use of catheters, tubes, cannulae, instruments and other devices
- Reducing reservoirs of infection
- High standards of hygiene in clinical practice
- Prudent use of antibiotics
- Management and organisation
- Research and development

Winning Ways. DH/CMO. Dec 2003

Saving Lives: reducing infection, delivering clean and safe care

NHS

Reducing healthcare associated infections: from trust board to ward

A summary of best practice

Best practice

- Key Clinical Areas (Renal, Orthopds., Cardio vasc, ITU. etc)

- High Impact Interventions (CVCs, HD, surgery)

- Increased resources

- Management involvement

- Audit & Assessment tools

... should have asked what they exactly meant with "traditional management style"

Healthy Lives, Healthy People:

for public health in England

DH UK 5 Year Antimicrobial Resistance (AMR) Strategy 2013-2018

Annual progress report, 2015

How to Guide

2

1000 LIVES
O FYWYDAU

Improving care, delivering quality

Reducing Healthcare Associated Infections

30 November 2010

Figure 5: Timeline of selected interventions to reduce HCAIs and improve IPC

Key	Launch of national campaigns	Recommendations	Mandatory

2001	First edition of epic published – *The epic project: developing national evidence-based guidelines for preventing health care associated infections*[i]
	Surveillance of MRSA BSI[ii]
2003	Report of the Chief Medical Officer: *Winning ways: guidance to reduce hospital acquired infection in England*[iii]
	Surveillance of Glycopeptide-Resistant Enterococci (GRE)[iv] (became voluntary in April 2013)[v]
2004	clean**your**hands (England and Wales) funded by the Department of Health; coordinated by the National Patient Safety Agency[vi]
	Surveillance of *C. difficile*-associated diarrhoea in patients aged 65 and over[iv]
	Surveillance of orthopaedic surgical site infections[iv]
	Patient Safety Alert issued, mandating placement of bedside alcohol handrub[vii]
	All NHS trusts to appoint a director of infection prevention and control[iii]
2005	Saving Lives – including high impact interventions based on the care bundle principle[viii]
	National target reduction for the number of incidents of MRSA bloodstream infections by 50% over three-year period (April 2005 – March 2008) compared to the 2003/04 baseline data[ix]
2006	Health Act 2006, requirement for provider registration with regulator, requirement for providers to ensure protection against HCAI, and new code of practice on infections[x]
	Visits by Department of Health improvement teams to acute hospitals[xi]
	Chief Medical Officer makes CEOs personally responsible for the accuracy of infection data submitted by their trusts[xii]

Improving patient care by reducing the risk of hospital acquired infection: A progress report

Hospital Acquired Infection is now a National Health Service Priority

Despite a higher profile at NHS trust level, wider factors stand in the way of improving infection control   13

Changing clinician and other staff behaviour in order to reduce risks requires multiple approaches to prevention

The Lowbury lecture: behaviour in infection control

Behavioral interventions to improve infection control practices

RN, MS, CFNP Edna K. Kretzer [a], [b], RN, PhD, FAAN, CIC Elaine L. Larson [a], [b]

Optimisation of infection prevention and control in acute health care by use of behaviour change: a systematic review

Rachel Edwards, Esmita Charani, Nick Sevdalis, Banos Alexandrou, Eleanor Sibley, David Mullett, Heather P Loveday, Lydia N Drumright, Alison Holmes

Journal of
Infection Prevention

Using the Behaviour Change Wheel in infection prevention and control practice

Lou Atkins

RESEARCH ARTICLE

Use of an Innovative Personality-Mindset Profiling Tool to Guide Culture-Change Strategies among Different Healthcare Worker Groups

M. Lindsay Grayson[1,2,3,4]*, Nenad Macesic[1], G. Khai Huang[1], Katherine Bond[1]*, Jason Fletcher[5], Gwendolyn L. Gilbert[6,7], David L. Gordon[8], Jane F. Hellsten[5], Jonathan Iredell[6,7], Caitlin Keighley[6], Rhonda L. Stuart[9], Charles S. Xuereb[10], Marilyn Cruickshank[11]
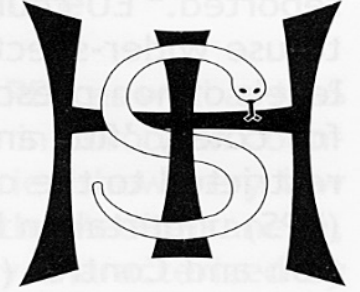
Lowbury Lecture 2013

Cultural determinants of infection control behaviour: understanding drivers and implementing effective change

M.A. Borg*

Mater Dei Hospital and University of Malta, Msida, Malta

Making the Case for Laws That Improve Health: A Framework for Public Health Law Research

Scott Burris, Alexander C Wagenaar, Jeffrey Swanson, Jennifer K Ibrahim, Jennifer Wood, and Michelle M Mello

- Law is a prominent intervention tool to achieve particular public health goals.
  - Regulation
  - Target setting
  - Expectations

- **BUT**………*Laws and their implementation also have **important unintended effects**, both positive and negative, on population health.*

LUDDITE   ?

An opponent of industrial change or innovation

Have targets improved NHS performance?

The King's Fund

- Many of the <u>targets have been met</u> or seen considerable progress, but……..

- Evidence of <u>unintended consequences</u> – for example, distortion of priorities or neglect of other non-targeted activities

Unintended consequences:

- The four-hour target for waiting times in accident and emergency (A&E) has led to distortions such as holding emergency patients in trolley waiting areas.

- Media reports based on internal ambulance service documents suggest that some patients have been held in ambulances outside emergency departments, to avoid 'starting the clock'

  - Surgical targets have been blamed for distorting clinical priorities:

    -clinicians felt that *"attempts to meet maximum waiting times targets can clash with their own clinical judgments concerning when to admit patients from waiting lists"*

Targets in Infection Control- success?

Infection control targets <u>have been successfully met</u>, but apply to a <u>limited range of infections and at-risk populations</u>

MRSA has been the focus of media attention -
was the first healthcare-acquired infection for which a target was set,
But…………. **<u>accounts for only 2 per cent</u>** of healthcare-acquired infections in the NHS (Millar M 2009).

Questions:

- Evidence base?

- Definitions?

- Non biased evidence of effectiveness?

Bare below elbows: Common sense or nonsense?

Epidemiologist makes the case for 'biological plausibility'

- Dearth of data to support the practice/requirement

- Relying on the "audacity of hope"……

LEADER

Pants, policies and paranoia…

S.J. Dancer

"Recent dress codes appear to have been **imposed more as a political gesture** than as *evidence-based strategies* likely to reduce HAIs."

"At best they can be described as 'informed common sense' - a level of **evidence** just above guesswork."

The
Health
Foundation

Evidence scan:
The impact of performance targets within the NHS and internationally

Central theme	Chosen targets
Creating and embedding targets	Improving Access to Psychological Therapies (IAPT)
When targets are successful and lead to quality improvement	Health care-associated infections (HCAIs)
Unintended consequences of performance targets	Accident and Emergency (A&E) (four-hour target)
When targets are ambitious and prove difficult to meet	Health inequalities

A&E WAITING TIMES

Clear guidelines are important
Some of those involved cited unclear guidance as a reason for failure to understand this target.

Both local and national factors must be considered
important to maintain a national and a local view; this should be done in such a way that lines of accountability are clear and there is no confusion over local or national responsibility

Using a range of metrics alongside a target can help to view it in context
Key metrics, alongside a performance target, will present a clearer picture The percentage target result should not be considered in isolation; other outcomes should be considered too. Learning and success cannot always be quantitatively measured, but can be gleaned if there is further exploration of the findings around a given target.

Performance targets can be a proxy for broader failure or success
important tool to trigger self-reflection and change and can also serve as proxies of system-wide performance

International case studies:

- Belgium:
  - Targets seen as vague and not measurable
  - Limited monitoring- poor development plans
  - Limited ownership

- Germany:
  - Targets set collaboratively brought together all stakeholders
  - Concrete recommendations
  - Structured approach, with quality assurance

Internat. Case studies, ctd.

- Netherlands
  - Key indicator setting is outside government control.
  - All stakeholders are required to participate
  - Self-calculated performance indicator scores must be submitted to inspectorate

- New Zealand- A&E waiting times
  - Target improved visibility
  - Staff empowered to progress patients & escalate problems
  - Improved efficiency, improved learning, & brought in resources
  - Unintended consequences identified, balancing effectiveness

INFECTION CONTROL?

- **Targets were successfully embedded within a change of organisational culture**

- **Monitoring progress helped to achieve the targets,** as they created a degree of accountability for everyone involved in patient care and allowed changes to be made to achieve them.

- **Financial and other resources played a key role in achieving the targets**
There was a sizeable increase in resources dedicated to tackling HCAIs through national initiatives, new equipment and cleaning staff

- **Close involvement of management was important**
NHS trusts that saw the greatest reductions in HCAIs were those that demonstrated strong leadership at board level as well as effective ward management.

- **Close monitoring of performance was effective**
The real-time reporting of relevant data enabled individual acute trusts to understand the pattern and prevalence of HCAIs at a local level, which NHS trusts used to concentrate their efforts.

Infection prevention and control: lessons from acute care in England

Towards a whole health economy approach

The Health Foundation

Figure 5: Timeline of selected interventions to reduce HCAIs and improve IPC

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			Visits by Department of Health improvement teams to acute hospitals[xi]
			Chief Medical Officer makes CEOs personally responsible for the accuracy of infection data submitted by their trusts[xii]

2007	Introduction of bare below the elbows guidance[xiii]
	epic2: *National evidence-based guidelines for preventing health care associated infections in NHS hospitals in England*[xiv]
	Surveillance of *C. difficile* infection extended to all cases in patients aged two and over[xv]
2008	Patient Safety First[xvi]
	Prime minister declared HCAIs a 'top priority' and ordered a programme of deep cleaning
	DH issued Clean, safe care: reducing infections and Saving Lives[xvii]
	Health and Social Care Act 2008: required registration with the Care Quality Commission: duty to protect patients against HCAIs. New code of practice[xviii,xix]
	National target to reduce *C. difficile* infection by at least 30% by March 2011, compared to the 2007/08 baseline data[xx]
2009	Matching Michigan programme[xxi]
	Some NHS trusts participated in Commissioning for Quality and Innovation (CQUIN) schemes that made a percentage of their incomes dependent on demonstrating compliance[xxii]
2010	Robert Francis Inquiry Report into Mid Staffordshire NHS Foundation Trust (January 2005 – March 2009)[xxiii]
2011	Surveillance of *Methicillin sensitive S. aureus* (MSSA) BSI[xxiv]
	Surveillance of *Escherichia coli (E. coli)* BSI[xxv]
2013	Robert Francis Report of the Mid Staffordshire NHS Foundation Trust public inquiry[xxvi]
	Post-infection reviews for all MRSA BSIs[xxvii]
2014	epic3: *National evidence-based guidelines for preventing health care associated infections in NHS hospitals in England*[xxviii]

For details of the references in this timeline, see www.health.org.uk/hcai

Figure 1: Annual rates of MRSA BSIs for NHS trusts in England per 100,000 bed days, 2001/02–2014/15[17,18]
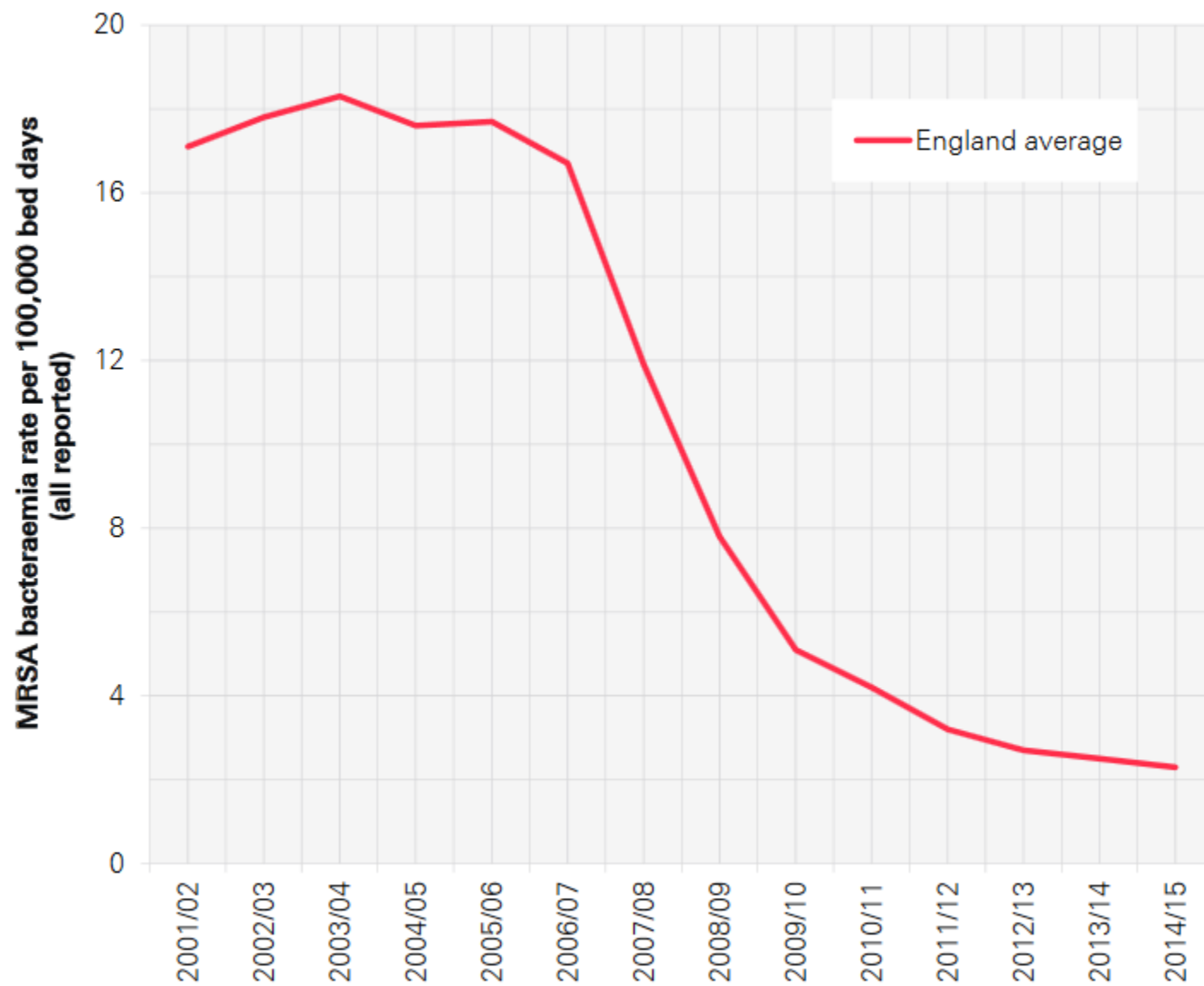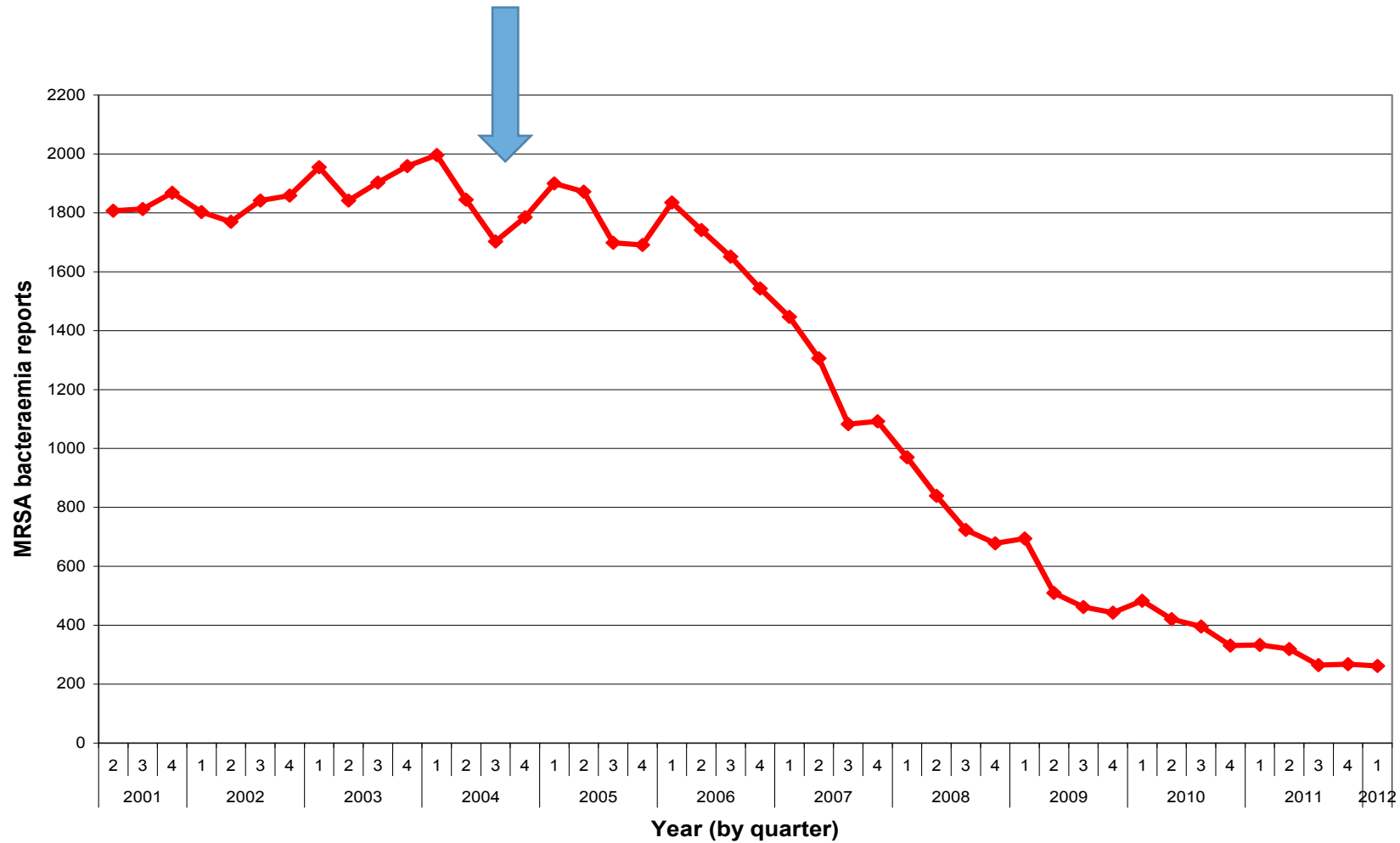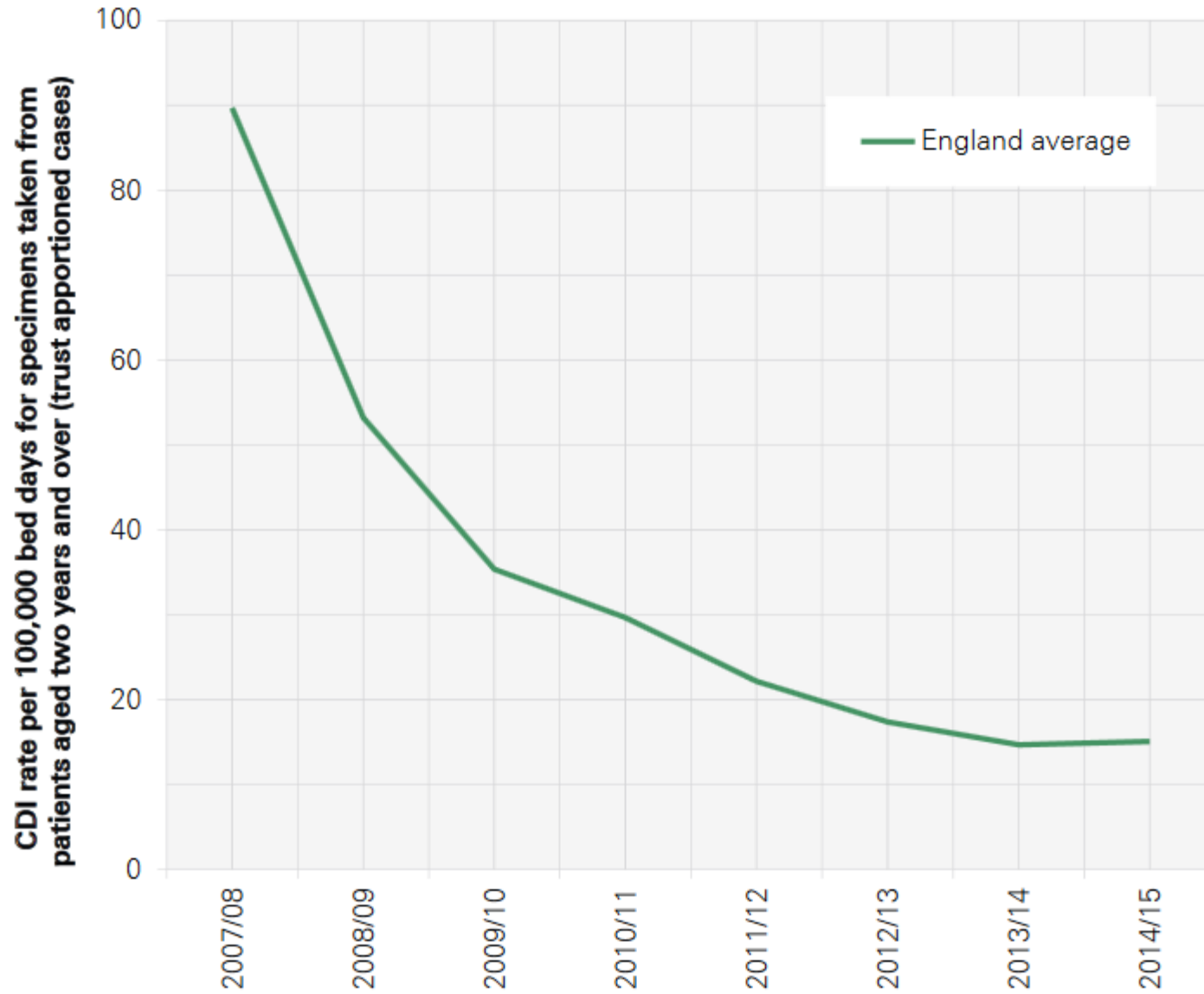
MRSA bacteraemia - England

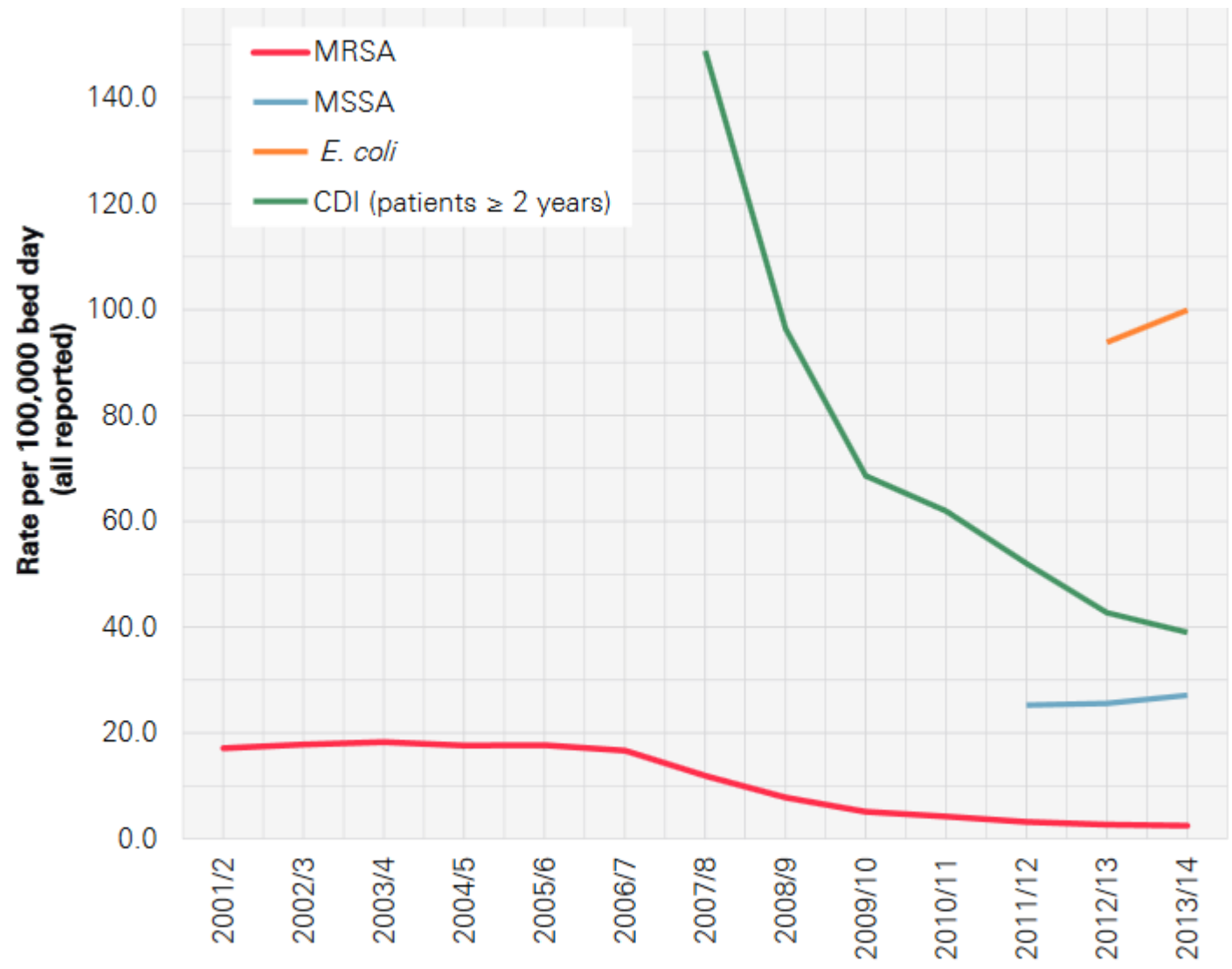**Figure 2: Annual *C. difficile* rates in England, 2007/08–2014/15**[21,22]

Table 1: Recommended organisational components for effective Infection prevention and control[40]

1. Effective organisation of IPC at a hospital level.

2. Effective bed occupancy, appropriate staffing and workload, minimal use of pool/agency nurses.

3. Sufficient availability of and easy access to materials and equipment, optimisation of ergonomics.

4. Use of guidelines in combination with practical education and training.

5. Education and training (involves front-line staff and is team- and task-oriented).

6. Organising audits as a standardised and systematic review of practice with timely feedback.

7. Participating in prospective surveillance and offering active feedback, preferably as part of a network.

8. Implementing IPC programmes following a multimodal strategy, including tools such as bundles and checklists developed by multidisciplinary teams, and taking into account local conditions (and principles of behavioural change).

9. Identifying and engaging champions in the promotion of intervention strategies.

10. Promoting positive organisational culture by fostering working relationships and communication across units and staff groups.

Lessons Learned from State Stakeholder Engagement

January 2012

ASTHO CDC, 2012

States are experiencing reductions in HAI rates and, based on professional judgment, many stakeholders attribute these improvements to public reporting policies.

States conducting data validation expressed greater confidence in the value and accuracy of existing data than those from states without a validation system.

While many individuals acknowledged that _reporting alone does not change behaviour_, stakeholders indicated that

Reporting of infections (surveillance-monitoring-benchmarking)

         -raised the awareness of facility leadership,
&
         -elevated the importance of HAI reduction and elimination to priority status for senior executives

- Ensuring a collaborative approach to preventing HAIs from the outset

- Mandating public reporting of HAI rates.

- Standardizing definitions, reporting processes, metrics and evaluation.

- Establishing a set of priority infections for initial focus.

Lessons learnt….

Measures for infection prevention and control need to be **appropriate and responsive.**

Infection prevention and control should remain **central to inspection and regulation.**

All **national-level campaigns** require an explicit framework underpinning how the campaign is intended to work and **must be accompanied by an evaluation strategy.**

Hospitals must have the **structural and cultural capacity** to deliver effective infection prevention and control and antibiotic usage.

Trusts need to ensure that the **goals** for infection prevention and control and patient safety are **integrated and aligned at the clinical front line**.

Targets and regulations: Conclusions

- Clarity of purpose is a must
- Collaboration and consensus
- Evidence Base
- Governance: clear lines of accountability, performance monitoring
- Wide set of metrics preferably to single measure of success/failure
- Implementation must take into account local & national socio-economic, institutional and practice context
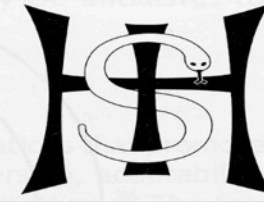
Review

Organizational culture and its implications for infection prevention and control in healthcare institutions

S. De Bono [a], G. Heling [a], M.A. Borg [b,*]

[a] Maastricht School of Management, Maastricht, The Netherlands
[b] Mater Dei Hospital and University of Malta, Msida, Malta

Organizational Culture

How it impacts on IP&C related behaviour

Target for IP&C campaigns?

Using cultural approaches to introduce change

Customized OC approaches to ensure maximum impact when introducing changes

Managing crisis (outbreaks) as windows of opportunity

Avoidance of "copy and paste" approaches- Same guidelines may not be applicable to all settings!
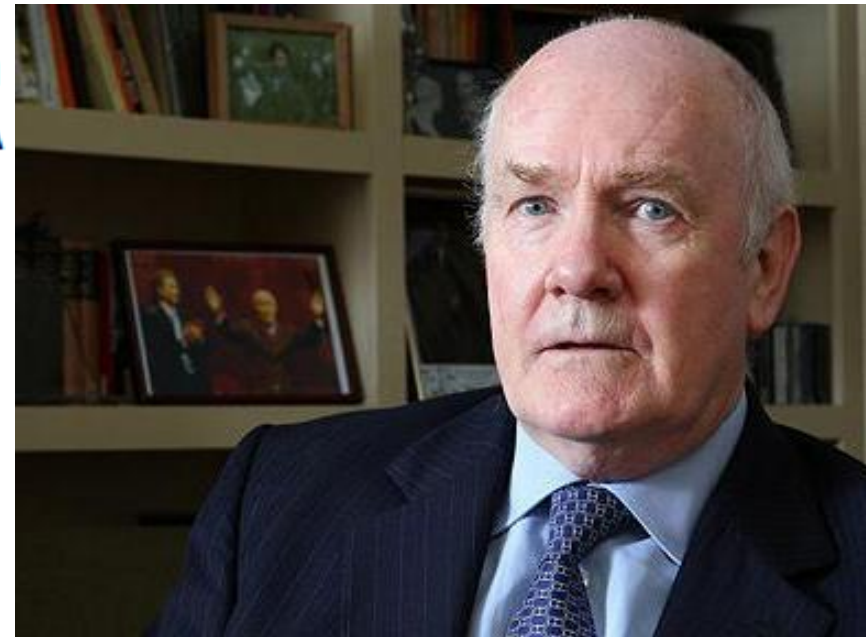
Thank you

Any questions?

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Infection rates are increasing

DH UK 5 Year Antimicrobial Resistance (AMR) Strategy 2013-2018

Annual progress report, 2015

Figure 1: UK wide resistance rates for selected drug-pathogen combinations

UK wide resistance rates for selected drug-pathogen combinations
2013 & 2014
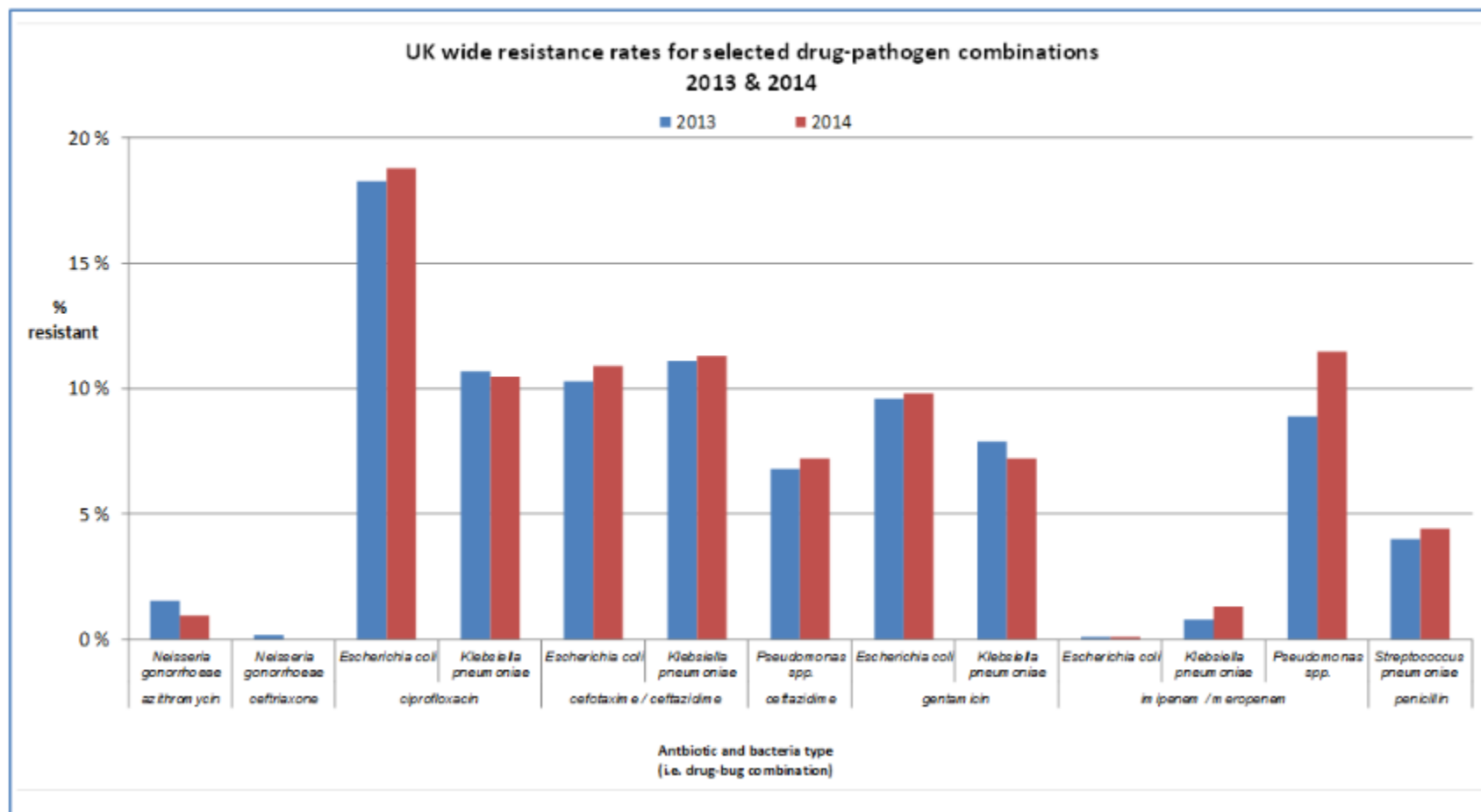
Matching Michigan

Can we replicate it successfully?

NPSA led initiative; Darzi A: *High Quality Care for All: NHS next stage review*. London: Department of Health; 2008

- Regulation

- Keeping patients and the public informed

- Care bundles

- Screening and vaccination strategies

Clinical and managerial leaders of infection prevention and control are needed at all levels in the organisation.

A whole health economy approach is needed for infection prevention and control in future