

Healthcare Infections A Manifesto 2010



MRSA Action UK

Registered Charity No. 1115672

**Raising public awareness
Campaigning for safe standards
Supporting sufferers and dependants**

FORWARD

Since the publication of our first Manifesto on 16th September 2008 there have been many changes in the NHS and some considerable progress made towards conquering the problem of healthcare associated infections and recognition of the need to tackle the issue of antimicrobial resistance.

Our Charity is heartened to see that preventing infections is now seen as a top priority in healthcare, and that it is acknowledged that no-one is immune from the global pandemic of hospital and community acquired infections that can cause so much suffering to those who are unfortunate enough to succumb to disease caused by infections, and the heartache of those families that have lost a loved one.

We want to see even more investment put into keeping the bacteria at bay and raising public awareness so that far fewer people will be left with the lifetime legacy caused by preventable and life-threatening infections.



Derek Butler
Chair

In memory of those who suffered and are lost to healthcare infections



Sammie



Derrick



Patricia Margaret



Patricia



John



Colin

Welcome to MRSA Action UK's proposal to the Government

MRSA Action UK is a registered Charity that supports people who have been affected by healthcare infections. We provide advice and information to people who enquire on the best way to prepare and reduce the risks of contracting an infection. We help patients and carers to make informed choices about health and social care to meet their needs. We provide a patient voice to those who develop and regulate the delivery of high quality, safe patient care.

Operating in partnership with healthcare providers in the public and private sector in the United Kingdom, we are an independent organisation and advise and work with government, the public, patients and other professions across the health economy to promote awareness of healthcare infections and how to prevent them.

The Charity was established in 2005 by people who had been brought together through being affected by healthcare associated infections, all of whom had been affected by Meticillin-resistant *Staphylococcus aureus*, commonly called MRSA.

MRSA is a variety of *Staphylococcus aureus* that is resistant to metcillin and some of the other antibiotics that are used to treat it. *Staphylococcus aureus* is a common germ that lives harmlessly on the skin and nose of approximately one-third of all people. It can cause problems when it enters the body, particularly among those who are already unwell, although sometimes fit and healthy people can succumb to infection from MRSA.

We are a voluntary organisation with a constitution and are run by an elected Board of Trustees.

Our Vision

A National Health Service where patients receive the highest quality care, equivalent to that of other healthcare systems where the prevention of healthcare infections is considered a paramount duty

Our Purpose

- To sustain those affected by healthcare infections by providing an advocacy and support service
- To provide information for people to help empower them to make the best choices for their health and social care
- To respond to and influence the government and health and social care providers, reflecting patients and carers' views on the prevention of healthcare associated infections
- To promote and encourage education and research on reducing healthcare associated infections and antimicrobial resistance
- To play a leading role in the promotion of high quality, safe patient care and to act as an independent watchdog, with the aim of achieving improved regulation

The NHS Constitution established a new right to choice and to information to support that choice. Choice is fundamental to the delivery of a patient-centred NHS as it empowers people to get the health and social care services they want and need. Giving the public and patients good information helps them to make effective choices that are right for them and their families. We are there to help that process by providing information to help people understand healthcare infections and what is being done to alleviate them wherever they choose to have treatment.

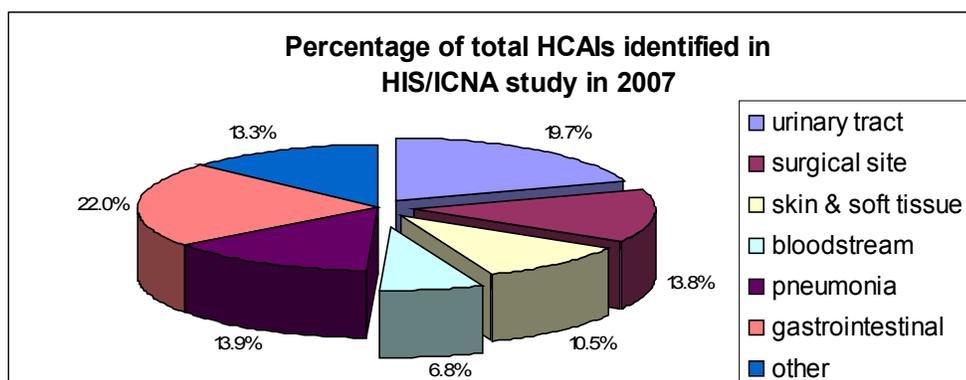
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Healthcare associated infections

Search isolate and destroy – a manifesto

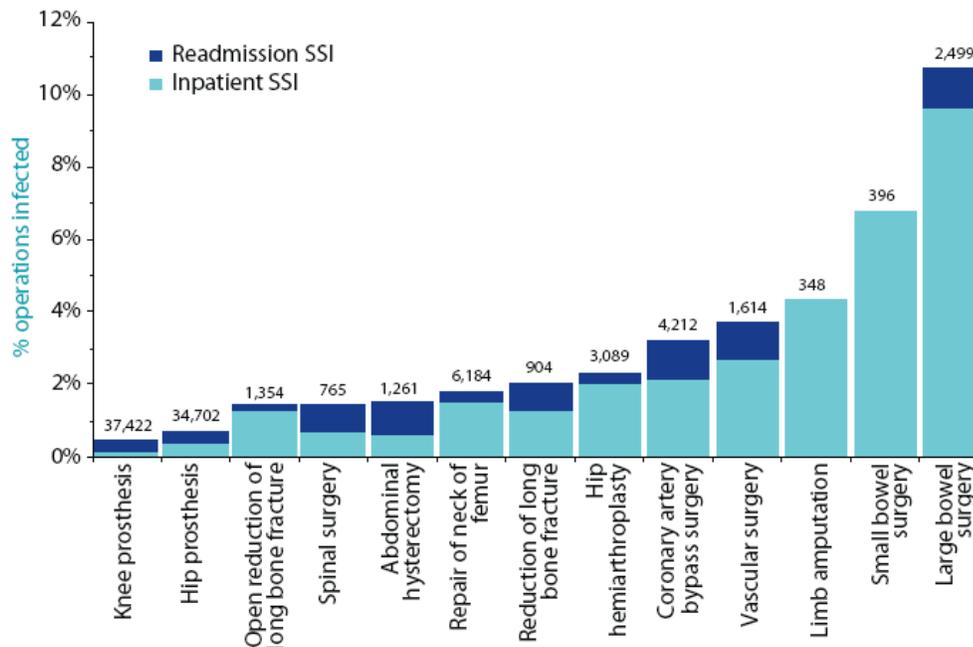
Healthcare associated infections – the facts

With estimates from the Office for National Statistics reporting that 33,000 people had MRSA or *Clostridium difficile* as a cause or a contributory factor to their death in the years from 2001 to 2007, we believe the government must bring in much tougher measures to combat healthcare infections. This is a conservative estimate as this was only measured in institutions with over 2,500 deaths. Furthermore evidence has shown that these infections are not always recorded on death certificates from accounts of relatives who come to our Charity for assistance. Other evidence that points to non-recording on death certificates is many of the institutions with more than 2,500 deaths show a small percentage of mentions on death certificates, yet the mandatory reporting system shows that many NHS Hospital Trusts have higher numbers of MRSA bacteraemia and reports of *Clostridium difficile*, in both instances the risk of mortality are higher in these patients. There are significant inequalities in the efforts put into reducing infections across the country. Some NHS Acute Trusts have done an excellent job at reducing infections and should be applauded, but we believe there should not be a situation where the commitment to reducing infections is not universal. Learning and sharing experiences across Trusts should be employed, using Route Cause Analysis to understand why some are better than others. As a Charity representing sufferers, carers and dependants, we are both deeply saddened and disappointed by the numbers of deaths, and by the numbers of people who contract avoidable infections such as MRSA through medical devices such as IV lines, catheters, and other life saving devices.



Orthopaedic and surgical site infections go unreported in the quarterly figures published by the government. In fact the figures the government report (bloodstream infections) account for only 6.8% of all healthcare infections.

Rate of SSI (detected during inpatient stay and at readmission) by surgical category, with number of operations shown above each bar, 2008



The Health Protection Agency report for 2008-09 show a higher proportion of surgical site infections than the study carried out in 2007 by the Hospital Infection Society, accounting for 15% of all healthcare associated infections. They are associated with considerable morbidity and estimated to at least double the length of hospital stay. There is evidence that the care provided before and after the operation is critical in minimising the risk of surgical site infection and that feeding back data on rates of the infections to the surgical team contributes to reductions in rates of infection. The Health Protection Agency established the Surgical Site Infection Surveillance Service (SSISS) in 1997 to enable hospitals to compare their rates of infection against a benchmark rate and to use the data to improve the quality of patient care. Hospitals are able to choose from 14 categories of surgical procedures. Basic demographics are collected on each patient who has a procedure in the category under surveillance. Patients are then followed up during their hospital stay for surgical site infections that meet the standard case definitions and, since July 2008, surgical site infections that occur in patients readmitted to hospital. SSISS is currently undertaking a study to evaluate methods of post-discharge surveillance.

During 2008, 251 hospitals collected data on 94,750 surgical procedures. These included 196 NHS and 55 independent sector hospitals. A total of 1,191 surgical site infections were detected, with readmission surgical site infections comprising 30% of this total. The proportion of surgical site infections detected in readmissions is higher in those procedures with a shorter length of post-operative stay. The rate of infection varies between categories, reflecting differences in

likelihood of microbial contamination at the operative site. In over 4,500 surgical site infections reported since 2004 *Staphylococcus aureus* was the causative organism for 38% of all surgical site infections, of which 59% were due to a methicillin-resistant strain. Since the mandatory surveillance of surgical site infections following orthopaedic surgery started in April 2004 the rate of infection has decreased significantly in hip prosthesis, knee prosthesis and hip hemiarthroplasty. (Source: *Healthcare-Associated Infections in England: 2008-2009 Report, August 2009*)

Healthcare associated infections in hospitals are caused by a wide variety of organisms and cause a range of symptoms from minor discomfort to serious disability and in some cases death. In 2007, around 9,000 people were recorded as having died with MRSA bloodstream infections or *Clostridium difficile* infections as the underlying cause or a contributory factor. Risk factors include the extent of the patient's underlying illness, or treatment, which can make patients more vulnerable. There is no national aggregate data on the total number of healthcare associated infections in England. In 2004, the Department of Health confirmed that 300,000 was the best estimate of the number of healthcare associated infections per year. The estimated cost to NHS hospitals of caring for people that acquire a healthcare associated infection is over £1 billion a year. (National Audit Office – 12 June 2009)

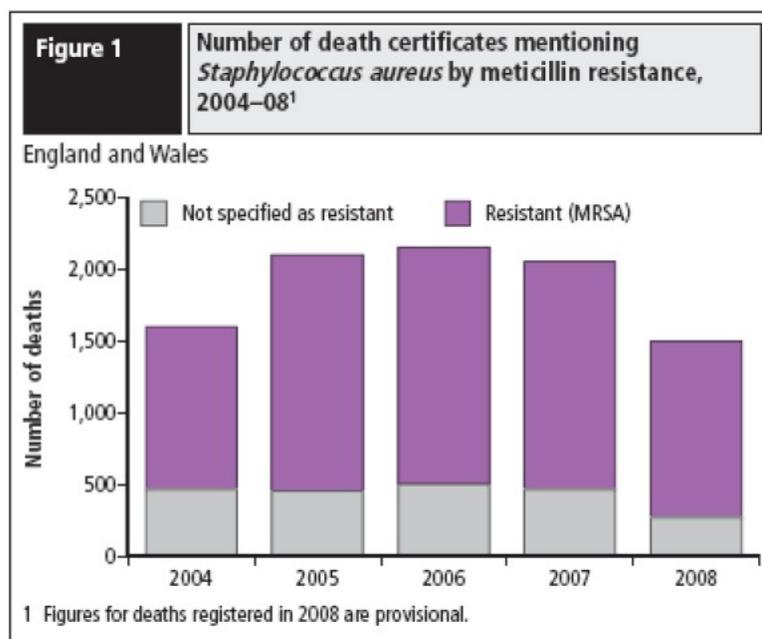
In 1996 there were just 12 cases of *Clostridium difficile*, there were a staggering 60,000 cases and rising in 2006, there is therefore no disputing that we are in an epidemic situation, despite assertions of success in reducing infections as each quarter's figures are released. Over two-thirds of NHS Hospital Trusts failed to meet the target to reduce MRSA from the March 2004 level, a target set by John Reid on 5th November 2004. Even by reducing MRSA bacteraemia by half that level is not a challenging target – the aim should be one of zero tolerance and to reduce levels to those countries in Northern Europe who have taken the challenge and their responsibilities extremely seriously.

Deaths from MRSA – how accurate are the numbers?

It is very common for patients and relatives to be told nothing of the nature of hospital associated infections, if at all, and the norm for it not to be mentioned on death certificates.

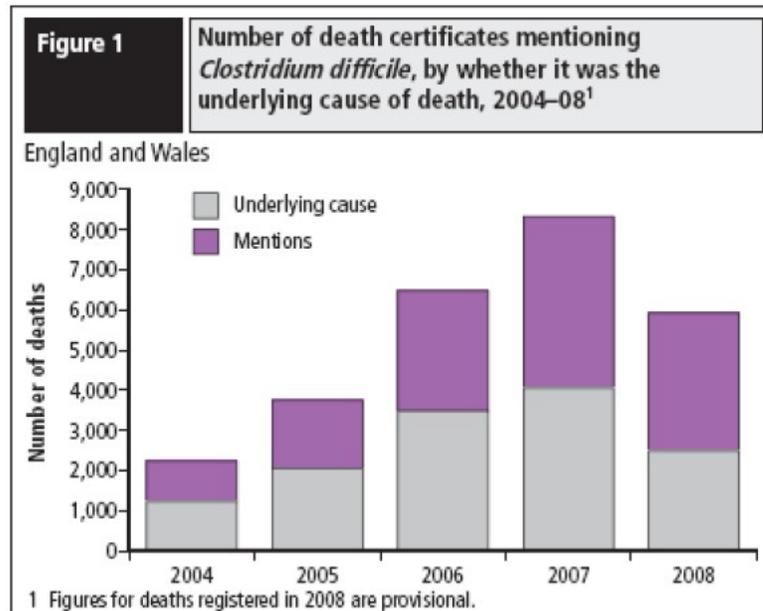
Most of our members who have lost a family member after acquiring a healthcare infection have experienced this failure to record this on death certificates where it has been a contributory factor or cause. Some have found the strength to come forward and ask that it is mentioned if they have found these causes and contributory factors in medical records, this can be a painful process as this can involve the coroner if the relative is put into the position of having to question or challenge a clinician's judgment.

The *National Confidential Study of Deaths Following MRSA Infection* reported that neither MRSA nor sepsis was mentioned on nearly half of the death certificates where MRSA was considered to have caused or contributed to the patient's death. The study, published by the Health Protection Agency in 2007, looked at death certification from ONS data and compared these to case notes of in-patients who had died. If we consider that people also die from healthcare acquired infections in the community and other institutions, as demonstrated by the Office for National Statistics report where over 33,000 people had MRSA or *Clostridium difficile* mentioned from 2001 to 2007, these would have been overlooked in the study.



Number of death certificates mentioning *Staphylococcus aureus* by meticillin resistance, England and Wales - Source: ONS

MRSA is the headline grabber because of the resistance to many of the last antibiotics that are effective against it, and many of us carry *Staphylococcus aureus* routinely on our skin, so it's a major problem, but like *Clostridium difficile* there are other infections that can be equally as lethal. If a patient has died with pneumonia it is quite likely that there may be an infection that has not been mentioned either at any time during the patient's illness or on the death certificate.



Number of death certificates mentioning *Clostridium difficile* and recording *Clostridium difficile* as the underlying cause of death, England and Wales - Source: ONS

In July 2005 Sir Liam Donaldson issued an instruction to practitioners telling them that healthcare infections must be mentioned where they are the cause or underlying cause of death, however without legislation the power of enforcement is limited and we fear this is still not happening. Despite this instruction being issued none of the clinicians interviewed in the *National Confidential Study of Deaths Following MRSA Infection* knew what their Trust's policy was on death certification involving healthcare infections.

Certifying deaths involving MRSA

Recently published figures from the Office for National Statistics (ONS) showed that the number of death certificates on which methicillin resistant *Staphylococcus aureus* (MRSA) was mentioned rose steadily, from 51 in 1993 to 955 in 2003. Nevertheless, there is widespread belief that this is an underestimate of mortality associated with MRSA, and that doctors are reluctant to put information about MRSA or healthcare associated infections on certificates.

One of the doctors responsible for the patient's care is required by law to complete a medical certificate of cause of death (MCCD) 'to the best of his

knowledge and belief'. Yet often by the time someone dies they have a number of diseases and complications of illness or treatment.

It is a matter of clinical judgment to decide whether a condition present at or just before death contributed to the patient's death. If an infection was part of the sequence of events that directly led to the death, this should be recorded in part I of the certificate. If the infection contributed, but was not part of this direct sequence, this should be written in part II.

Doctors should provide as accurate and detailed information as is possible about the site or manifestation (e.g. pyelonephritis, lobar pneumonia, wound infection); the source or route (hospital or community acquired, catheter associated, water or food

borne etc); the infecting organism, including resistance to antibiotics (e.g. MRSA, multiple drug resistant tuberculosis). Diseases or treatments, including chemotherapy, radiotherapy or immunosuppressant drugs, that may have reduced the patient's resistance to infection should also be included.

The ONS Death Certification Advisory Group has produced updated guidance for certifiers to clarify their responsibility under current legislation. These cover reporting deaths to the coroner, and how to complete the MCCD in a wide range of circumstances, with examples. The guidance is available at www.gro.gov.uk/medcert and will be published in the summer 2005 edition of *ACP News*.

Death certification reform

The purpose of the Coroners and Death Certification Bill is to deliver an improved system of death investigation for families so that they can be assured that the cause of death of their relative has been properly established and that, where possible, lessons can be learned to prevent future deaths.

MRSA Action UK have been involved in the consultation process on this Bill and are asking that any relatives who believe their loved one either died from MRSA or another healthcare infection, or where it was a contributory factor in their death have the death certificate changed. This would enable people come to forward and review the case notes in the same way as the *National Confidential Study of Deaths Following MRSA Infection* published by the Health Protection Agency, this will allow a more accurate picture, raise awareness of the need to record infections on death certificates, giving transparency for the public, and give an assurance that everything is being done to reduce avoidable deaths from healthcare infections – without a baseline figure how will we know what improvement and saving lives looks like. MRSA Action UK believes it is also the final posthumous thing owed to our loved ones.

We believe all Healthcare Trusts should have a policy on death certification which incorporates the Guidance from the Office for National Statistics' Death Certification Advisory Group, Revised November 2007, we believe the Care Quality Commission has a role to play in the audit of the adherence to these policies, and call on the Government to make this a mandatory requirement:

“If a health care associated infection was part of the sequence leading to death, it should be in part I of the certificate, and you should include all the conditions in the sequence of events back to the original disease being treated.

Examples:

Ia. clostridium difficile pseudomembranous colitis

Ib. multiple antibiotic therapy

c. community acquired pneumonia with severe sepsis

I

II immobility, Polymyalgia Rheumatica, Osteoporosis

1a. bronchopneumonia (hospital acquired Meticillin Resistant Staph aureus)

1b multiple myeloma

c

I

II chronic obstructive airways disease

If your patient had an HCAI which was not part of the direct sequence, but which you think contributed at all to their death, it should be mentioned in part II

Ia. Carcinomatosis and renal failure

Ib. Adenocarcinoma of the prostate

c

I

II. Chronic obstructive airways disease and catheter associated Escherichia coli urinary tract infection” Source: Guidance for doctors certifying cause of death in England and Wales - From the Office for National Statistics' Death Certification Advisory Group, Revised November 2007

We welcome the Creation of a new system of secondary certification of deaths not referred to a coroner in the Coroner's and Justice Bill.

The role proposed for Medical Examiners in confirming the cause of death for all deaths not investigated by the coroner will mean that Registrars will no longer need to make judgements about the content of The Medical Certificate of Cause of Death – an activity for which they are often poorly qualified – and will need to report fewer incidence of questionable certifications to the coroner.

The Medical Examiners Officer will oversee the application for disposal of the body with relatives and The Medical Certificate of Cause of Death will be scrutinised by the Medical Examiner and discussed with relatives. At this stage a relative who believes the death may have been caused by a healthcare infection or was a significant contributory factor can raise concerns. We hope that this will be a vehicle to be able to challenge poor practice and the non-recording of infections on death certificates. The true toll to deaths from healthcare infections will begin to evolve.

The need for transparency and independence

We are of the view that the Medical Examiners should be accountable to, and appointed by the Coroner's Office and not appointed by Primary Care Trusts. The governance is important for the Medical Examiners to be able to be completely independent. The Medical Examiner's role should be to scrutinise the death certificates and act as a source of medical expertise within the coroner's office.

We hope the reform of death certification will produce a significant improvement in the quality and consistency of information on death certificates. The Medical Certificate of Cause of Death provides a valuable source of information on diseases, which is important for the general public, clinicians and those responsible for planning health services.

Primary Care Trusts and Hospital Trusts must ensure they have consistent and robust arrangements in place to assist doctors in death certification.

We are supporting relatives' campaigning to refrain from the "best guessing" practice. Following the death of a patient, doctors must note a cause of death "to the best of their knowledge" even if a post mortem is planned. If that cause of death is proven inaccurate after post mortem a revised death certificate is issued which retains the inaccuracies within the "cause of death" box with a small footnote, outside this box, at the bottom of the certificate which states the true cause of death. It is hardly noticeable and, it is easy to assume the notes in the cause of death box are accurate when they are not.

The campaign calls on the Government to allow new death certificates to be issued when the cause of death is proven incorrect. Secondly, it calls on the Government to examine the practice of "best guessing" when a cause of death is not certain.

A number of people who are involved in this campaign have experienced this with the recording of healthcare infections, we believe this practice must end to encourage transparency, openness and provide a true picture of people dying from healthcare associated infections.

Redress for patients when things have gone wrong

AVMA, the charity "action against medical accidents", state that "thousands of people are gravely affected or even killed by avoidable hospital acquired infections every year. However, the continuing restriction of legal aid means that very few people can afford even to have their case investigated. Legal aid should be extended and consideration given to a special compensation scheme for those affected by these infections, to make compensation more accessible to all. This also has the potential to help control the total bill for compensating patients and avoid unnecessary legal costs. The charity is also calling for donations to a legal "fighting fund" it is establishing to pay for important test cases for which funding is not available from elsewhere."

We support the view that patients who have been harmed by avoidable healthcare infections should be given access to legal aid. Compensating patients who have been harmed in this way is important, as those who survive can be left with debilitating disabilities; some suffer amputations, long-term conditions such as osteomyelitis and potentially fatal heart conditions such as endocarditis.

Surgical site infections can have lasting effects on patients. When compared to patients without an infection, patients with surgical site infections are:

- Twice as likely to die
- Sixty percent more likely to be admitted to an Intensive Care Unit
- More than five times more likely to be readmitted after discharge
- More likely to experience a disability lasting longer than 60 months (an effect in almost 20 percent of all surgical site infections) ¹

Those who have been bereaved will also have lost household income. A compensation scheme should be put into place to help people in these circumstances, and affordable access to the legal system where the bereaved or survivors need to bring cases to court.

¹ Source: Kirkland, K.B., Briggs, J.P., Trivette, S.L., Wilkinson, W.E., Sexton, D.J. (1999), "The impact of surgical-site infections in the 1990s: attributable mortality, excess length of hospitalization, and extra costs", *Infection Control and Hospital Epidemiology*, Vol. 20 No.11, pp.725-30

What are the lasting effects for survivors of healthcare associated infections?

MRSA Action UK know that the very nature of healthcare associated infections means patients may have co-morbidities, so it can be difficult to ascertain some of the longer term effects of acquiring an infection. We know it prolongs treatment and healing, so it would be reasonable to deduce that some of the symptoms described by patients may be as a direct consequence of acquiring an infection.

Aside from the more obvious disabilities such as amputation, colon removal after severe illness from *Clostridium difficile*, endocarditis and osteomyelitis, we have experiences of being told of other symptoms. Some are from younger people, who before their encounter with the healthcare infection were very fit.

We have been told of extreme fatigue, memory loss, loss of hearing, and loss of taste. These accounts when shared with medical practitioners prove difficult to ascertain.

Are such symptoms as a consequence of MRSA or other infections?

Are they a consequence of the drug therapy used to save the patients' lives after contracting the infection?

Can they be alleviated?

What are the chances of becoming ill with the infection again?

Patients describe difficulties with benefits claims and contact with the Department of Works and Pensions, often feeling stigmatised. The psychological effects from the fear of becoming ill again and the stigmatisation all take its toll on survivors.

We believe research is needed to help understand and support people who have had life-changing experiences as a consequence of having contracted healthcare associated infections.

WHAT ARE WE DOING TO AVOID HEALTHCARE INFECTIONS AND TO SAVE LIVES?

In July 2005 the Department of Health considered the situation with regard to rising numbers of healthcare associated infections and consulted widely with experts and those involved in delivering healthcare. They published a document Action on Health Care Associated Infections in England.

Patient groups such as ourselves also contributed our views on the need for action. As a result of the consultation the Code of Practice for the Prevention and Control of Healthcare Associated Infections was developed. It built on the existing guidelines and knowledge about preventing healthcare infections, but it is now set in a legislative framework, and has been subject to regulation by the Healthcare Commission and the Commission for Social Care Inspection.

The Care Quality Commission was created in October 2008 to take over from the Commission for Social Care Inspection, the Healthcare Commission, and the Mental Health Act Commission from 1 April 2009

In October 2006 NHS Trusts were required to implement the Code of Practice for the Prevention and Control of Healthcare Associated Infections, also known as the Hygiene Code. The Hygiene Code is a mandatory requirement enacted by The Health Act 2006 and applies to all NHS services, whether these are directly provided by the NHS or commissioned by the NHS. As well as services it also applies to the systems that are in place to prevent healthcare associated infections, namely

- Management, organisation and the environment
- Clinical care protocols
- Healthcare workers
- Education, communication and information

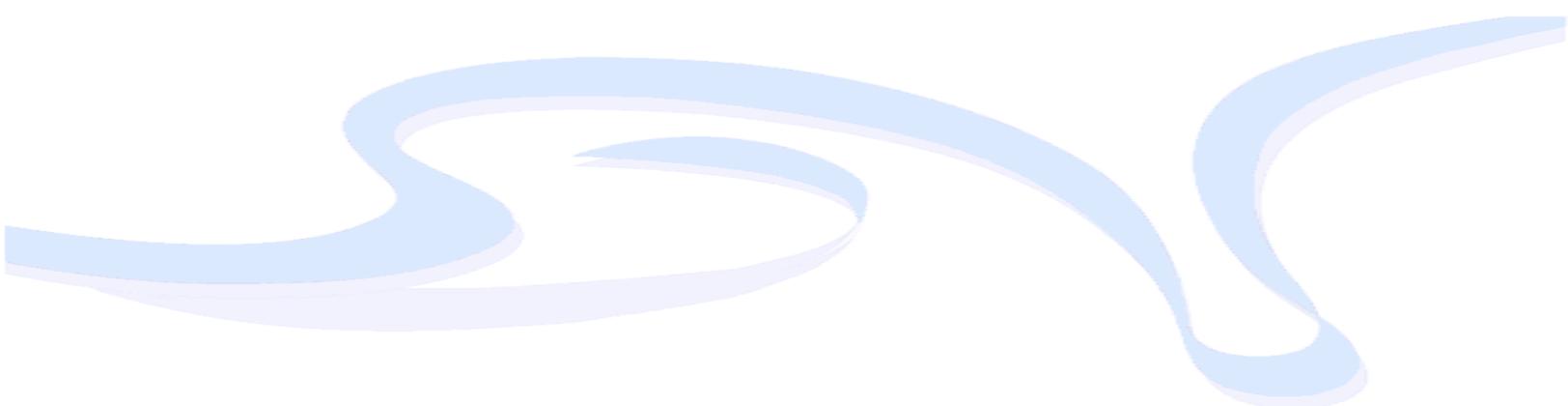
The Act was strengthened with effect from 1 April 2009 and the requirement for NHS Trusts to register, and as part of that registration process to show compliance with The Hygiene Code. This requirement will be extended across Health and Social Care establishments from next April and this will include Care Homes and Nursing Homes. Work has been going on to prepare the wider health community for these changes; we would like to see the Improvement Foundation programme of improvement techniques rolled out to all Care Homes. Staff have been making a real difference and have shown measurable improvement in reducing inappropriate antibiotic prescribing, and improving communication between hospitals and other care environments.

The MRSA Cleaner Hospitals programme designed by the Department of Health is to support organisations and individuals in reducing healthcare associated infections like MRSA, and help them meet the requirements of the Hygiene Code.

The National Patient Safety Agency have been running programmes such as the Cleanyourhands campaign highlighting the importance of hand-hygiene at the right moments, now known and recognised as the World Health Organisation's "Five Moments of Hygiene"

- Before patient contact
- Before aseptic task
- After body fluid exposure risk
- After patient contact
- After contact with patient surroundings

We need to build on the excellent work of programmes such as *Saving Lives* and the *Cleanyourhands* campaign, to attain year-on-year reductions, with a vision of zero tolerance to avoidable healthcare infections.



The mandatory requirement to reduce MRSA bacteraemias, with a commitment to cover other healthcare associated infections as information from mandatory surveillance becomes available

The target is to achieve year on year reductions in methicillin resistant Staphylococcus aureus (MRSA) levels, expanding to cover other health care associated infections as data from mandatory surveillance becomes available.

There was a national Public Service Agreement target to halve the number of MRSA bacteraemias (bloodstream infections) in NHS acute and specialist trusts in England by March 2008. To achieve this target, each acute and specialist trust with more than 12 MRSA bacteraemias in 2003/2004 (the baseline year) will be expected to achieve either a 60% reduction in the number of bloodstream infections by 2007/2008 or a maximum of 12 infections in 2007/2008.

Trusts with 12 or fewer infections in 2003/2004 were expected to maintain or reduce these levels. Details are given in the letter of November 5th 2004 (Gateway reference 4104) from the Group Director Health and Social Care Delivery and Chief Nursing Officer to all Strategic Health Authority chief executives.

*Source: Healthcare Commission, Accessed 21st September 2008
<http://www.healthcarecommission.org.uk/nationaltargets2007-2008/newnationaltargets/acuteandspecialisttrusts/indicators/mrsabacteraemia.cfm>*

Since the first publication of our manifesto the government has announced that targets for MRSA have been achieved and now the National Quality Board is to look at continuing to drive reductions with a new MRSA Objective. We know that not all trusts achieved John Reid's target; furthermore the commitment to expanding the reporting has not come to fruition, with only recorded bloodstream infections being published. We are disappointed that the wider publication of information for patients has not taken place.

We were invited to give views to the National Quality Board and hope that these will be taken into account. Trusts who have not yet met their targets or who are not performing so well need to have tougher targets and regulators and Department of Health should be doing all they can to ensure that the good examples set by other organisations are followed, nothing less than a change in management and Board members where improvements are not being achieved and sustained will do.

HOW DO OTHER COUNTRIES OVERCOME THE PANDEMIC OF INFECTIONS PREVALENT IN OUR HEALTHCARE FACILITIES?

A very low prevalence of MRSA is one that is enjoyed by our Northern European neighbours employing a strict "Search and Destroy" policy.

They, like us have had experience of outbreaks of infection and used systems devised by us to overcome them.

In the 1990's, the 1,200-bed Erasmus Medical Centre University Hospital in The Netherlands, were experiencing 20 cases of MRSA bacteraemia per year. In 2002 this rose to 70. The implementation of the strict "Search and Destroy" policy brought significant reductions, and by 2004 there were no MRSA outbreaks in the hospital, and other incidence are quickly eradicated by employing search and destroy.

Dr Margreet Vos says one of the main reasons for success was search and destroy which involves the early detection, early identification and early containment of infection and encompasses patients, healthcare workers and the healthcare environment.

"This is proof that you can come from a high endemic level to hardly any MRSA. Many cultures are now taken from patients and healthcare workers and you don't see any outbreaks"

Dr Margreet Vos Learning from the Best Conference, London, January 2005

Key interventions in Search and Destroy:

- A national policy on infection prevention and control benchmarked by the Healthcare Inspectorate
- National laboratory guidelines on detection and the transportation of patients from abroad
- Local infection control committees implement policy, infection control facilities such as isolation rooms and trained healthcare workers
- All healthcare workers are educated about healthcare-associated infections
 - Risk classification of patients and healthcare workers (Class A - proven, Class B -high risk, Class C - increased risk Class D - no risk)
 - Class A and B - strict isolation on admission, pending culture test results
 - Staff that come into contact with those patients wear gloves, a gown, mask and cap
 - Class C are screened and limited contact made until proven negative
 - Class A staff are removed from the hospital immediately and stay at home until proven negative
 - Class B are restricted in their movement at work until proven negative
- In the event of an outbreak the ward closes and only reopens after all patients and healthcare workers are negative, the ward is disinfected and non-disinfected material, such as paper, is destroyed

A judicious policy on antibiotic prescribing is key in reducing antimicrobial resistance, there needs to be a reduction in the use of broad spectrum antibiotics, particularly in the elderly population

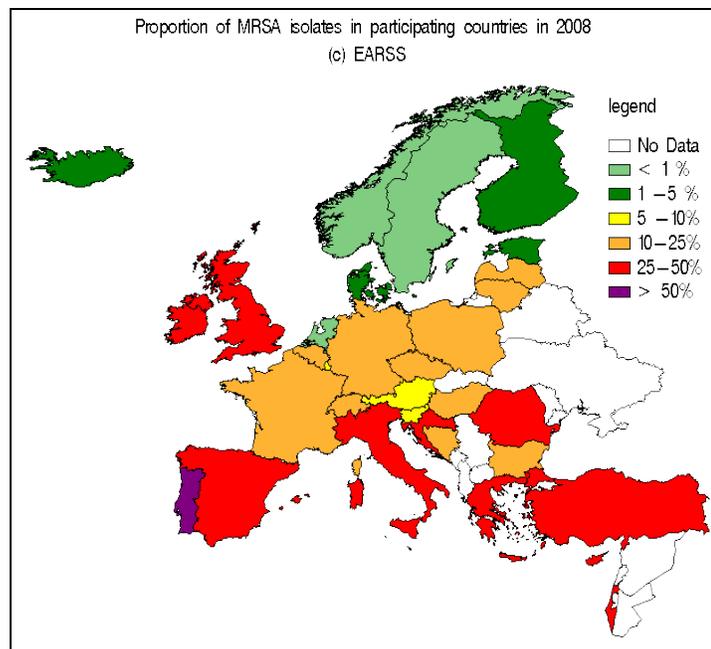
Doing things half-heartedly will not work, take one of these measures away and you break the link in a very effective chain of events that need to be implemented to reduce the risks of contracting an infection.

If methods employed by the Dutch were fully implemented then infection rates would drop dramatically. Reducing *Clostridium difficile* by 30% is not challenging, with rigorous controls such as screening for *Clostridium difficile* and improved isolation facilities numbers of cases would drop significantly.

The European Antimicrobial Resistance Surveillance System currently monitors seven pathogens, across thirty-one European countries:

- Escherichia coli (*E. coli*)
- Enterococcus faecalis
- Enterococcus faecium
- Klebsiella pneumoniae
- Pseudomonas aeruginosa
- Staphylococcus aureus
- Streptococcus pneumoniae

Table 1 on page 21 identifies the susceptibility results from isolates of *Staphylococcus aureus*. Countries with lower rates of antimicrobial resistance have adopted a search, isolate and destroy policy, with judicious use of antibiotics. The Netherlands policy of Search and Destroy was recently evaluated and concluded that the policy was cost effective, and would benefit from improved access to screening to enable more effective use of isolation facilities and associated resources. The UK remains the country reporting the largest number of *Staphylococcus aureus* bloodstream infections.



The lower percentage of antimicrobial resistance speak volumes in terms of where strict search and destroy policies are adopted.

A system and method for the identification of the bacteria that present the highest risks to patients receiving healthcare at the point-of-care has enormous potential to impact significantly on the burden of healthcare associated infections on a global basis. We believe diagnostic technologies that could identify multiple bacteria linked to an online resource of up-to-date clinical knowledge would help

healthcare professionals plan the best possible treatment programme and interventions for patients.

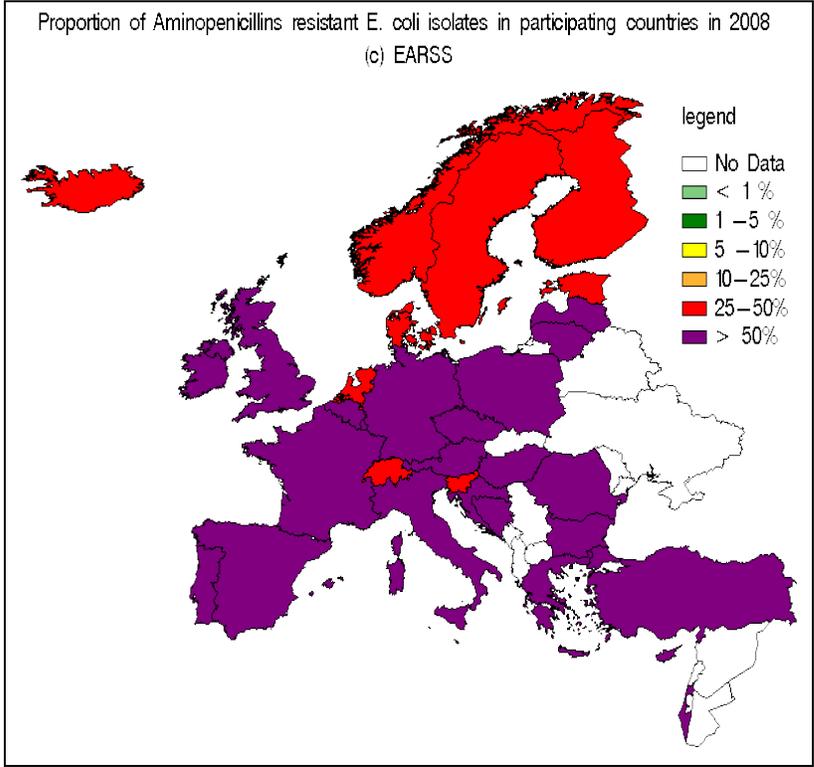
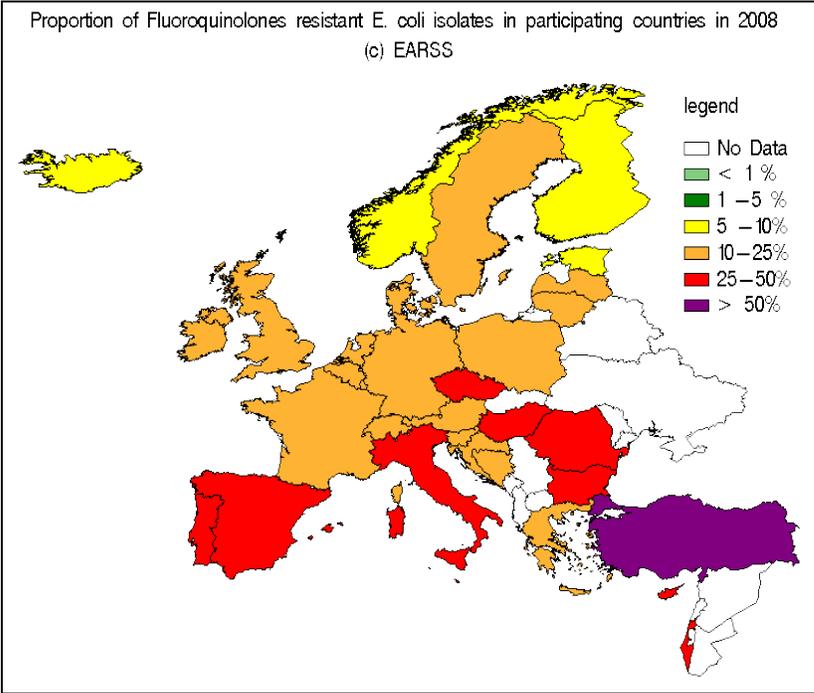
The scale of the problem

Table 1 Susceptibility results for S. aureus isolates in participating countries in 2008

Participating country	Resistant organism	Number		Total	Percentage	
		Susceptible	Resistant		Susceptible	Resistant
France	MRSA	3304	1072	4376	75.5	24.5
United Kingdom	MRSA	2321	1029	3350	69.3	30.7
Sweden	MRSA	2392	16	2408	99.3	0.7
Austria	MRSA	1738	156	1894	91.8	8.2
Czech Republic	MRSA	1471	244	1715	85.8	14.2
Portugal	MRSA	733	823	1556	47.1	52.9
Spain	MRSA	1104	401	1505	73.4	26.6
Denmark	MRSA	1265	30	1295	97.7	2.3
Ireland	MRSA	831	411	1242	66.9	33.1
Hungary	MRSA	915	266	1181	77.5	22.5
Switzerland	MRSA	985	112	1097	89.8	10.2
Germany	MRSA	877	212	1089	80.5	19.5
Turkey	MRSA	658	402	1060	62.1	37.9
The Netherlands	MRSA	997	7	1004	99.3	0.7
Italy	MRSA	618	312	930	66.5	33.5
Finland	MRSA	894	27	921	97.1	2.9
Belgium	MRSA	719	187	906	79.4	20.6
Greece	MRSA	507	352	859	59	41
Norway	MRSA	805	5	810	99.4	0.6
Croatia	MRSA	306	168	474	64.6	35.4
Slovenia	MRSA	388	30	418	92.8	7.2
Israel	MRSA	250	136	386	64.8	35.2
Lithuania	MRSA	247	31	278	88.8	11.2
Estonia	MRSA	177	8	185	95.7	4.3
Bulgaria	MRSA	120	40	160	75	25
Latvia	MRSA	114	17	131	87	13
Luxembourg	MRSA	106	11	117	90.6	9.4
Malta	MRSA	48	60	108	44.4	55.6
Poland	MRSA	87	12	99	87.9	12.1
Cyprus	MRSA	50	42	92	54.3	45.7
Bosnia Herzegovina	MRSA	56	15	71	78.9	21.1
Iceland	MRSA	62	1	63	98.4	1.6
Romania	MRSA	26	13	39	66.7	33.3

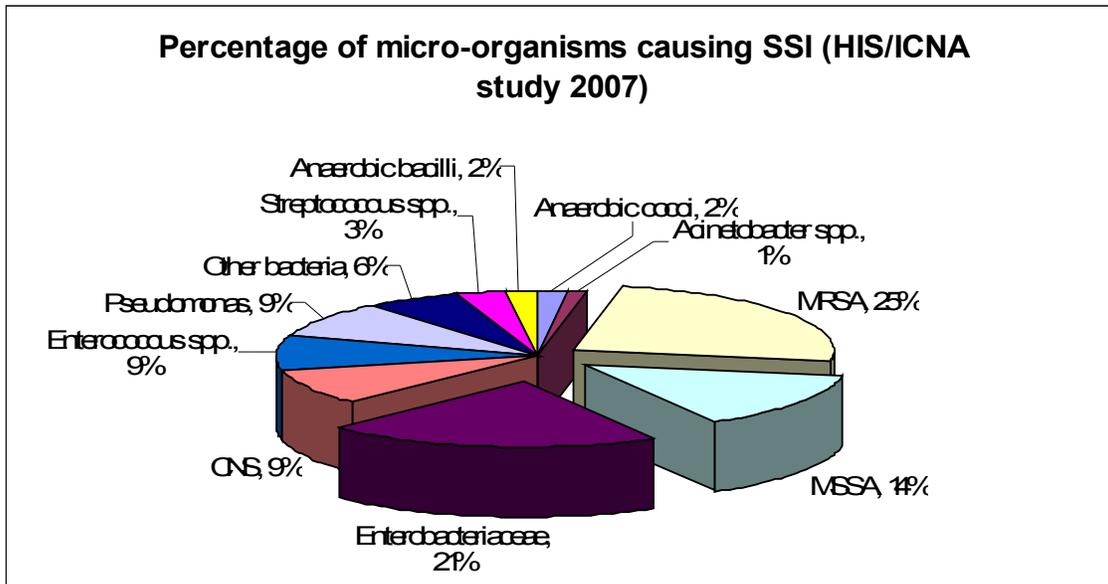
MRSA = non susceptible to Cloxacillin, Dicloxacillin, Flucloxacillin, Methicillin, Oxacillin or Cefoxitin. Austria recorded two cases resistant to Vancomycin

The maps of Europe show significant resistance to antibiotics used to treat *E.coli*, furthermore these antibiotics can play a significant role in causing *Clostridium difficile* disease, judicious prescribing has to be rolled out, along with a public information campaign on the appropriate use of antibiotics.



More threats on the horizon

Worryingly there is another organism that is multi-resistant and very difficult to treat that has not attracted the same attention as MRSA. Enterobacteriaceae accounted for 21% of the micro-organisms causing surgical site infections in 2007, the article published in The Guardian in August 2009 shows that we cannot afford to take our eye off the ball with regard to preventing infections, and we need to ensure more investment and research is put into solutions to overcome the threat from ever evolving micro-organisms.



New superbug resistant to antibiotics and more difficult to tackle than MRSA

The Guardian, Wednesday 12 August 2009

Hospitals have been put on alert about a group of new superbugs brought into the UK by patients returning home after surgery abroad, including cosmetic treatments and organ transplants. The virulent new strains of drug resistant bacteria, which are much harder for doctors to tackle than MRSA or *Clostridium difficile*, have killed two people and left 18 others seriously ill in 12 months.

At least 17 hospitals in England and Scotland have seen cases, prompting the Health Protection Agency to issue a warning about what it calls "a notable public health risk". The bacteria can cause wound infections, septicaemia, pneumonia and gastroenteritis and are posing real problems for the NHS because they are proving resistant to all the usual antibiotics.

This year hospitals have reported seeing the infections in at least nine UK nationals who appear to have acquired them while staying in hospitals in India and Pakistan after having "tummy tuck" surgery, liver and kidney transplants or surgery following a car crash. Previous cases have emerged in holidaymakers who picked up the bacteria while hospitalised in Greece and Turkey after a moped accident.

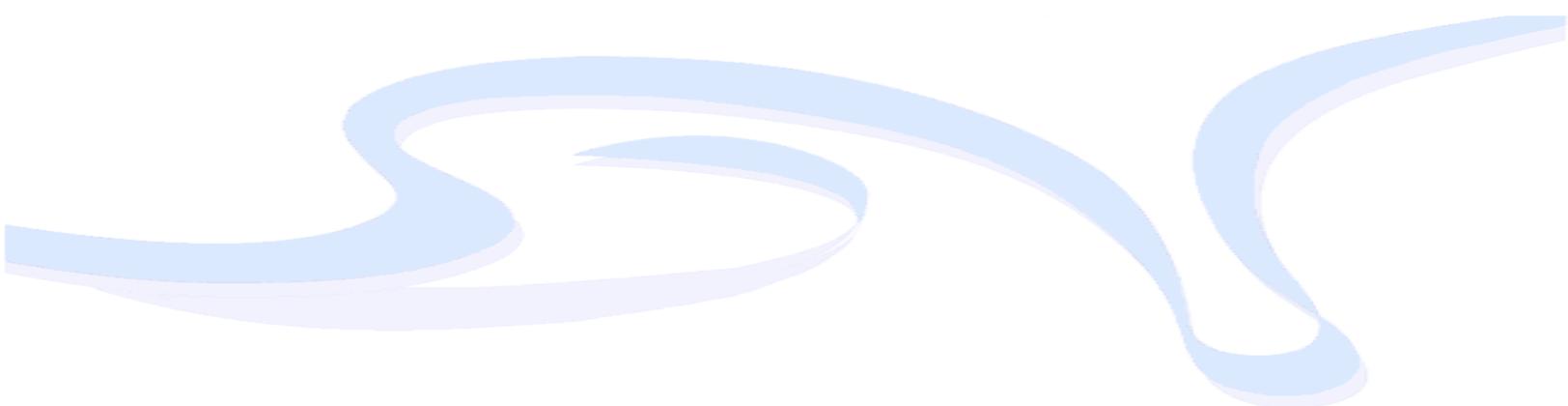
But doctors are worried because the latest strains, known as enterobacteriaceae, produce enzymes that attack and counteract powerful antibiotics called carbapenems which the NHS relies on as its last line of defence against particularly damaging infections.

The HPA admits that tackling the threat posed by the bacteria "presents major challenges, [as most of them] are resistant to all standard intravenous antibiotics for treatment of severe infections".

John McConnell, editor of the medical journal the Lancet Infectious Diseases, said: "There's the potential for this to become a substantial problem of antibiotic resistance within UK hospitals, and there's not much we can do at the moment.

"Compared to MRSA or C difficile or a regular pneumonia-type infection this is pretty small beer, purely in terms of the number of cases so far. But small beer is the way that things like MRSA started. These cases could be the start of what could go on to be a major cause of healthcare-acquired infections."

The situation is so serious that the HPA is urging pharmaceutical companies to urgently start producing drugs that are effective against these types of bacteria. McConnell said the government should offer financial incentives.



WHAT MORE DO WE NEED TO DO?

Education on the importance of hand hygiene

We believe that education on the importance of hand hygiene is not only important in the healthcare setting, but is important in the wider community. Correct hand washing at the right time and right place is the most important link to reducing the risks to preventing and infection, other interventions are also necessary, but without correct hand washing and the use of gels to fight organisms like MRSA the battle will be lost.

Health Protection Scotland has been running advertising campaigns as part of Scotland's National Hand Hygiene Campaign which has involved periodic short information films and advertising on bill boards. The campaign also specifically targets children. The aim is to raise the awareness of hand hygiene as early as possible; the sooner children get into the habit of washing their hands regularly, the better.

E-Bug is an exciting new initiative that complies with the Department of Education and QCA educational standards for Junior and Senior schools. Its main aim is to teach young people about microbes, appropriate use of antibiotics, how microbial infections are spread and can be prevented through improved hygiene and vaccine use.

The programme demonstrates how inappropriate use of antibiotics can adversely affect an individual's good bugs and cause resistance in the community. E-bug demonstrates the importance of hand and respiratory hygiene in minimising the spread of infections in the community, including teaching how to wash hands most effectively.

We believe these initiatives need to be rolled out to reach a wider audience with public information campaigns for everyone. East Midlands Hand in Hand Campaign is an excellent example of how this can be done and we would like to see this rolled out nationally across all Strategic Health Authorities.

The "Hand in Hand, fighting infection together" campaign was the first public-facing campaign for hand hygiene. Washing hands regularly and correctly is one of the easiest ways to prevent the spread of infections such as MRSA and Clostridium difficile.

Hand hygiene in clinical practice

To ensure high standards of hygiene in clinical practice it is important that repeated observational monitoring of hand-hygiene is conducted against the criteria set out in the World Health Organisation's 'five moments for hand hygiene'. Outcome measures that include the rates of sepsis and cases of methicillin resistant *Staphylococcus aureus*, and *Clostridium difficile* should be published and used to benchmark success in all healthcare facilities.

Facilities for cleansing the hands should be close to the patient. It is essential to remember that alcohol-based products are not effective on *Clostridium difficile*. Patients, visitors and healthcare workers all need access close to the vicinity of the patient for cleansing the hands to avoid spreading infections that are carried by hand contact.



No rings, watches or jewellery – bare below the elbows leaves no place for bacteria to hide

A HOLISTIC APPROACH IS NEEDED

It is widely recognised that a holistic approach is necessary for the prevention and control of healthcare associated infections to be effective in all our healthcare settings, at the organisational and individual level. Infection prevention and control activities must be embedded into everyday practice and applied consistently by everyone, every time.

Healthcare professionals have a responsibility to reduce the burden and level of healthcare associated infections. It is imperative that all healthcare professionals share this responsibility for infection prevention and control, rather than some doing it and not others.

Healthcare professionals must be aware of current evidence-based national guidelines for the control and prevention of healthcare associated infections, and their duty within the Hygiene Code to ensure these are effectively implemented in every clinical setting, both in Primary and Acute care.

Healthcare professionals must comply with the high standards of hygiene in clinical practice, and in particular with respect to:

- hand hygiene protocols
- non-touch aseptic techniques
- medical devices
- the use of personal protective equipment
- the safe disposal of sharps
- dress code in the clinical setting, including the use of face-masks for invasive procedures
- providing and maintaining a safe, clean environment

Non-touch aseptic technique

The Health Act 2008 requires that Trusts must have a policy for aseptic technique. Medical or clean asepsis reduces the number of organisms and prevents their spread: surgical or sterile asepsis includes procedures to eliminate micro-organisms from an area and is practiced by nurses in operating theatres and treatment areas. Prevention of post operative surgical site infections relies on flawless aseptic technique in the operating theatre, on the wards, and in the Primary Care setting where patients are discharged for care at home and in institutions. This includes effective preparation and cleaning of the patients' skin. We are increasingly being told of routine blood tests and treatments at clinics and GP practices where these practices are not assiduously followed.

The number of infections in hospital and in the Primary Care setting can be kept down if all staff adhere to good hygiene measures and aseptic technique. The most important is to wash hands before and after contact with each patient, and before carrying out any invasive procedure. These simple measures reduce the chance of passing on bacteria from patient to patient.

Healthcare professionals must ensure they adhere to guidelines on asepsis and the management and use of indwelling devices including urinary catheters, central venous catheters, arterial catheters, enteral and parenteral feeding equipment, peripheral intravenous cannulae and respiratory support equipment. We believe that their needs to be a more judicious use of cannulae, these should be inserted only when needed and not as a matter of routine. Where indwelling devices are used these should be checked and monitored on a daily basis to mitigate the risk from infection.

We believe the Royal Colleges need to provide a focus on clinical training to be followed by healthcare providers' regular observations and refresher training. We believe there is a role for the Royal Colleges in assessing competencies within the healthcare setting once professionals have been trained and qualified. The Improvement Teams, acting as critical friends, have been commissioned as part of the Cleaner Hospitals, Saving Lives Programme and have identified some anomalies in the observations carried out in-house; an independent trained eye is always a good to ensure this key skill is being used effectively.

We support the UK adoption of aseptic non-touch technique (ANTT) clinical guidelines as a national standard for use

- IV practice
- Urinary catheterisation
- CVC/PICC insertion
- Wound care; and
- Cannula insertion

Providing and maintaining a clean, safe environment

Providing and maintaining a clean, safe environment is key in preventing avoidable healthcare infections. The need to make it easier for the inpatient environment to be kept clean is important, and any specifications for refurbishment should be in consultation with the Infection Prevention and Control Team, staff on the wards and cleaning teams.

Technologies that can help in maintaining a clean, safe environment should be encouraged, and we welcome the HCAI Technologies programme and Design Bugs Out, work should continue in these areas.

Cleaning is everyone's business, not just the role of the cleaner. It is a science, as such training and being given the right equipment to do the job is important. Environmental testing is something we have always welcomed and we are pleased to see that the HCAI Technologies programme has taken this on board in their Showcase Hospitals. We would like to see more Showcase hospitals across the UK.

The Duty to provide adequate isolation facilities

The most common barriers to further improvement in reducing healthcare associated infections, as reported by trusts, were high bed occupancy and lack of isolation facilities. (National Audit Office, 12 June 2009)

An NHS body providing in-patient care must ensure that it is able to provide, or secure the provision of, adequate isolation facilities for patients sufficient to prevent or minimise the spread of healthcare associated infections.

The Health Act 2008 requires core policies on Isolation facilities. Adequate isolation facilities for patients who have been screened and found to be MRSA positive or who are colonised or infected with *Clostridium difficile* are essential.

Access to hand cleansing facilities for both patients and healthcare workers is of vital importance, and more investment in making sure that these facilities are accessible should be made available. We have seen the indignities suffered by patients who have succumb to *Clostridium difficile*. In the absence

of en-suite facilities, a simple measure would be to ensure that in the event of an outbreak of *Clostridium difficile* the supply of a commode, cleaned after each use, to each patient affected, would save many of the indignities suffered by patients and reduce the risk of cross-contamination between patients.

It is important that if patients are isolated they are not forgotten, we have had reports from patients who have been left for long periods of time, and even missed drug therapy and meals due to staff not entering their room. The duty of care must never be forgotten.

Judicious Antimicrobial Prescribing and educating the public

To reduce the development of antimicrobial resistance, healthcare professionals should ensure they achieve optimal antimicrobial prescribing. Screening has an important role to play in identifying isolates and treating appropriately. The impact of antimicrobial use on the bacterial flora in the healthcare environment is an important outcome to evaluate the quality of antimicrobial prescribing habits within healthcare institutions.

Periodic reviews of the prevailing antimicrobial susceptibility of clinically important bacterial pathogens should be undertaken to assess appropriate inclusion or deletion of antimicrobials. Periodic antibiotic audits should be conducted using recommended standard treatments as a basis for evaluating the appropriateness of antimicrobials used. The most important evaluation is the clinical outcome of treatment. The response of patients to the prescribed antimicrobial therapy would, in the final analysis, judge whether the interventions to improve antimicrobial use are clinically relevant and effective.

We support Sir Liam Donaldson's view and want to see the government invest in information for the public, better regulation of antibiotic prescribing, and funding for research and development of new antibiotics.

“Antibiotics are life saving drugs. They save thousands of lives a year. Unfortunately, many bacteria are now resistant to them. Resistance is caused by excessive use of antibiotics: bacteria evolve and block the antibiotic's attempts to destroy them.

Every time an antibiotic is used, it potentially becomes less effective to the population as a whole. Overuse, and inappropriate use, of antibiotics reduces their ability to cure human disease.

In some infections the last line of defence has been reached. Antibiotics are also used in large quantities on animals, adding to the threat of resistance.

Even though these drugs are becoming less effective, fewer pharmaceutical companies are developing new antibiotics. They yield only small profits for the companies.

The potency of one of the key weapons in the medical armoury is being eroded.

Correcting this situation will require completely new attitudes. The effectiveness of antibiotics should be seen as a common and collective public good. We are part of the problem and we must all become part of the solution.

In other countries in Europe, high profile national campaigns have produced significant falls in the number of antibiotics prescribed. In Belgium, a campaign reduced prescribing in the community by 36%.

Learning from these experiences elsewhere, I have called for action on this serious problem in this country.

- First, I want to see a major national campaign, similar to those used in other parts of Europe. We must educate the public about the proper use of antibiotics.
- Second, I advocate warnings on the side of every antibiotic packet. This way we can remind people of the importance of taking their medication in the correct way.
- Third, I call for a ban on the use of certain antibiotics in animals.
- Fourth, no further antibiotic classes should be made available across the chemist's counter, unless we can be sure it won't make the problem of resistance worse.
- Finally, I want to see research and development re-energised to find new antibiotics.

Taken together, the measures I am calling for could allow us to turn the tide of resistance. Until then, every antibiotic expected by a patient, every unnecessary prescription written by a doctor, every uncompleted course of antibiotics, and every inappropriate or unnecessary use in animals or agriculture is potentially signing a death warrant for a future patient.”

*On the State of Public Health: Annual Report of the Chief Medical Officer 2008, Antimicrobial resistance:
Up against the ropes
Sir Liam Donaldson, Chief Medical Officer
March 2009*

Information for patients, the public and staff

The Department of Health have commissioned research to understand attitudes and behaviours around healthcare associated infections and the wider public perception. The findings are yet to be published and yet these have shown that an education campaign is needed. We need a National Public Campaign. The Charity deals with enquiries from the public on a daily basis, so we know that this is needed. Screening for MRSA prior to surgery has raised the numbers of enquiries, so awareness is happening, we just need to ensure the information is accessible and what the public needs to know.

Duty 3 of the Hygiene Code

Duty 3 of the Hygiene Code requires that NHS organisations provide suitable and sufficient information on healthcare associated infections to the patient, the public and other service providers when patients move to the care of another healthcare or social care provider. We believe information is key in a number of areas and the importance of using it to measure patient outcomes and reduce the risk to patients is key in preventing and controlling healthcare associated infections:

a) Patient information to inform choice

Healthcare professionals and managers must ensure that they provide clear and concise information to patients on healthcare associated infections and advice on how they can help to prevent and control them. There is a duty to protect staff, patients and the public and it is important that visitors and relatives are advised of the necessary precautions to take when assisting with care or for example take home laundry or personal items of patients. Information also helps patients to choose where and how they are treated and infection rates should be freely accessible.

We are told by patients that they have not been given advice on how to deal with laundry, or what precautions to take at home. We are often asked for guidance and we believe that healthcare professionals should be more willing to discuss a sensible approach to taking precautions as patients will often be cared for by close relatives who may also be vulnerable. Patients and carers also need to be aware of any potential signs of infection, such as high temperature, rigours so that they can seek medical help at the earliest opportunity.

There is guidance available but not all hospitals make this easily available. We are told there is a conflict with patient confidentiality, however if a patient is being barrier nursed visitors and relatives will be aware of staff taking precautions and should also be given advice.

The Integrated Lincolnshire Care Pathway contains a pictorial description of what care the patient will receive if they have been diagnosed with MRSA, it is easy to understand and because it is pictorial is a good communication tool for healthcare workers and patients.

b) Sharing of Information between Healthcare Providers

Integrated care pathways for the treatment of healthcare infections provides a way of passing information about the care a patient has received if they have been found to be colonised or have had an infection. The Integrated Lincolnshire Care Pathway, developed in partnership with the local authority provides an opportunity for the information to be passed on through the patients' journey into the Primary Care and Social Care setting.

This approach ensures the records are kept up to date and also serve as an aid for healthcare workers in the management of patients with healthcare infections.

Electronic records can serve this purpose and we would hope to see further use of information systems that can be developed to aid in the care of patients with healthcare associated infections.

Bedford Hospital use a bed management system whereby patients who have an infection or may be in the process of being screened can be isolated or cohorted so that staff are always aware that bays are in use for this purpose.

Patient's details are easy to track with the ability to generate a GP's letter to advise of any infection that may have been present during treatment, and what precautions to take. This can be used to help care for the patient at home, in a nursing home or for any ongoing treatment that may be necessary as an outpatient, for example Oncology, or in a hospice where risk assessments are particularly important.

The sharing of information between healthcare providers is key in infection prevention and control.

c) The effective collection, publishing and use of information to evaluate outcomes of interventions

The effective recording and publication of information relating to healthcare associated infections is essential to establish baselines from which to consider whether interventions are working and improving the outcome for patients, and of course ultimately saving lives.

Using information for performance management encourages a culture of safety. If wards have a good track record and have very few bacteraemias or other infections, this can act as an incentive to do well. It makes everyone aware of their responsibility to reduce the burden of healthcare associated infections.

We would like to see more information made available on the internet, currently bacteraemias are published, as are cases of *Clostridium difficile*; however the information relating to surgical site infections on the Health Protection Agency website is not kept up-to-date. This information helps people make choices when they are deciding where to go for treatment. One of our most common questions is “how is my hospital doing, what are their infection rates?” An up-to-date resource would help patients to decide.

Dress and Uniform Policy

It is widely acknowledged that there are risks of contracting MRSA and *Clostridium difficile* through contact with sheets, curtains, dressings and clothing, and, with the enforcement of bare-below-the elbows in mind, there can be no disputing that healthcare workers’ uniforms are any different in terms of the risk of carrying bacteria. We believe that uniforms should be changed out of at the end of the working shift, and laundered appropriately, preferably on site reducing risks involved in transportation using the same vehicles to pick up soiled laundry and drop off clean laundry.

Clear policies and instructions on the cleaning of uniforms should be provided, which should be monitored and evaluated by matrons. We believe guidance on a dress code and uniform policy should be included in the Hygiene Code, subject to monitoring and regulation by the Care Quality Commission.

DEVISING EFFECTIVE STRATEGIES FOR CARE AND NURSING HOMES

The Department of Health has issued guidance regarding the safe treatment of patients who are colonised with MRSA in care and nursing homes. Patients should not be refused access to nursing or care homes if they are MRSA positive as this would be discriminatory. The guidance gives sensible advice on giving safe care, and precautions to take where patients may have open wounds, or skin lesions through psoriasis, or have drips or catheters. In these circumstances the same precautions apply in the care and nursing home setting as when giving care in an Acute hospital, residents would be treated in their own room with support from clinical teams from the Primary Care Trust.

Maintaining patient dignity whilst taking sensible precautions is important to staff, and they need to be confident that they are trained to do this. New guidance is being consulted on to help Care Homes meet their responsibilities and ensure all staff know how to reduce the risks of spreading infection and covers infections such as Clostridium difficile, Norovirus and MRSA.

From April 2010 all Care Homes will need to register with the Care Quality Commission and demonstrate that they have effective infection prevention and control policies in place, this includes policies on antimicrobial prescribing and attention to providing a safe clean environment. The design of nursing homes would benefit from some of the innovative approaches being developed in the Acute setting. Keeping care homes clean can be more difficult because of the soft furnishings. Technologies should be developed to look at ways of making the design of the environment safer for residents and we would like to see investment in this important area of care.

The Improvement Foundation has been running a programme of support to help tackle healthcare associated infections in care homes, which complements the work taking place in Primary Care Trusts and hospitals. Local improvement teams, which include managers, nurses, and staff from care homes, work with residents, carers and relatives, local General Practitioners and community nursing teams to provide information and training on how to reduce the risks of healthcare associated infections. This support for staff is vital if infections are to be avoided, the programme has seen considerable success with staff making a real difference and saving lives. During our work with the Improvement Foundation it has become apparent that information and communication is key when admitting and discharging patients between the hospital and care home environment. Documentation is available to help this process but hospitals are often too busy and this detail tends to get left to one side. We advocate the use of the Lincolnshire Care Pathway for MRSA and the Inter-Healthcare Infection Control Notification form, for transfer of patients between care facilities.

Two metrics used to measure success relate to appropriate antibiotic prescribing, and the proportion of residents who have a care plan that gives details of their infection status so that appropriate care is given and precautions taken where necessary. These indicators should be used nationally to help drive improvement. We have already seen that John Reid's target to reduce MRSA bloodstream infections by half the 2004 level has driven real improvements.

Effective regulation

Effective regulation and actions to enable Trusts to meet their obligations as set out in the Hygiene Code

MRSA Action UK believes the Care Quality Commission must be a body with enough resources to regulate the implementation of the Hygiene Code across the whole healthcare economy. This includes nursing homes where there are significant risks to patients with pressure sores and indwelling devices such as catheters. Tissue viability nurses have a role to play in making sure patients and residents do not succumb to largely avoidable pressure sores and consequent life-threatening infections, and this needs monitoring effectively.

We repeatedly note from patients and professionals that the art of aseptic technique during clinical procedures appears to be not to a standard we should expect. Perhaps this is down to the reliance on packaged equipment, and little practical experience during training in terms of the need for pristine hygiene and asepsis. There has been an over reliance on antibiotics leading to an attitude that these will cure infections if we don't get aseptic technique right every time. Whereas the view should always be prevention is better than cure, and about doing everything right first time every time.

There needs to be better regulation in the Primary Care setting, to include GP practices. Hand hygiene and aseptic technique are equally important in GP practices where clinical procedures are carried out.

Attention to antibiotic prescribing is important, broad-spectrum antibiotics can present a significant risk to the elderly and a focus on prescribing the correct treatment needs to be brought in. Guidance needs to be published and regulators need to ensure that everyone involved in patient care is aware of their responsibility. The Hygiene Code applies to Primary Care Trusts therefore services commissioned by Trusts must have clinical protocols and antibiotic prescribing policies in place, and this includes GP practices.

There has been a strong focus on the Acute setting, attention must be paid to the Primary Care setting, and this cannot be done in isolation, better recording systems are needed so that patients are screened according to risk. Care Homes, hospices, and other institutions need risk assessments in place. Similarly hospitals need to get better at communicating between departments, for example if a patient is discharged but sent for treatment to Oncology, screening on discharge is a sensible approach, and we believe should form part of a more targeted approach to screening for healthcare infections.

Regulators are in a good position to look at risk assessment and to bring to the attention of Trust Boards areas of concern and to continuously monitor and review outcomes from implementation of the Hygiene Code.

Of note, in the Netherlands the regulator endorses a National policy of Search and Destroy, this rigorous approach has to be national for it to work, and it is recognised that preventing and controlling healthcare associated infections is a whole health economy problem.

Judicious antibiotic prescribing and surveillance are key components of successful Search and Destroy strategies, The Health Act 2008 requires Trusts to have an antimicrobial prescribing policy, policies should be reviewed to ensure judicious use of antibiotics, particularly in relation to broad-spectrum antibiotics in the older age groups.

Where there are shortfalls in the capacity for Trusts to carry out their duties within the Hygiene Code regulators are in a good position to make recommendations to the Department of Health on the resources, technologies and training required to reduce and prevent avoidable infections.

We believe working collaboratively with the National Patient Safety Agency and patient groups is important in gaining intelligence to see where patient safety can be improved upon, and would like the Care Quality Commission to make better use of these resources when carrying out inspection and regulation.

Effective prevention and control of healthcare associated infections has to be embedded into everyday practice and applied consistently by everyone. It is particularly important to have a high awareness of the possibility of healthcare associated infections in both patients and healthcare workers to ensure early and rapid diagnosis. This should result in effective treatment and containment of the infection. Effective action relies on an accumulating body of evidence that takes account of current clinical practices. This evidence base should be used to review and inform practice. All staff should demonstrate good infection control and hygiene practice - *The Health Act 2006, Code of Practice for the Prevention and Control of Healthcare Associated Infections*

The Hygiene Code must be regulated and enforced in its entirety; each key policy component supports compliance with the Health Act 2008.

GOVERNANCE AND STRONG LEADERSHIP

Organisational responsibilities

In addition to carrying out their own responsibilities appropriately, healthcare professionals are duty bound to ensure that their colleagues fulfil their responsibilities with regard to infection prevention and control. Senior healthcare professionals should lead by example by demonstrating good infection prevention and control and hygiene practices. This should include ensuring that junior staff members adhere to the same principles.

There needs to be a 'can do' attitude, and organisations must take a 'Board to Ward' approach, the commitment needs to be throughout the organisation and beyond. With hospital treatment being commissioned by Primary Care Trusts, there is a responsibility to ensure that budgets allow for safe care and infection prevention strategies to be fully implemented. Strategic Health Authorities have key roles too. Particularly in regions where there are higher incidence of healthcare infections.

It is important to remember that key legislation in The Health Act 2006 places a mandatory requirement on Primary, Acute, Mental Health and Ambulance Trusts to protect everyone from the risks of healthcare associated infections.

There must be a zero tolerance policy to avoidable healthcare infections. This will only be possible when systems are in place for a safe environment, such as facilities for cleaning hands are at every point of patient care, and when all healthcare workers understand the danger of unclean hands and equipment, and when chief executives support and help sustain a zero tolerance culture wholeheartedly.

The aspiration must be one of zero tolerance to avoidable infections, and there needs to be recognition that the postcode lottery that currently exists makes a significant contribution to health inequality – something the Government must aim to address.

WHAT DO WE NEED THE GOVERNMENT TO PLEDGE?

The target to reduce MRSA by half the 2004 level was we believe long overdue, and at the time thought to be unachievable by many NHS Trusts. MRSA Action UK has always believed it was achievable and that this could be greatly improved upon. Many NHS Trusts have worked hard with strong leadership and support from Strategic Health Authorities; they made great strides, and saved lives by preventing avoidable healthcare infections.

We wish the Government to invest and to build on the success and great achievements of those NHS Trusts and to continue this focus by pledging to

- empower all healthcare providers to adopt a zero tolerance approach to avoidable healthcare infections across the healthcare economy through investment in resources and technologies
- publish the mandatory collection of data on surgical site infections in this financial year, and introduce a target to reduce these, with year on year reductions in each clinical setting
- publish MRSA bacteraemias, *Clostridium difficile*, surgical site, urinary and catheter infections on a hospital basis to inform patient choice
- improve performance reporting, providing clarity on what is being done to address NHS Trusts who are not reducing healthcare associated infections as quickly as they should
- introduce legislation and regulation for recording healthcare associated infections on death certificates in accordance with Office of National Statistics guidelines
- introduce a compensation scheme for patients when things have gone wrong as a consequence of contracting avoidable healthcare infections, giving access to legal aid
- invest in research into the lasting effects of healthcare associated infections on survivors, and improve access to support services and benefits for sufferers
- work collaboratively with the EU to identify strategies for tackling the problem of antimicrobial resistance across the wider healthcare economy, in care homes and in the community
- introduce education and advertising campaigns on the importance of hand hygiene and the need to be judicious in the use of antibiotics
- fully implement the Search, Isolate and Destroy strategy, now being effectively used in Northern Europe

