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DEBATE PACK

Number CDP 2016-0004, 7 January 2016

Hand hygiene in the NHS

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Westminster Hall debate, Wednesday 13 January 2016,4.30pm

This debate was initiated by Nigel Mills MP

Contents

1. Background and rates of infection

According to the National Institute for Health and Care Excellence (NICE):

> Around 300,000 people get an infection while being cared for within the NHS in England each year. One in 16 people being treated on the NHS picks up an infection. As a result, more NHS resources are consumed and the affected patients are at increased risk.[1]
>
> Effective hand decontamination, even after wearing gloves, results in significant reductions in the carriage of potential pathogens on the hands and decreases the incidence of preventable healthcare-associated infections, leading in turn to a reduction in morbidity and mortality. Hand decontamination is considered to have a high impact on outcomes that are important to patients. Although hand hygiene has improved over recent years, remaining misconceptions about this standard principle of infection control are reported and good practice is still not universal.[2]

1.1 Rates of MRSA, MSSA and C Difficile

Data on meticillin resistant Staphylococcus aureus (MRSA) bacteraemia, meticillin susceptible Staphylococcus aureus (MSSA) bacteraemia and Clostridium Difficile (C Difficile) are routinely collected. The table below shows a brief time series of rates of infections apportioned to NHS trusts in England.

Since quarter 2 of 2012 there has been a 27% decrease in the rate of total MRSA bacteraemia reports when compared to the current quarter (quarter 3 2015) – down from 1.1 to 0.8 reports per 100,000 bed days. This is part of an overall decreasing trend beginning from April 2007. However, the rates of Trust assigned MRSA bacteraemia reports in the current quarter have increased by 14.0% (when compared to the same quarter in the previous year (0.7 to 0.8 per 100,000 bed-days).

MSSA rates have also increased when comparing quarter 3 of 2015 with quarter 3 of 2014 – up to 8.2 per 100,000 bed days from 7.9.

C. Difficile rates for quarter 3 of 2015 were the same as in the third quarter of 2014, however rates have fallen since 2012.

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[1] Infection prevention and control, NICE quality standard [QS61], April 2014 Introduction

[2] As above Quality statement 3: Hand decontamination,.

Hospital trust apportioned reports of infection, England

	MRSA		MSSA		C Difficile	
	Reports	Reports per 100,000 bed days	Reports	Reports per 100,000 bed days	Reports	Reports per 100,000 bed days
Q2-2012	94	1.1	711	8.3	1,517	17.7
Q3-2012	96	1.1	648	7.6	1,433	16.9
Q4-2012	92	1.1	663	77.7	1,527	17.7
Q1-2013	116	1.3	678	7.7	1,503	17.1
Q2-2013	96	1.1	711	8.2	1,347	15.6
Q3-2013	82	1.0	700	8.3	1,278	15.2
Q4-2013	98	1.1	596	6.9	1,249	14.5
Q1-2014	88	1.0	689	7.7	1,160	13.4
Q2-2014	67	0.8	682	7.9	1,197	13.9
Q3-2014	62	0.7	674	7.9	1,353	15.8
Q4-2014	75	0.9	728	8.3	1,306	14.9
Q1-2015	81	0.9	715	8.1	1,363	15.4
Q2-2015	77	0.9	680	7.9	1,319	15.3
Q3-2015	82	0.8	702	8.2	1,355	15.8

Source:
Public Health England Quarterly Epidemiological Commentary: MRSA, MSSA and C Difficile

2. Press articles

British Medical Journal, 28 July 2015

Improving hand hygiene in hospitals—more is better

Guardian, 17 April 2014

One in 16 patients in NHS hospitals picks up infection, warns watchdog

National Institute for Health and Care Excellence describes the rate of infections in hospitals as 'unacceptably high'

Nursing Times, October 10, 2013

Improving adherence to hand hygiene practice

Nursing Times, September 23, 2013

Why is hand hygiene compliance low in some areas?

3. Press releases

NICE

NHS must renew hygiene efforts to tackle "unacceptable and avoidable" infection rates

17 April 2014

Healthcare professionals should wash their hands before and after seeing every patient to help prevent the spread of infections such as MRSA and C difficile in the NHS.

Around 300,000 people get an infection while being cared for within the NHS in England each year. One in 16 people being treated on the NHS picks up an infection. As a result, more NHS resources are consumed and the affected patients are at increased risk.

In 2007, MRSA - or methicillin-resistant Staphylococcus aureus - infections and *C difficile* infections were recorded as the underlying cause of, or a contributory factor in,approximately 9000 deaths in hospital and primary care in England.

This **latest NICE quality standard** contains six statements designed to reduce infection rates, including a statement recommending that patients should be looked after by healthcare workers who always clean their hands thoroughly, both immediately before and immediately after contact or care.

The quality standard also aims to tackle the growing threat of antibiotic resistance by recommending that antibiotics be prescribed only in accordance with local antibiotic formularies - as part of a system to stem resistance of infections to antibiotics.

Antibiotics should not be offered to patients for self-limiting mild infections such as colds and most coughs, sinusitis, earache and sore throats.

Healthcare workers should minimise the risk of infection to people who need a urinary catheter or a vascular access device by following procedures to make sure they are inserted, looked after and removed correctly and safely.

These procedures include cleaning hands, assessing the need for a catheter, using a lubricant when inserting a catheter, using sterile procedures when inserting a vascular access device, emptying the catheter drainage bag when necessary, and removing catheters and vascular access devices as soon as they are no longer needed.

Professor Gillian Leng, Deputy Chief Executive and Director of Health and Social Care at NICE said: "It is unacceptable that infection rates are still so high within the NHS. Infections are a costly and avoidable

burden. They hinder a patient's recovery, can make underlying conditions worse, and reduce quality of life.

"Although there have been major improvements within the NHS in infection control, particularly in relation to *C difficile* and MRSA bloodstream infections in the last few years, healthcare associated infections are still a very real threat to patients, their families and carers and staff. This quality standard gives primary, community and secondary care services the most up-to-date advice on the best ways to minimise the risks of infections."

Carol Pellowe, Senior lecturer at Guy's & St Thomas' NHS Foundation Trust and a member of the committee which developed the standards, said: "This quality standard will promote best practice in infection prevention and control and by providing key areas for action, encourage organisations to sustain their efforts in ensuring patient safety."

Gavin Maxwell, a lay member of the committee which developed the standards, added: "This quality standard will help to combat and control the spread of infection, both within health related facilities and across the population at large. As a lay member of the advisory committee, I particularly welcome and support the quality statement relating to responsible prescribing of antibiotics. It will bring substantial benefits."

Royal Society for Public Health

Public should not wash their hands of basic hand hygiene

17 April 2014

The latest NICE quality standard on Infection prevention and control has been published alongside disturbing news that an estimated 300,000 patients develop a healthcare associated infection (HAI) each year. Infections and viruses are not only a major public health issue, but are also a significant burden in terms of resources required to control outbreaks and provide care.

Shirley Cramer CBE, Chief Executive of the RSPH welcomed the standard with its focus on hand washing, "Patients have the right to good quality care, but it is alarming that the very place you would expect public health to be a high priority remains a breeding ground for life threatening infections. We must continue to promote the message that washing hands is the most cost-effective intervention for controlling diseases and ensure that healthcare workers in particular understand the consequences of not doing so.

One of the simplest ways of reducing transmission of HAI is basic hand hygiene, not just for the health workforce, but the public at large. Our research shows that the public is still not engaging in the basic act of handwashing – this should be instilled at a young age."

According to Dr Lisa Ackerley, Professorial Fellow of RSPH, "the majority of the public know about good handwashing practices, yet studies have

shown that 1 in 5 do not wash their hands after using the toilet and a survey of caterers show that over one third said that they do not wash their hands after going to the toilet (FSA 2002). Dirty hands can transmit bacteria and viruses."

One of the major barriers is an assumption by people that they don't carry any diseases, but on average hands can carry at least 3,000 different bacteria. The RSPH is continuing to promote the message that washing hands is the most cost-effective intervention for controlling diseases and ensuring healthcare workers in particular understand the consequences of not practicing good hand hygiene.

The charity is supporting a range of initiatives aimed at promoting the benefits of handwashing at all stages of the life course and across different settings including food preparation and handling. This includes supporting a current global campaign aimed at changing handwashing behaviours. Employing good hand hygiene has the potential to reduce the risk of diarrhoea by upto 47 per cent and save a million lives worldwide.

RSPH and IHM are committed to raising public awareness and supporting the health workforce in taking hand washing seriously.

World Health Organisation (WHO)

Good hand hygiene by health workers protects patients from drug resistant infections

2 May 2014

On Hand Hygiene Day (5 May), WHO urges health workers to practice good hand hygiene when caring for patients, to protect them from contracting infections in health facilities. Initial results from a new WHO global survey confirm that these infections are often resistant to the antibiotics used to treat them.

Healthcare-associated infections usually occur when germs are transferred by health-care providers' hands touching the patient. Of every 100 hospitalized patients, at least 7 in high-income and 10 in low-/middle-income countries will acquire a healthcare-associated infection. Among critically ill and vulnerable patients in intensive care units, that figure rises to around 30 per 100 . Every year, hundreds of millions of patients around the world are affected by healthcare-associated infections, a high proportion of which is caused by germs that are resistant to antimicrobial drugs.

When patients are infected with germs that do not respond well to antibiotics, they generally have worse clinical outcomes, cost more to treat and are more likely to die than other patients.

Antimicrobial resistance and good hand hygiene

Earlier this week, WHO issued a major global report on antimicrobial resistance documenting high rates of resistance in bacteria that cause common infections (e.g. urinary tract infection, surgical site infections, pneumonia and bloodstream infections) in all regions of the world.

The initial results of the global survey confirm that resistance is very frequent in bacteria isolated in health-care facilities; for instance, for a devastating bug called Methicillin-resistant *Staphylococcus aureus* (MRSA), it is as high as 44%, 40% and 38% on average in Latin America, West African countries, and Europe respectively.

"There is clear scientific evidence that good hand hygiene by health workers reduces healthcare-associated infections caused by resistant germs, in particular by MRSA," says Professor Benedetta Allegranzi, technical lead of the WHO Clean Care is Safer Care programme and of the activities planned for Hand Hygiene Day.

5 key moments

Health workers can play a vital role to protect patients from infections that are difficult to treat by performing hand hygiene at 5 key moments, preferably by using an alcohol-based rub or by hand washing with soap and water if hands are visibly dirty.

The '5 Moments' for hand hygiene are:

- before touching a patient.
- before clean and aseptic procedures (e.g. Inserting devices such as catheters).
- after contact with body fluids.
- after touching a patient.
- after touching patient surroundings.

The use of alcohol-based hand rub products is a key factor to achieve improvement because they can be promptly used at the point of care when hand hygiene is needed to ensure patient safety and they have higher antimicrobial effect than soap and water.

"Although the development of new antibiotics is vital to provide new treatment options, strengthening hand hygiene and other infection control best practices has the potential to stop antimicrobial resistance. Preventing the transmission and spread of the germs, avoids infections and the related treatment constraints and patient suffering," says Dr. Edward Kelley, Director, Service Delivery and Safety which hosts the Clean Care is Safer Care programme.

For this year's "SAVE LIVES: Clean Your Hands" campaign, the Call to Action is "No action today; no cure tomorrow – make sure the WHO '5 Moments' are part of protecting your patients from resistant germs." Under this year's campaign, more than 1100 health facilities have registered, committing to practice good hand hygiene, joining more than 16 000 health facilities in 168 countries that have committed in previous years.

"This continuous increase of participation shows that hand hygiene efforts continue to be prioritized and sustained worldwide, especially when combined with other important goals such as combating antimicrobial resistance," says Professor Didier Pittet, Director of the

WHO Collaborating Centre on Patient Safety (Infection Control) at the University of Geneva Hospitals.

Through the "SAVE LIVES: Clean Your Hands" campaign, WHO will continue to work with countries to highlight the issue of antimicrobial resistance and to promote the role that hand hygiene can play in preventing the spread of resistant germs. Final results of the surveys mentioned will be updated as more data is processed. This will allow reacting with further actions in the field of infection prevention and control, surveillance, antibiotic use optimization, and the prevention of surgical site infections.

4. Parliamentary questions

Hospitals: Hygiene

Asked by: Mills, Nigel

To ask the Secretary of State for Health, if he will review the adequacy of his Department's current guidance to NHS trusts on how to monitor hand hygiene levels;

Hospitals: Hygiene

To ask the Secretary of State for Health, what recent assessment he has made of levels of hand hygiene compliance in hospital Trusts.

Answering member: Dr Daniel Poulter

Auditing of hand hygiene compliance is a local responsibility, and the Department does not collect this information centrally.

The Health and Social Care Act 2008 Code of Practice on the prevention and control of infections and related guidance sets 10 compliance criteria to manage healthcare associated infections. This includes one covering infection prevention and control which refers to hand hygiene and recommends that providers undertake hand hygiene audits.

The hand hygiene provisions appear to be operating satisfactorily and it is therefore not proposed that provisions relating to guidance on hand hygiene are changed as part of the revisions to the Code of Practice, which is currently out for consultation.

Feb 2015 | Written questions | 222412, 221964

Hospitals: Infectious Diseases

Asked by: Mills, Nigel

To ask the Secretary of State for Health, what steps he is taking to incentivise NHS trusts to reduce levels of healthcare-associated infections.

Answering member: Dr Daniel Poulter

The NHS Standard Contract is a key enabler for commissioners to secure improvements in the quality of services for patients and to hold providers of National Health Service funded care to account.

Each provider is required to have a healthcare associated infections reduction plan for each contract year (and to comply with its obligations under that plan) that must reflect local and national priorities relating to healthcare associated infections, including antimicrobial resistance. Under the NHS Standard Contract, commissioners may impose financial sanctions where providers fail to achieve healthcare associated infections reduction targets. These are set out at:

http://www.england.nhs.uk/nhs-standard-contract/

These robust measures have played their part in reducing annual Meticillin-resistant staphylococcus aureus bloodstream infections by 59% and Clostridium difficile infections by 45% since May 2010.

02 Feb 2015 | Written questions | 221942

Hospitals: Infectious Diseases

Asked by: Mills, Nigel

To ask the Secretary of State for Health, if he will make an estimate of the (a) average and (b) total cost to the NHS of healthcare-associated infections.

Answering member: Dr Daniel Poulter

The most recent reliable estimate of the cost of healthcare associated infections is derived from the Plowman Report, which estimated the cost to be £1 billion per year.

Although there is no systematic analysis of average costs of all healthcare associated infections, the average cost of Meticillin-resistant staphylococcus aureus bacteraemia is estimated to be £7,000 per case and Clostridium difficile infection is estimated to be £10,000 per case.

02 Feb 2015 | Written questions | 221940

5. Further reading

Public Health England, 31 July 2014

Healthcare associated infections (HCAI): guidance, data and analysis

NICE

Infection prevention and control

NICE quality standard [QS61] Published date: April 2014

WHO

Health care-associated infections

FACT SHEET

Journal of Hospital Infection, January 2014

National Evidence-Based Guidelines for Preventing Healthcare-Associated Infections in NHS Hospitals in England

Volume 86, Supplement 1, Pages S1–S70

2.3. Hand Hygiene

Public Accounts Committee

Reducing Healthcare Associated Infection in Hospitals in England

Published on 10 November 2009

Fifty–second Report of Session 2008–09 HC 812

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CDP 2016-0004
7 January 2016