

Practical Management of Healthcare Associated Infections: every day issues



Tackling healthcare associated infections outside of hospital – Learning Workshop 3

Wednesday 22nd April 2009

Breakout Session 9.30-16.55

Forest Pines, Lincs

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Health Protection Agency (HPA)

Regional Microbiology Network (RMN)

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Tackling Healthcare Associated Infections Outside of Hospitals

Learning Workshop 3

Breakout session

Practical Approaches to HCAI control

Dr Bharat Patel, Consultant Medical Microbiologist, Regional Microbiology Network, London, Health Protection Agency

This interactive session will provide an understanding of the management of residents with urinary catheters, PEG feeding, antibiotic prescribing and *Clostridium difficile* infections.

Using clinical scenarios and case studies, the session will cover the concepts of good practice.

Basic information on the use of antimicrobial treatment regimes will be provided for carers and prescribers. Join us and participate in this informative session.

Case one Clinical scenario



- 80 yr old retired postman
 - Nocturia, frequency, hesitancy
 - Previous recurrent urinary tract infections
 - Specialist referral
 - Enlarged prostate
 - While awaiting surgery developed acute retention
 - Catheterised
 - Returned to Nursing Home
- How do you manage this patient?

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- While awaiting surgery developed acute retention
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- Returned to Nursing Home
- How do you manage this patient?
- District Nurse came to visit – ordered a urine sample to be sent to the laboratory
- Result *Escherichia coli*
- What do you do?

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- What do you do when the patient develops a temperature?

Urinary catheter management



Why patients have them

- Urinary incontinence
- Prostatic problems
 - Short term
 - Long term



Prevention

- role of fluids rcn npsa
- when antibiotics
- regular change
- ESBL (Extended spectrum beta lactamase)
- MRSA (meticillin resistant staphylococcus aureus)
- Pseudomonas
- non touch technique
- Biofilms
- Emptying the bag

High Impact Intervention No 6

Urinary catheter care bundle



Insertion actions

Catheter needed?

- Avoid if possible.

Clean the urethral meatus

- Prior to insertion of catheter.
- With sterile normal saline.
- Use sterile lubricant.

Sterile, closed drainage system

- Choice of urinary catheters should be based on individual patient assessment and local policy.

Hand hygiene

- Decontaminate hands before and after each patient contact.
- Use correct hand hygiene procedure.

Aseptic technique

- Gown, gloves and drapes as indicated should be used for the insertion of invasive devices.

Personal protective equipment

- Gloves are single-use items and should be removed and discarded immediately after the care activity.
- Eye/face protection is indicated if there is a risk of splashing with blood or body fluids.

High Impact Intervention No 6

Urinary catheter care bundle



Ongoing care

Hand hygiene

- Decontaminate hands before and after each patient contact.
- Use correct hand hygiene procedure.

Catheter hygiene

- Clean catheter site regularly as per local policy.

Sampling

- Perform aseptically via the catheter port.

Drainage bag position

- Above floor but below bladder level to prevent reflux or contamination.

Catheter manipulation

- Examination gloves should be worn to manipulate a catheter, and manipulation should be preceded and followed by hand decontamination.

Catheter needed?

- Remove as soon as possible.

Case two Clinical Scenario



- 75 yr old retired shop keeper
 - Diabetes
 - High blood pressure
 - Dementia
 - Sudden onset of confusion
 - Left sided weakness
 - Suffered a stroke
 - Admitted to hospital
 - Colonised with MRSA
 - Unable to swallow
 - PEG inserted
- How do you manage the PEG?

Case two Clinical Scenario



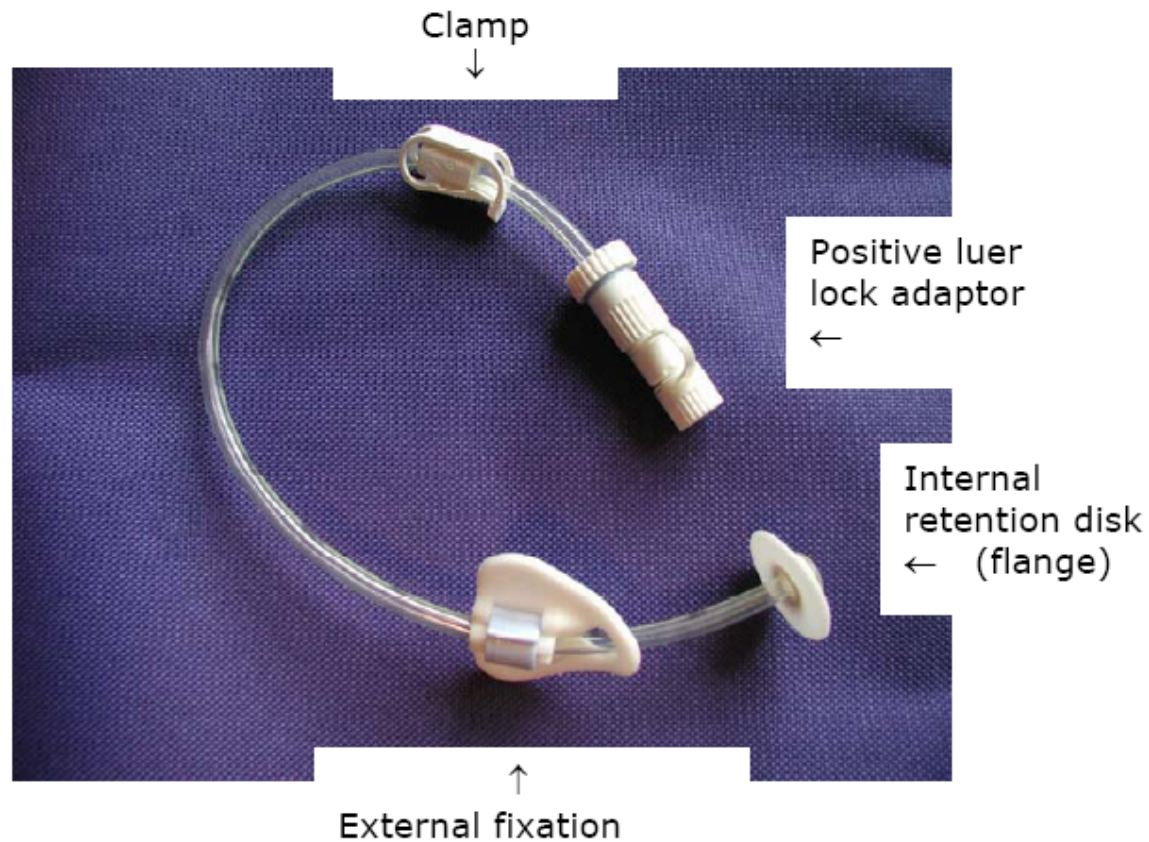
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- How do you manage the PEG?
 - One morning it looks red?
 - What do you do?

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- PEG inserted
- How do you manage the PEG?
- One morning it looks red?
- What do you do?
- 4 days later the patient develops a temperature?
- What do you do?

Percutaneous endoscopic gastrostomy ('PEG') tubes



Percutaneous Endoscopic Gastrostomy feeding tube management



□ Why patient have them

- Feeding
- Dysphagia
- CVA
- Cancer
-

Acute stroke (usually the most common indication for PEG and often vertebrbasilar strokes)

Disorders of swallowing

Multiple sclerosis

Neurosurgical disease

Parkinson's disease

Brain tumours

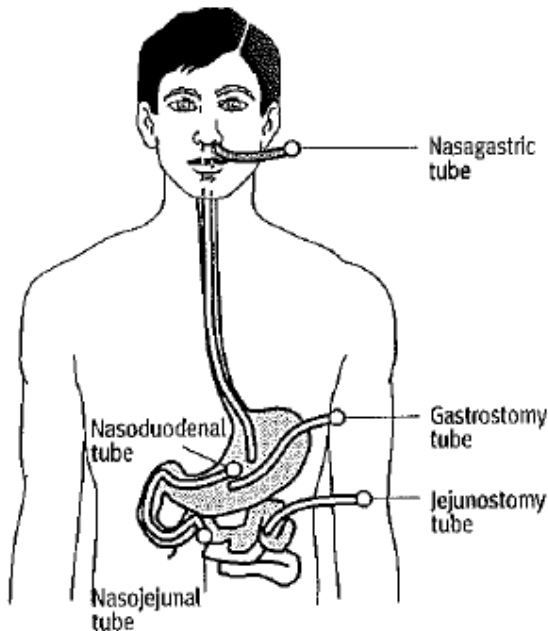
HIV encephalopathy

Neonatal encephalopathy

Amyotrophic lateral sclerosis

Dementia in which use is common but controversial

Head injury patients.



Complications



Most commonest

Site infections (common but rarely serious. There have been studies to determine whether prophylactic antibiotics prevent such infections.

Major complications

Gastric perforation

Gastrocolic fistula

Internal leakage

Dehiscence

Peritonitis

Aspiration pneumonia

Subcutaneous abscess

**Buried bumper syndrome
(migration of the internal bumper
of the PEG tube into the gastric or
abdominal wall).**

Minor complications include:

Tube problems:

Tube blockages

Tube dislodgements

Tube degradation

External leakage

Unplanned removal.

Norovirus Clinical scenerio



Viral gastroenteritis

What is norovirus?

How does it behave?

Where would you find further information?

Norovirus outbreak



- 75yr old retired secretary
- Resident for 5 years
- Recently had her birthday party 2 days ago
- Develops projectile vomiting and diarrhoea and a slight temperature
- What do you do?

Norovirus outbreak



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- Patient in the next room develops nausea and diarrhoea?
 - What do you do?
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Norovirus outbreak



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 - Develops projectile vomiting and diarrhoea and a slight temperature
 - What do you do?
- Patient in the next room develops nausea and diarrhoea?
 - What do you do?
 - Next day 3 more residents develop vomiting and diarrhoea?
 - Senior assistant vomits in the breakfast room
 - What do you do now?



Journal of Hospital Infection (2000) **45**: 1–10

Article no. jhin.2000.0662, available online at <http://www.idealibrary.com> IDEAL®



**REPORT OF THE PUBLIC HEALTH LABORATORY SERVICE
VIRAL GASTRO ENTERITIS WORKING GROUP**

Management of hospital outbreaks of gastro-enteritis due to small round structured viruses

P. R. Chadwick¹, G. Beards², D. Brown³, E. O. Caul⁴, J. Cheesbrough⁵, I. Clarke⁶,
A. Curry⁷, S. O'Brien⁸, K. Quigley⁹, J. Sellwood¹⁰ and D. Westmoreland¹¹

www.hpa.org.uk norovirus

Antibiotic management



- Who decides?
 - When are they needed?
 - How long to you continue them for?
 -
- Simple UTI 3-5 days
 - Simple chest infection 5 days
 - Question any antibiotic prescription longer than 10 days
 -

Other issues



Residents hand hygiene

Immunisation

Annual Influenza immunisation

Pneumococcal immunisation

Visitors policy

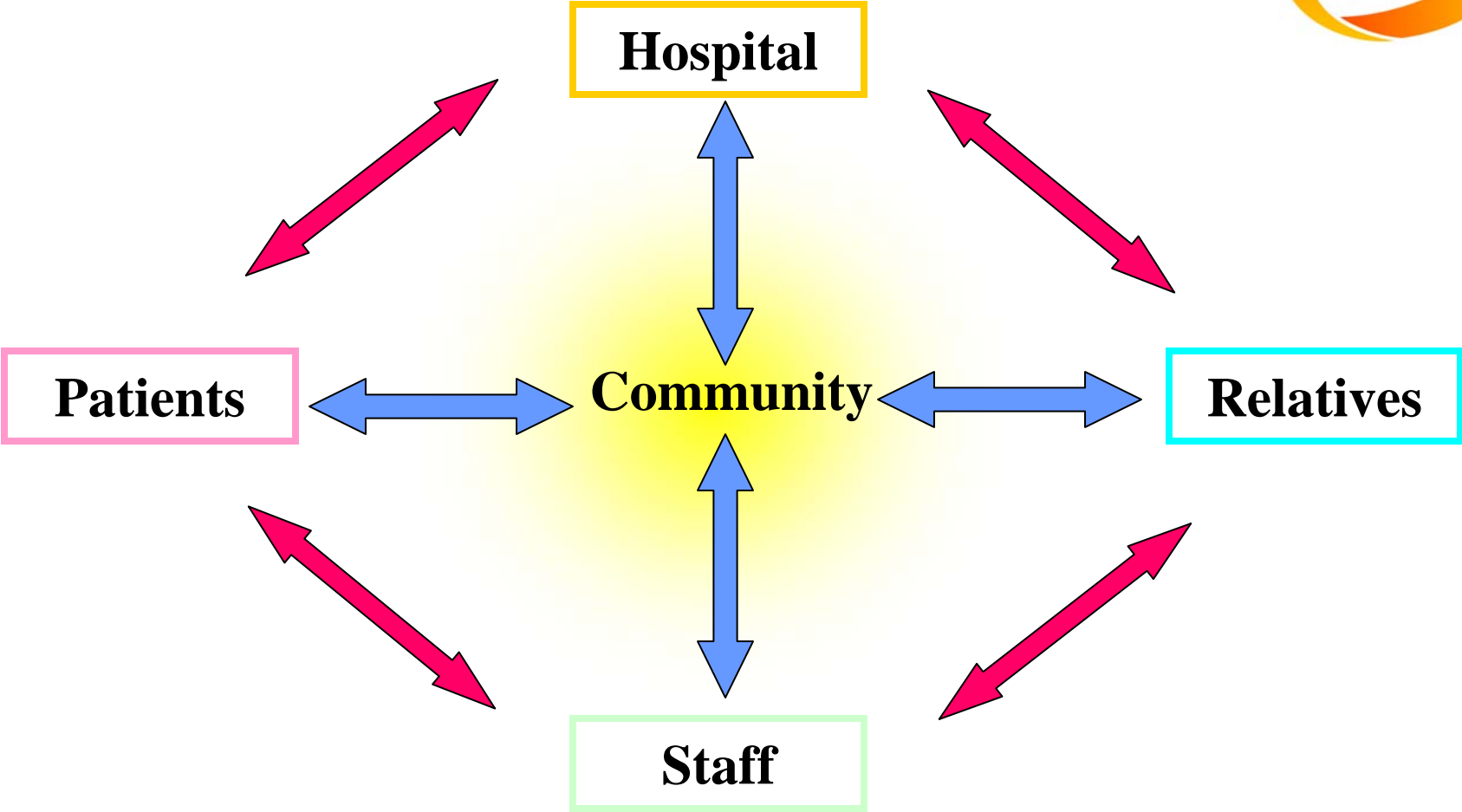
Diarrhoea and vomiting

Recent Influenza

Chickenpox

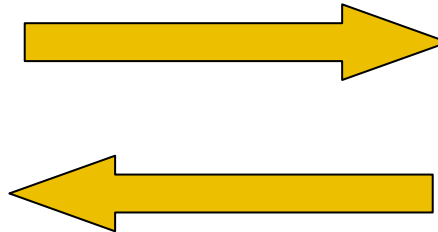
Children visiting

Interaction between community & hospital



Vehicles of transmission

Hospital and nursing home interaction



- Clostridium difficile***
- Norovirus**
- (MRSA)**
- Other alert organisms**

Community



Where is the difference?

Community case - two thirds have had prior contact with hospitals

Already, policy of accepting the elderly in nursing homes and residential homes

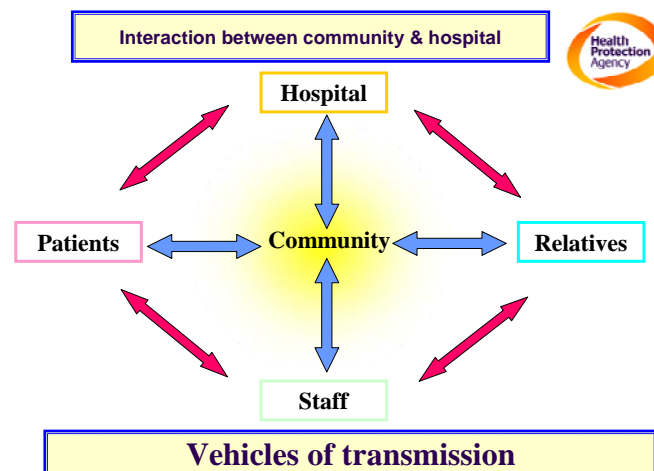
Evidence of colonisation in those around case

Skin contamination of cases

Difficulties of cleanliness around the elderly

There will be accidents

Hygiene must be enhanced

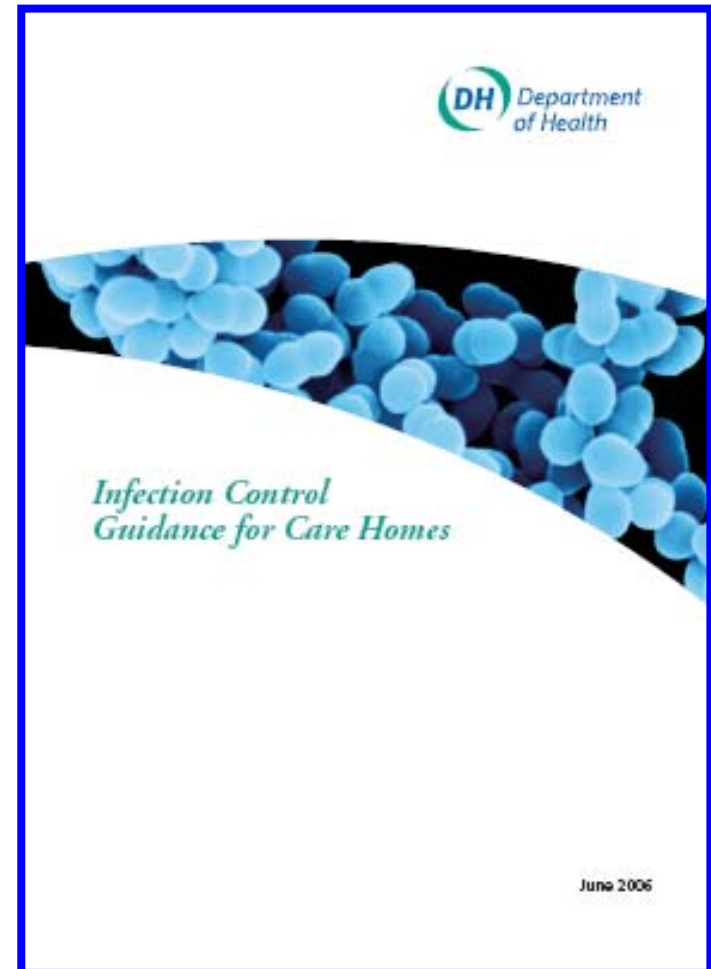


Infection Control Guidance for Care Homes

June 2006



- Organisation and management
- How are infections spread?
- Practical procedures
- Guidelines on the management of infections
- Appendix:
 - Infectious disease/incident surveillance form
 - Notifiable diseases
 - Sharps injury flow chart
 - List of diseases
 - Exclusion from work
 - Colour coding of cleaning equipment
 - Working group on the prevention and control of infection in care homes



Infection control in Care Homes



Introduction to infection control in care homes

This is a series of seven short films. These are designed to provide staff with an introduction to infection control.

These seven short films include:

- ▶ [Preventing Infection](#)
- ▶ [Hand Hygiene](#)
- ▶ [Person Protective Equipment](#)
- ▶ [Prevention of exposure to Blood and Body fluids](#)
- ▶ [Clinical Equipment](#)
- ▶ [General Equipment](#)
- ▶ [Management of Laundry](#)

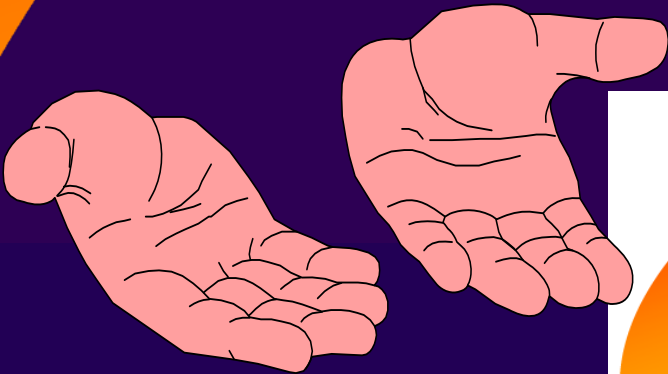
Infection control nurses have provided expert advice throughout filming and production of the training resource. Every effort has been made to ensure that the advice provided is based on the best available evidence while providing advice that can be easily adopted and put into practice. The DVD can be used to supplement existing infection control training programs for care homes. It will also provide practical assistance to help comply with the Department of Health Code of Practice as and when it is issued.

<http://www.hpa.org.uk/webw/HPAweb&Page&HPAwebAutoListName/Page/1229594195568?p=1229594195568>

Thank you for listening

Patient Safety

Community Safety



**PLEASE WASH
YOUR HANDS**

Acknowledgements:

To my colleagues in various NHS hospitals
BMJ Learning
Health Protection Agency website
Department of Health colleagues
DH Website

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HPA
Consultant
Medical
Microbiologist

**22nd
April
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