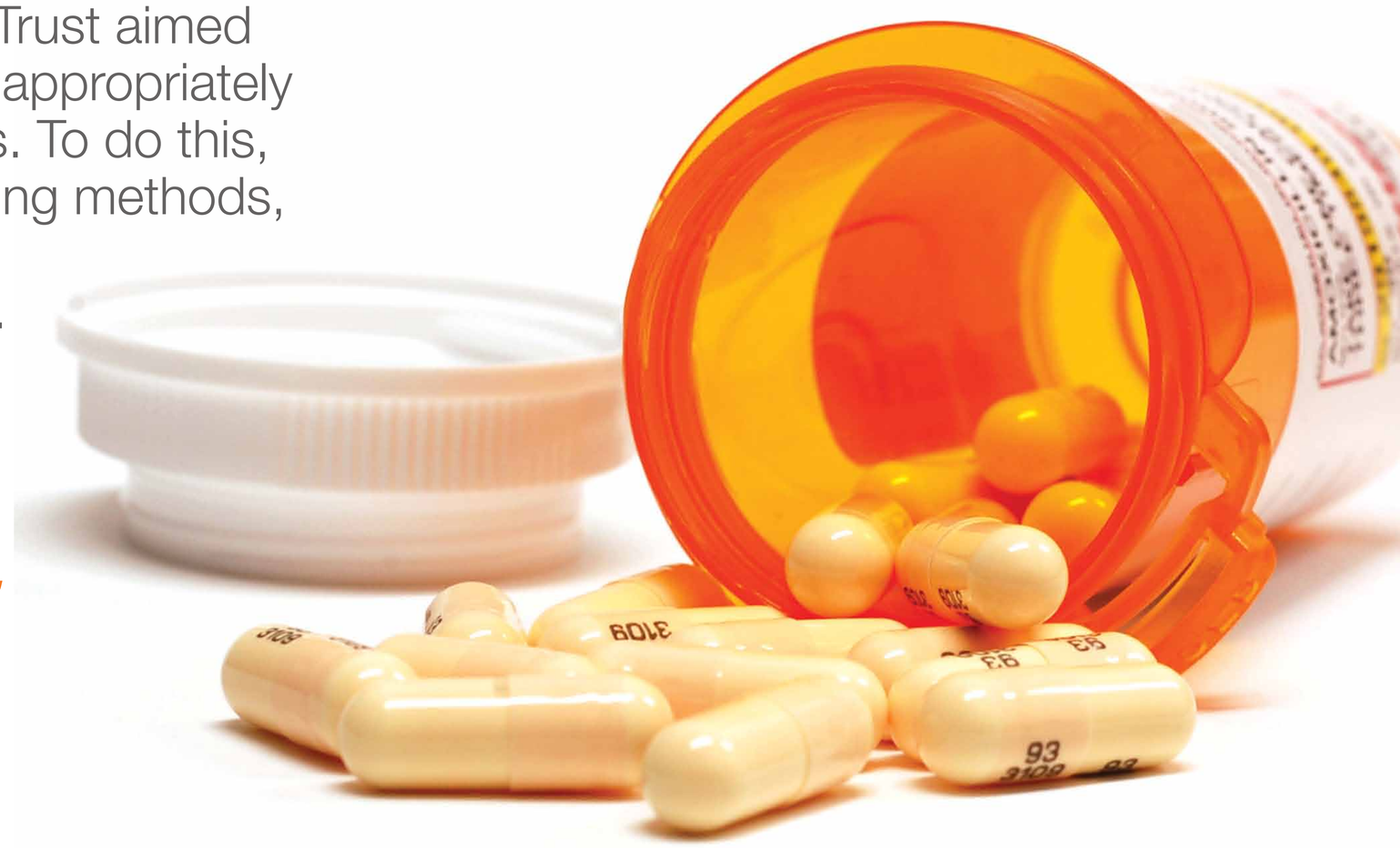
NHS

Reducing the use of unnecessary antibiotics in care homes

NHS North Lancashire Primary Care Trust aimed to reduce the amount of antibiotics inappropriately prescribed in the region's care homes. To do this, it ran an audit to evaluate its prescribing methods, and to reduce excess prescribing of antibiotics in line with NICE guidance.



"Carrying out the audit on a single day provided a useful 'snapshot' of practice."

Anita Watson, Lead Nurse for Infection Prevention & Control, NHS North Lancashire

Antibiotic resistance poses a "catastrophic threat" to health

Nearly a century since their discovery, antibiotics have now led to what experts believe to be one of the biggest threats to public health. Resistance to antibiotics is rising, and is being driven by the excess use and prescribing of the drugs. Earlier this year, Chief Medical Officer Dame Sally Davies warned that the threat to public health could be "catastrophic".

NICE has produced a range of guidance on reducing inappropriate prescribing of antibiotics, and NHS North Lancashire Primary Care Trust used some of these principles to change practice

In 2008, the trust began a joint campaign with the Association of British Pharmaceutical Industries to reduce the incidence of Clostridium difficile infection (CDI) within its community. The campaign identified inappropriate prescribing of antibiotics in care homes as a priority, because unnecessary antibiotics can damage gut flora and make patients more susceptible to CDI.

It consequently carried out an audit of antibiotic usage within care home settings, and used the results to shape a plan of action on how to reduce inappropriate prescribing, and develop a new antibiotic formulary.

Audit reveals areas for improving care

The trust's Infection Prevention and Control team ran a series of analyses to find the number of confirmed cases of infection within the 175 care homes in the region. These analyses showed that care home residents were often prescribed antibiotics on clinical diagnosis alone, with no microbiological analysis or confirmation of infection taking place. This goes against principles set out by NICE in guidance such as its clinical guideline on self-limiting respiratory tract infections, which recommends a no-antibiotic or delayed antibiotic strategy in the first instance.

The Infection Control and Prevention team then used these results, together with results from an earlier pilot trial, to draft an audit questionnaire. The audit questioned respondents on their level of antibiotic usage on one particular day, and so provided a 'snapshot' of practice.

Responses from the questionnaires were analysed and compared with the trust's recently drafted guidance on antibiotics and formulary. They were also used to amend the way the trust communicated how antibiotics are used, and to amend the training and education offered to GPs, primary care providers and care home staff.

Results to shape prescribing protocols

Of the 175 care homes in the region, 126 responded with completed questionnaires, with 90 residents reported as taking antibiotics.

The audit's key findings included:

- chest infections were the most common condition that antibiotics were prescribed for (37% of cases)
- in 31% of cases, antibiotics were prescribed after a telephone consultation, where the patient was not seen by a clinician
- penicillin was the most commonly prescribed antibiotic group (67% of cases)
- cephalosporin was inappropriately prescribed to 17 residents with a high risk infection of Clostridium difficile

The trust took a range of key learning points from these results:

- prescribing protocols will be further reviewed, with emphasis on not prescribing antibiotics unless a clinical diagnosis can be established
- further communication and education about the formulary and best practice for antibiotic prescribing is necessary.
- antibiotic prescribing practices will be compared to see if there is any difference between prescribing to the elderly in care homes, with prescribing to the elderly in their own homes

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