Data Quality

Accuracy
Statistics in this bulletin are based on information systems at NHS Prescription Services, part of the NHS Business Services Authority, on data provided by the commercial company IMS Health and on data provided by the pharmaceutical companies Roche Products Ltd, AstraZeneca, Merck Sharp & Dohme Limited and Pfizer.

For Prescription Services data the data was extracted from the primary care and hospital versions of their ePACT system which allows the NHS IC to extract data via the NHSNet. Data for cost growth charts was taken from the PCA database held by the NHS Information Centre but which is populated from prescription data downloaded from Prescription Services. NHS Prescription Services quality assures the data they provide.

IMS Health sells their data to a range of customers who would not purchase it if they did not have faith in it. However it has known limitations. It is based on a sample of trusts although that sample covers over 99% of the beds in trusts in England. There are known problems when a product is used via an aseptic unit (where a drug is prepared for use by dilution). The data received by IMS Health does not always indicate the physical amount of the drug in a bag prepared for infusion and an estimate has to be made using average doses. Data from some aseptic units does not appear in data submitted to IMS Health. Another known deficiency is when medicines are supplied to patients in their homes using a process known as homecare. Although the service (including the medicines used) is paid for by the trust they are not always recorded in the pharmacy system and so may not appear in the data provided to IMS Health. This means that the figures are likely to be an underestimate of the medicines used.

Product volume data has been supplied by various companies aggregated to a strategic health authority, cancer network and England level. The definition of these regions was agreed with IMS Health as part of this project using IMS “bricks” (based on postal “bricks”). The term “brick” refers to an aggregation of lower level units.

Before aggregation, the data supplied by the companies is mainly based on comprised of direct sales to dispensing NHS services. Where a product is supplied to a third party providing services across several locations (e.g. aseptic units or homecare providers), agreements are in place to receive information on where this product is ultimately used. For AstraZeneca the data was the actual number of patients treated based on returns from trusts as part of a Patient Access Scheme.

Although there may be a delay between direct sales and dispensing of the product, hospitals would not usually hold significant quantities of product in pharmacy. Over a twelve month period direct sales are considered to represent actual usage.

For the section on use of biologics several companies provided estimates or key parameters rather than data. It was not possible to verify these figures and so they were accepted from the companies on trust.
Relevance
This report gives an indication (within the limitations of the methodology and data) of the use of various medicines positively appraised by NICE compared with the expectations of use developed by NICE.

Compatibility and Coherence
The Prescription Services data presented here differs from that presented in the NHS IC publications based on the Prescription Cost Analysis system. This is because the PCA database is based on all prescriptions dispensed in England irrespective of where they were written. The primary care figures given here will match the PCT Prescribing data published by the NHS IC. PCA figures are used for the cost growth charts because PCA data is available over a longer time period.

Timeliness and punctuality.
The timing of this publication is influenced by the agreement between the NHS IC and IMS Health which requires the NHS IC not to publish hospital data until six months after the time period to which it applies.

Accessibility
More detailed data on primary care or prescriptions written in hospital but dispensed in the community may be requested from Prescription Services. Release of hospital data is governed by an agreement between the NHS IC and IMS Health. Any requests for more detailed data should be made to the NHS IC who will release the data provided that it would not be in conflict with the terms of the agreement and would not impose an unacceptable workload.

Performance cost and respondent burden.
For the figures from the Prescription Services, the figures used in this publication are collected as part of the process of reimbursing dispensers for drugs supplied. The publication therefore uses an existing administrative source. The hospital data is not collected by the NHS but by a commercial company who cannot require trusts to provide the data and so any burden is entered into willingly. For data provided by companies no burden was placed on the NHS.

Confidentiality, Transparency and Security.
The standard IC data security and confidentiality policies have been applied in the production of these statistics. The standard data and confidentiality policies have been applied in line with the data sharing agreements signed between the Health and Social Care Information Centre and the pharmaceutical companies contributing data.