

Using evidence to inform healthcare policy and practice: an overview of NICE

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- UK NHS is free, largely, at the point of delivery and all citizens are covered
- Largest single payer publicly funded system in the world
- Annual budget of £100 billion
- It's not perfect; universal coverage with fixed resources involves compromises...but it provides a good level of cover
- Private insurance in the UK approx. 10% and shrinking

The NHS in the late 90s...



- No quality standards
- Lack of guidance for professionals
- Unexplained (and unpopular) variation
- Unaffordable new technologies



1997 - Government white paper

- **‘A new National Institute for Clinical Excellence will be established to give new coherence and prominence to information about clinical and cost-effectiveness.’**
- **‘...membership will be drawn from the health professions, the NHS, academics, health economists and patient interests.’**
- **‘... need to have access to an appropriate range of skills, including economic and managerial expertise as well as specialist input on specific issues.’**



NICE Statutory Instruments – 1999/2005

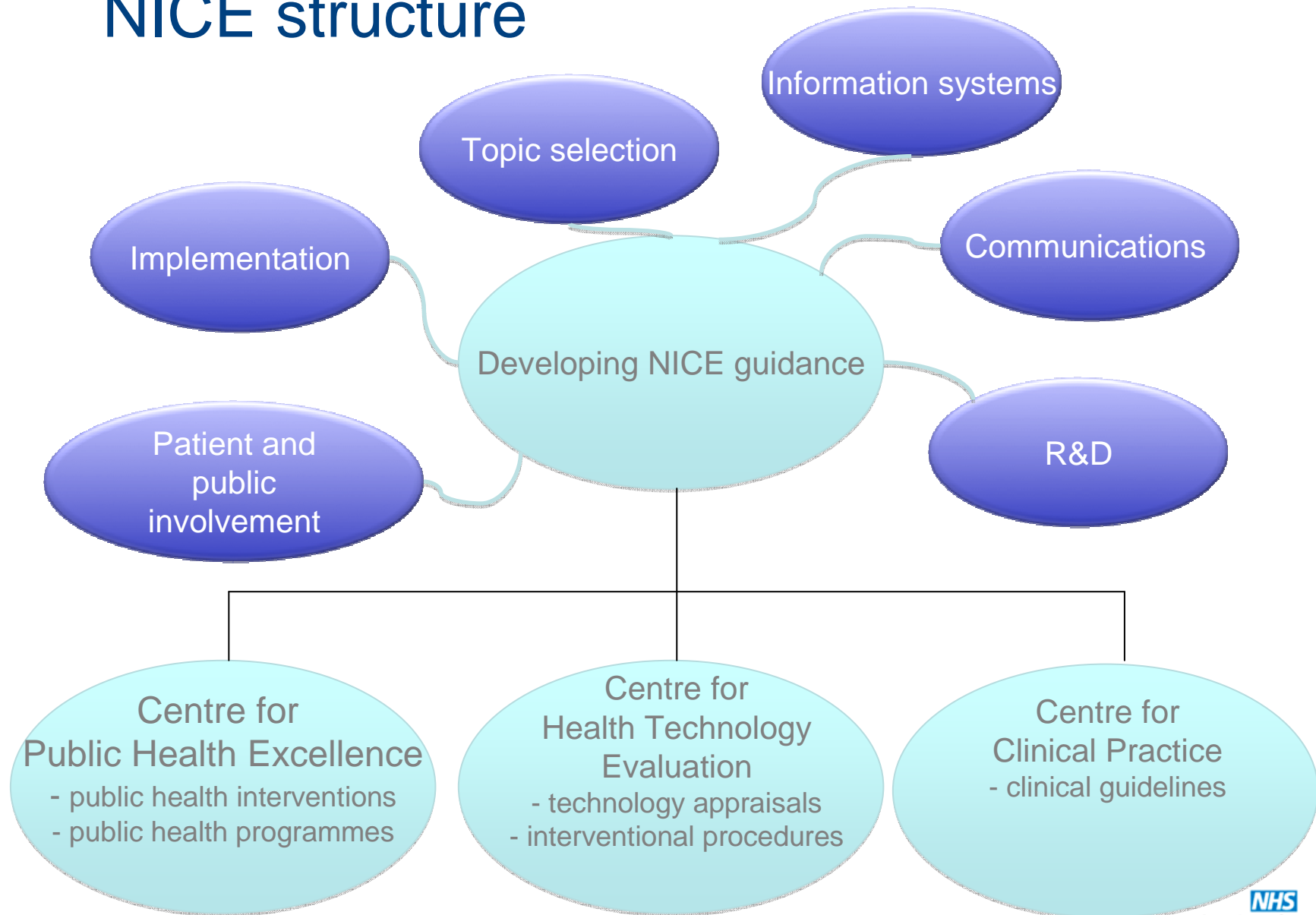
"Subject to and in accordance with such directions as the Secretary of State may give, the Institute shall perform: such functions in connection with the promotion of clinical excellence, and **the effective use of available resources in the health service**"

Article 3 (functions of the Institute) of the principal Order (March 2005)

NICE: who we are

- National Institute for Health and Clinical Excellence - established 1 April 1999
 - Special Health Authority – part of NHS
 - Board appointed by Secretary of State for Health
 - Budget of £35m pa; to reach £100m over next 4 years
 - ~270 staff directly employed in London and Manchester
 - ~2,000 experts –physicians, nurses, health economists, clinical epidemiologists, statisticians, lay people- across the UK engaged in NICE guidance development during the year

NICE structure



Evaluating new treatments to decide reimbursement

- Rational drug use: advice on the optimal use of new medical technologies:
 - Drugs
 - Medical devices
 - Surgical procedures
- Negative list of cost-ineffective drugs and devices
- Completed around 150 topics - over 400 products

Setting quality standards for treating disease

- Clinical guidelines
- Cover whole diseases and conditions – not just individual drugs
- Published around 70 topics – including diabetes, heart disease, depression, infertility and head injuries. Another 40 in development
- Plan to cover the major causes of illness in the UK

Helping people stay healthy – balance new technologies and public health

- Prevention, aiming to improve health and reduce health inequalities
- Exercise, smoking cessation, nutrition, sexual health and substance misuse
- Transport and the built environment
- Advice to the NHS, local and central government and businesses

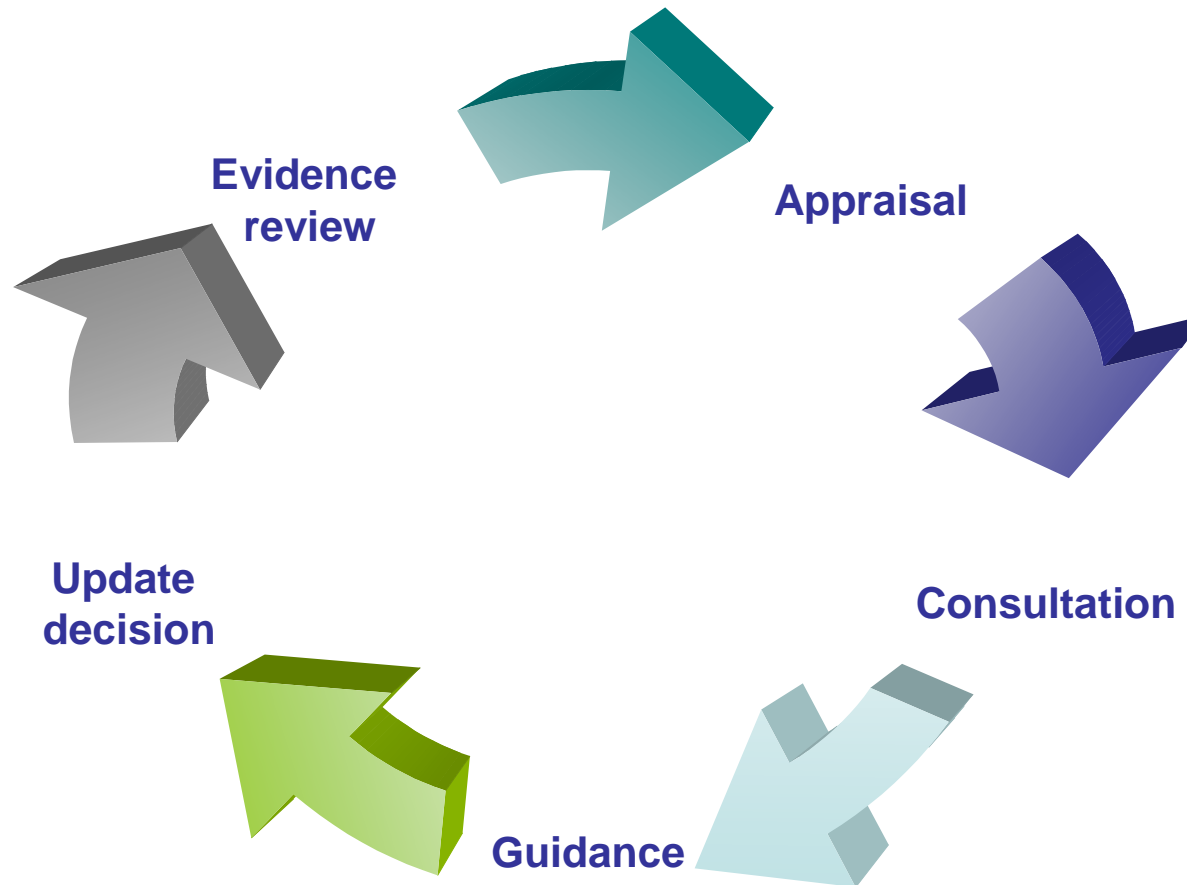
Ensuring safe surgery

- We review new interventional procedures and tell the NHS about their usefulness and safety
- Laser surgery for correcting sight is an example
- We can recommend:
 - Use in clinical studies only
 - Special measures for gaining patient consent
 - Safe for general use

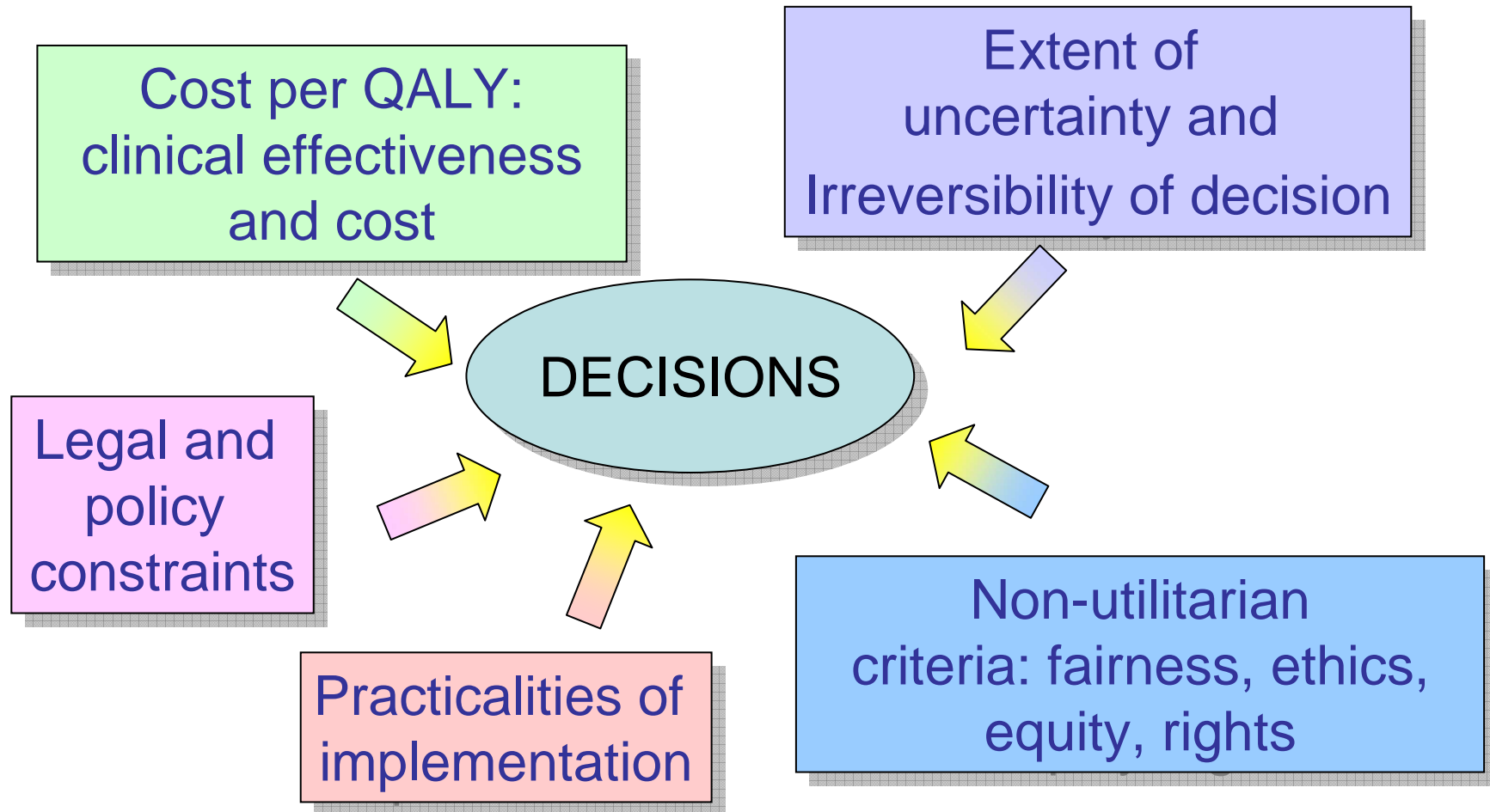
How we work

- Comprehensive evidence base
- Expert input
- Independent advisory committees
- Genuine consultation
- Support for implementation
- Regular review

NICE decision cycle



Cost per QALY: one of many inputs



Are we making a difference?

- Routinely collected national data
- Published research
- Healthcare Commission reports
- Patient surveys
- National audits
- Informal comments



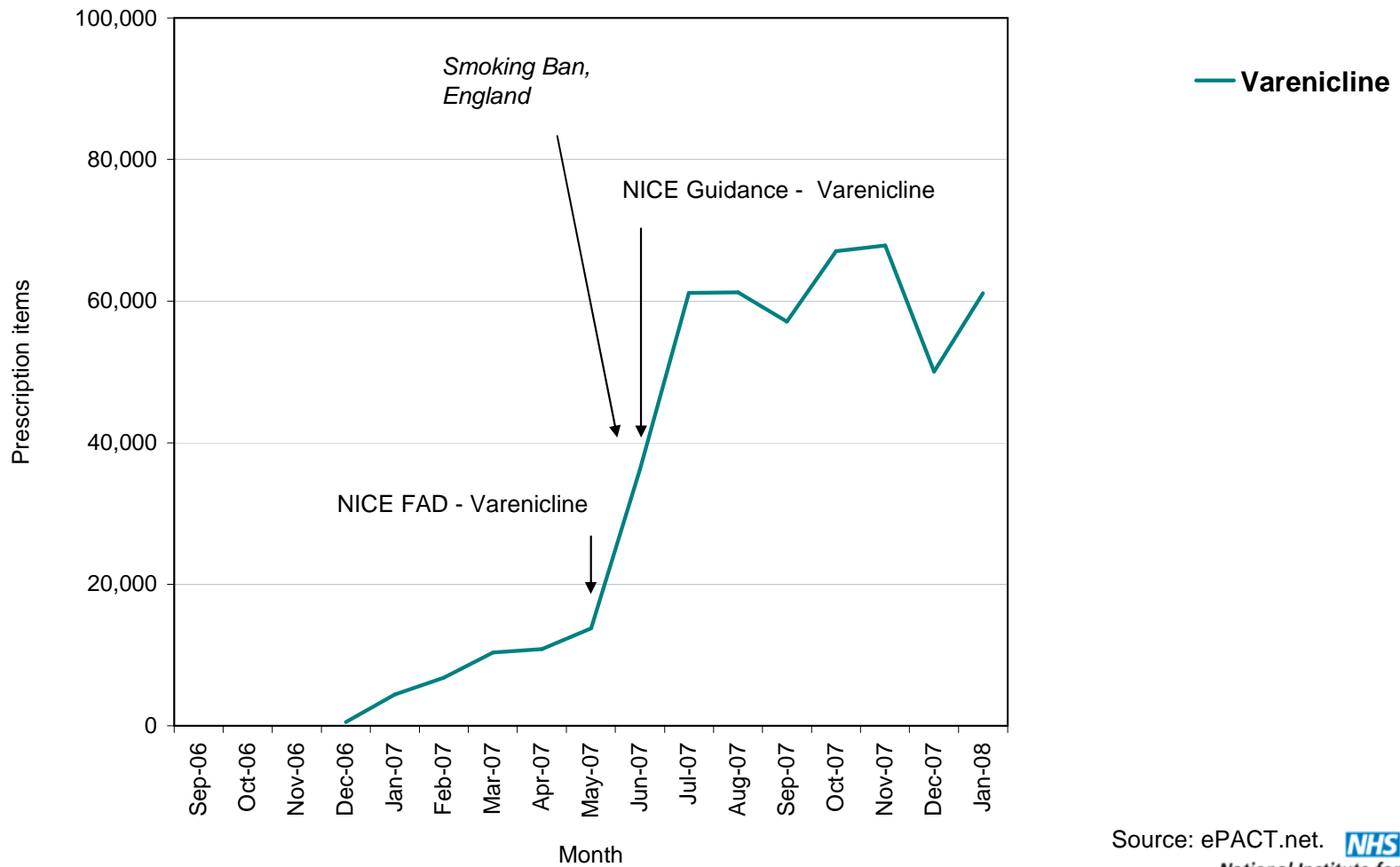
National inspection results – technology appraisals

Self assessment results – NHS Trusts

	2005/06	2006/07	2007/08
Compliant	84.6%	89.3%	95.1%
Insufficient assurance	11%	7.87%	TBC
Not met	4%	2.79%	TBC

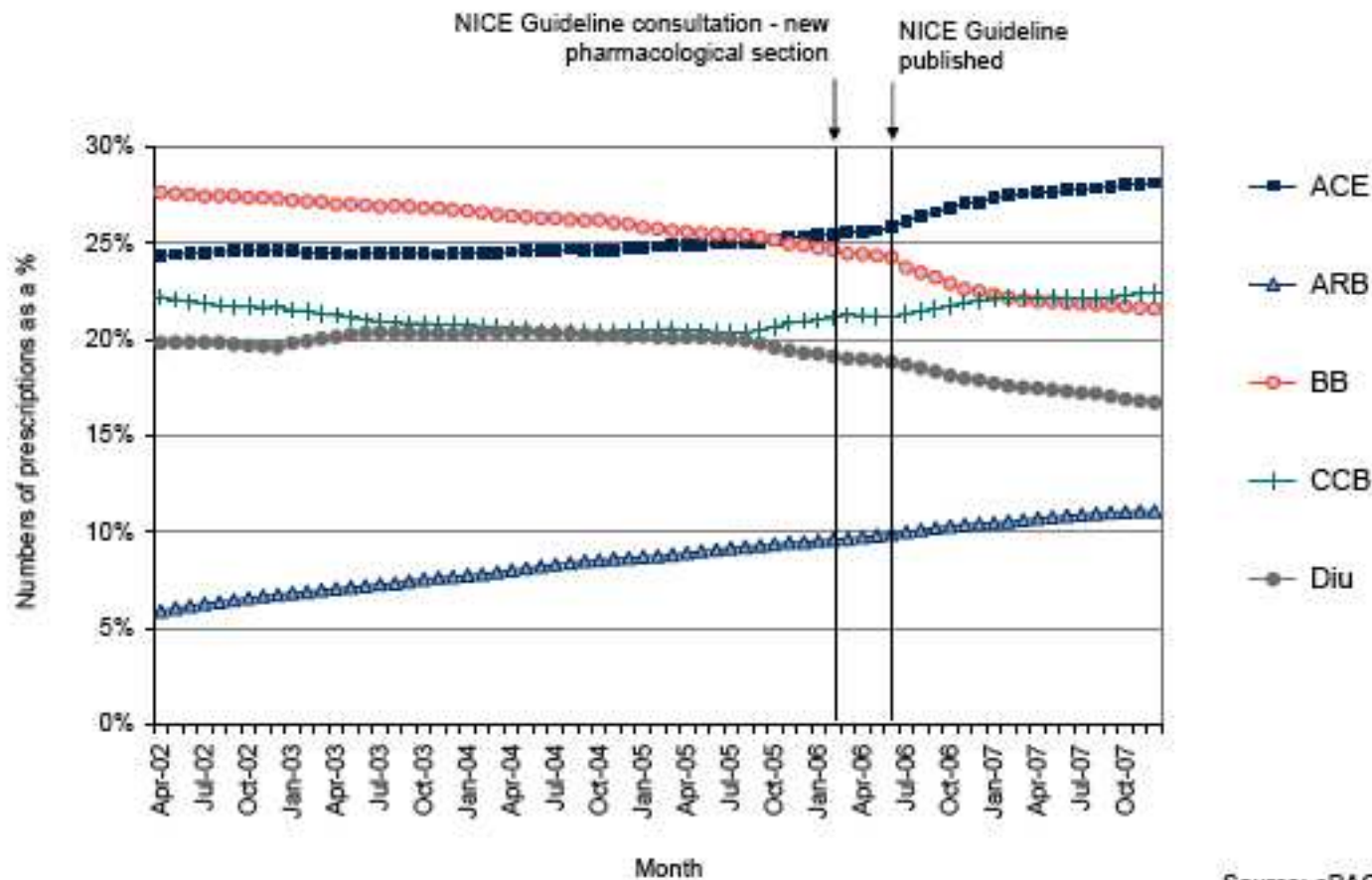
Source: The Healthcare Commission: Annual Health Check

Varenicline for smoking cessation

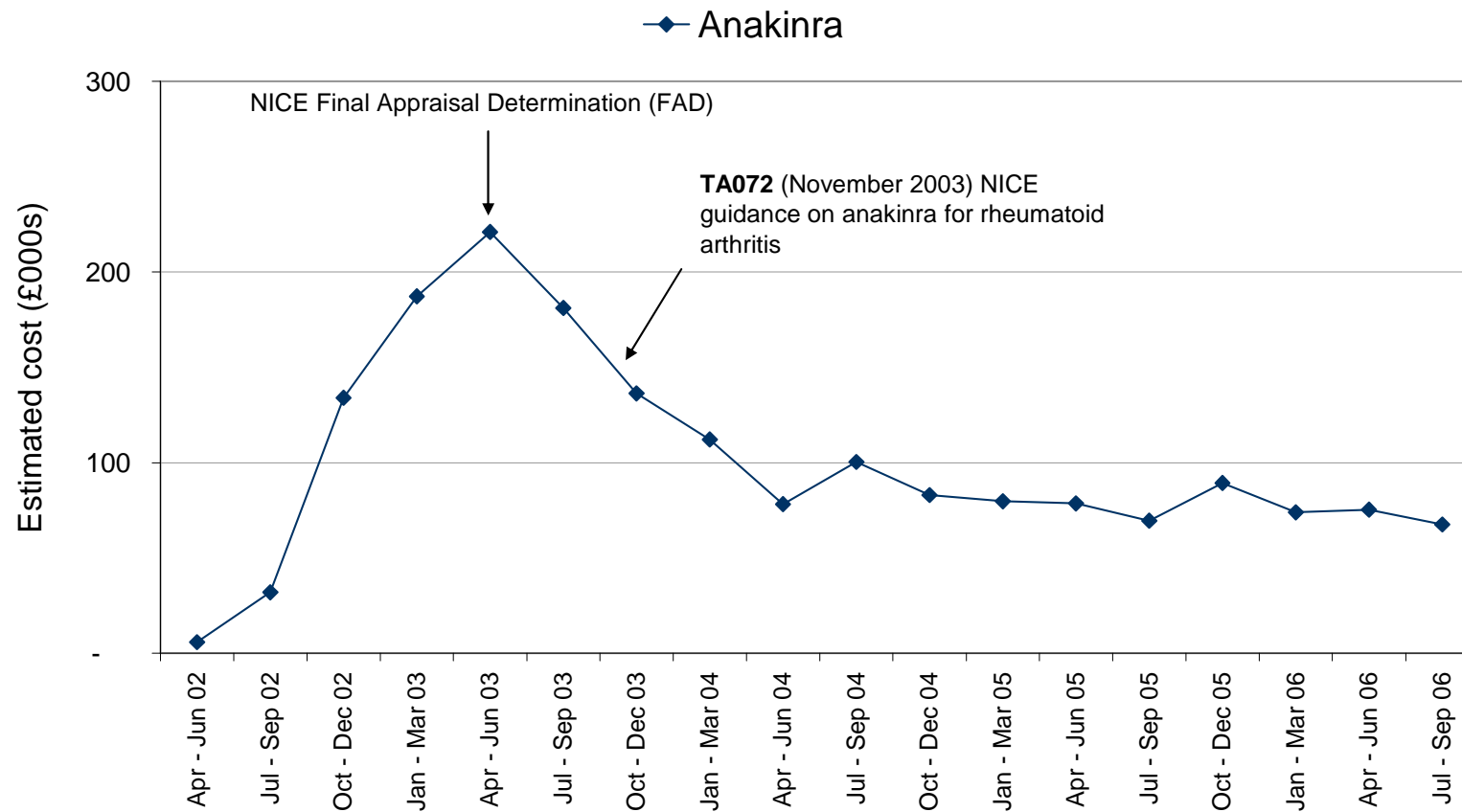


Anti-hypertensives

Chart 2: Monthly trend in drugs used to treat hypertension in primary care in England, total prescription items as a %



Anakinra for rheumatoid arthritis



Source © IMS HEALTH: Hospital Pharmacy Audit

Selected case studies

- Case study 1: Accelerating the uptake of new innovative drugs to fight cancer
- Case study 2: Ensuring good value for money for medical devices: drug eluting vs. bare metal stents
- Case study 3: Encouraging generic substitution – promoting primary prevention: statins for cardiovascular events
- Case study 4: Promoting rational drug use: antibiotics for upper respiratory tract infection

Case study 1: promoting uptake of new cancer drugs

Decision	Number (% of total cancer appraisals)
Yes	34 (54%)
Yes, with restrictions	16 (25%)
No	7 (11%)
In the context of research	6 (10%)
<i>Total</i>	<i>63 (28% of total appraisals)</i>

Comprehensive, timely guidance:

- Dedicated topic selection panel chaired by National Cancer Director
- Review all significant new indications for cancer drugs
- Issue guidance within 8-10 months of referral and within weeks of licensing

Case study 1: promoting uptake of new cancer drugs

- Overall increase in uptake following NICE guidance (median: 47%) and decrease in variation (from 3-8 fold, 2003, to 2-3 fold, 2005)*
 - “A positive NICE appraisal leads to increased and more consistent use of these drugs around the country.”
- High compliance (97%) with NICE multidisciplinary team recommendations for management of colorectal and lung cancer**

*Usage of cancer drugs approved by NICE. Report of review undertaken by the National Cancer Director; 2003, 2006;

**Dr Foster hospital Guide, 2007

House of Commons: London Jan 2008

“We conclude that NICE does a vital job in difficult circumstances. The development of more and more health technologies and procedures, alongside rising patient expectations and the ageing population, is going to make it even more difficult in the future. Healthcare budgets in England, as in other countries, are limited. Patients cannot expect to receive every possible treatment. Demand outstrips resources and priorities have to be determined...NICE requires the backing of the Government. NICE must not be left to fight a lone battle to support cost- and clinical effectiveness in the NHS.”

Thank you!

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