



Our £7.6bn drug problem

Colin Richman BPharm MRPharmS – Company Director Rx-info Ltd

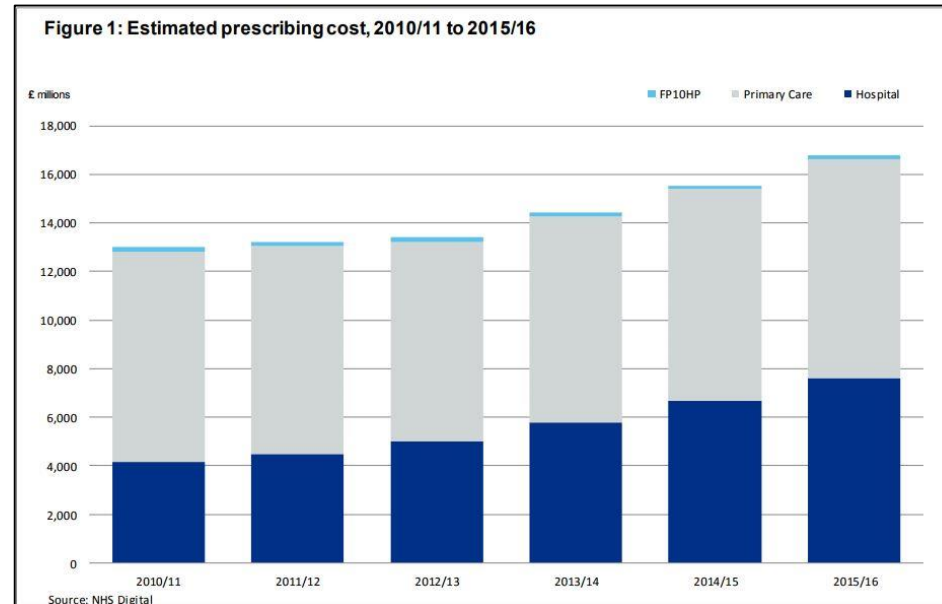
Image © Polygram films 1996

Medicines spend - England

The overall NHS expenditure on medicines in 2015/16 was £16.8 billion, an increase of 8.0% from £15.5 billion in 2014/15 and an increase of 29.1% from £13.0 billion in 2010/11

In 2015/16 hospital use accounted for 45.2% (£7.6 billion) of the total cost, up from 43.0% (£6.7 billion) in 2014/15 and up from 32.1% (£4.2 billion) in 2010/11

Approximately 12 - 15% per annum growth in hospital spend



Source: NHS Digital

<http://www.content.digital.nhs.uk/catalogue/PUB22302/hosp-pres-eng-201516-report.pdf>

Drivers in Hospital Spend

- Technological advancement
 - _mab
 - _nib
 - _vir
 - _cept
 - Lenalidomide
- Genetic testing / genome mapping
- Population demographics

THE TOP TEN COSTLY DRUGS IN 2015/16

Adalimumab - £416,647 million. Used to treat arthritis

Ranibizumab - £248,975 million. Used to treat macular degeneration

Etanercept - £230,588 million. Used to treat arthritis

Aflibercept - £198,268 million. Used to treat bowel cancer

Infliximab - £178,179 million. Used to treat Crohn's disease

Rituximab - £155,893 million. Used to treat arthritis

Trastuzumab - £152,037 million. Used to treat breast and stomach cancer

Lenalidomide - £141,840 million. Used to treat myeloma

Rivaroxaban - £106,586 million. Used as an anticoagulant

Imatinib - £89,067 million. Used to treat leukaemia

<http://www.dailymail.co.uk/health/article-4000810/NHS-spends-1-billion-just-4-common-drugs-latest-figures-show.html>

A SNAPSHOT OF 2014-15

Key Trends

- ▶ Health cost for England NHS £120.151bn 2016/7 (£2,057 per capita 14/15)
- ▶ 2017/8 Hospital spend will overtake Primary Care
- ▶ Continual upward cost pressure
- ▶ Cost saving and management initiatives
- ▶ Ageing population (<https://www.theguardian.com/society/2016/feb/01/ageing-britain-two-fifths-nhs-budget-spent-over-65s>)



Downward pressures

- ▶ Price management mechanisms (↓PPRS, ↓ Category C, ↑Daraprim)
 - ▶ Patient reviews
 - ▶ Sharing Care
 - ▶ VAT efficient supply
 - ▶ Carter review
-
- ▶ Further reference:
 - ▶ (Daraprim) <https://www.theguardian.com/business/2016/oct/28/martin-shkreli-daraprim-hiv-drug-price-hike-interview>
 - ▶ (Carter review) <https://www.gov.uk/government/news/review-shows-how-nhs-hospitals-can-save-money-and-improve-care>

So what was the problem?

- ▶ Until 2013 the NHS did not have a system that could show them hospital spend data!
- ▶ "Measure what is measurable, and make measurable what is not so."

- Galileo Galilei

Our Journey

- ▶ In 2012/3 Rx-info went from 4 alpha sites to 40 beta testers to 145 user sites
- ▶ Dealt with just under 200 NHS IT departments
- ▶ Standardised the data
- ▶ Processed data used in
 - ▶ Hospital savings plans
 - ▶ Parliamentary Health Select Committee
 - ▶ Regional procurement for medicines
 - ▶ PHE Antimicrobial Stewardship
 - ▶ Carter review

α β

Stats and facts



Data platform and business interfaces

The screenshot displays the Rinfo data platform interface. At the top center is the Rinfo logo with the tagline "data into information". Below the logo, there are eight buttons arranged in a 4x2 grid, each representing a different business interface: Define, EmBox, Refine, Translabel (marked "free to use"), ADIoS, Parity (marked "coming soon"), Support, and Mapping. To the right of these buttons is a list of pharmaceutical products with their respective prices. At the bottom center, there is a link for "Forgotten your password?".

Rinfo
data into information

Define **EmBox** **Vend**

Refine **Translabel** free to use

ADIoS **Parity** coming soon

Support **Mapping**

Forgotten your password?

Efavirenz 600mg tablets (Dr Reddy's Labor...
7 packs **£1,331.82**

Voriconazole 200mg/5ml oral suspension 7...
1 packs **£551.37**

Posaconazole 40mg/ml oral suspension 10...
6 packs **£2,974.20**

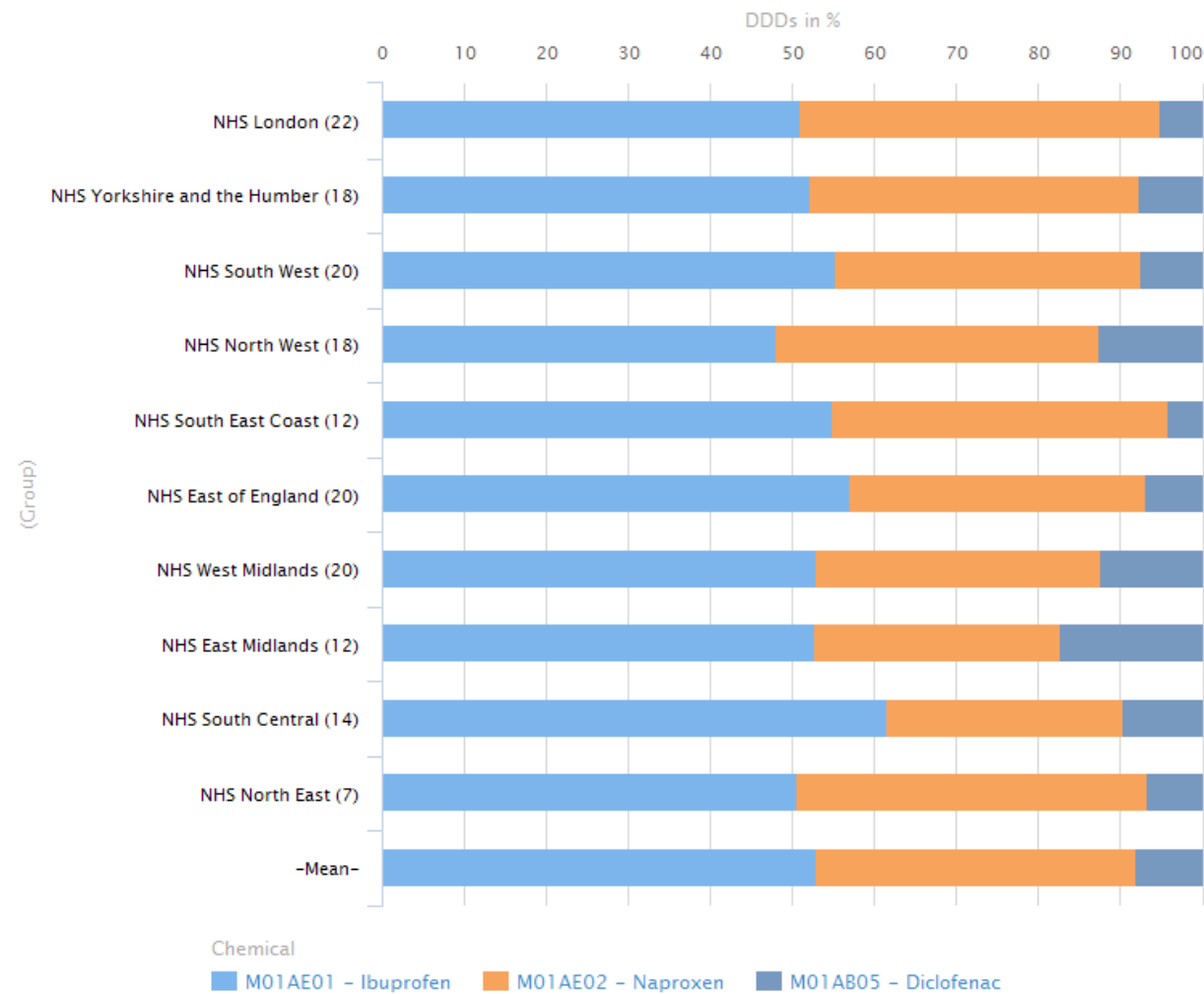
Magnevist 0.5mmol/ml solution for injection...
7 packs **£121.17**

Levact 25mg powder for concentrate for sol...
7 packs **£1,823.15**

Nicorette 15mg Inhalator (McNeil Products ...
20 cartridge **£13.88**

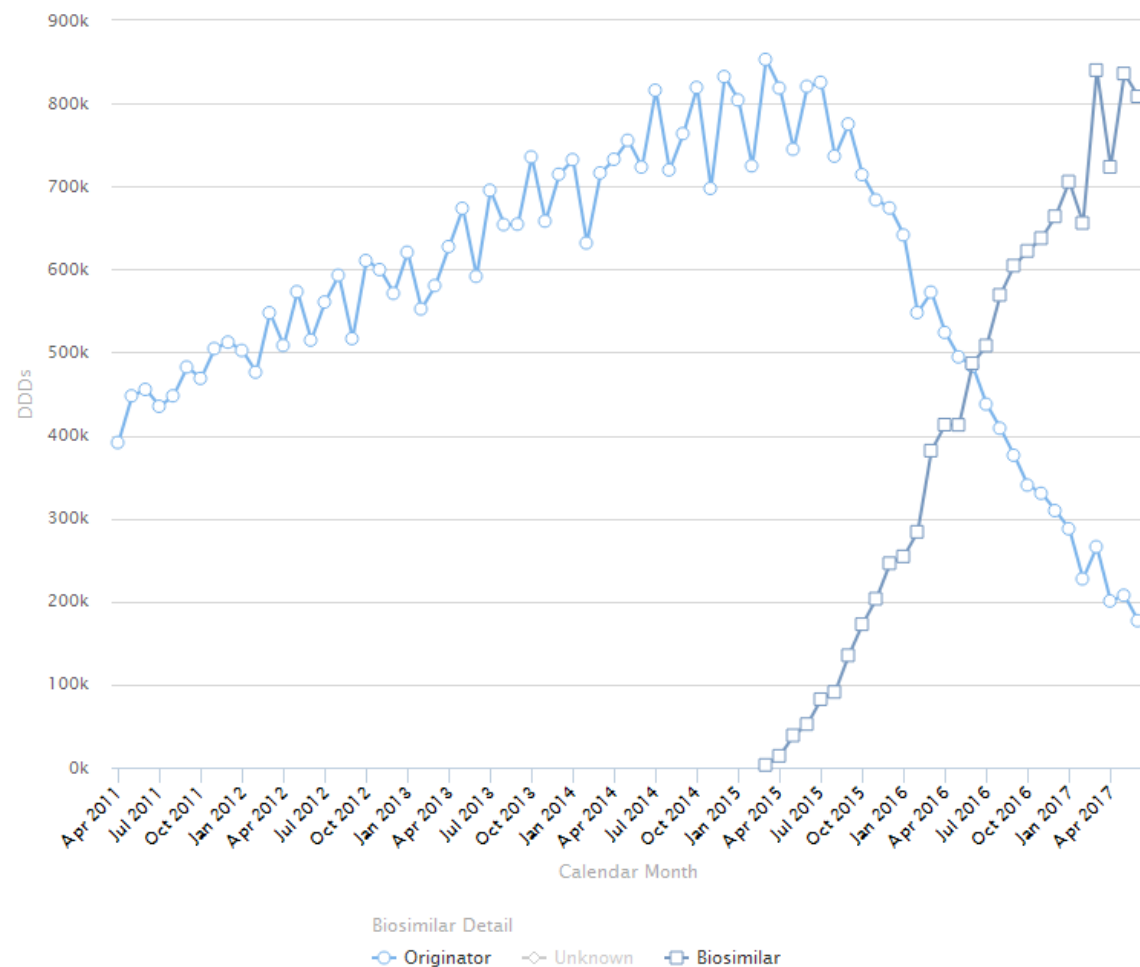
Date Range: Last Month (Jun 2017 - Jun 2017). **Trusts:** Custom. **Drugs:** ATC: M01AB05 - Diclofenac, M01AE01 - Ibuprofen, M01AE02 - Naproxen, Excluding VMP: 12717 - Diclofenac 100mg suppositories, 12843 - Diclofenac 12.5mg suppositories, 12844 - Diclofenac 25mg suppositories, 12858 - Diclofenac 50mg suppositories, 1894 - Diclofenac 75mg/2ml solution for injection vials, 12696 - Diclofenac 75mg/3ml solution for injection ampoules.

Specialties: Internal (exc. Stock, Sales) (225 of 230). **Prescription Types:** All



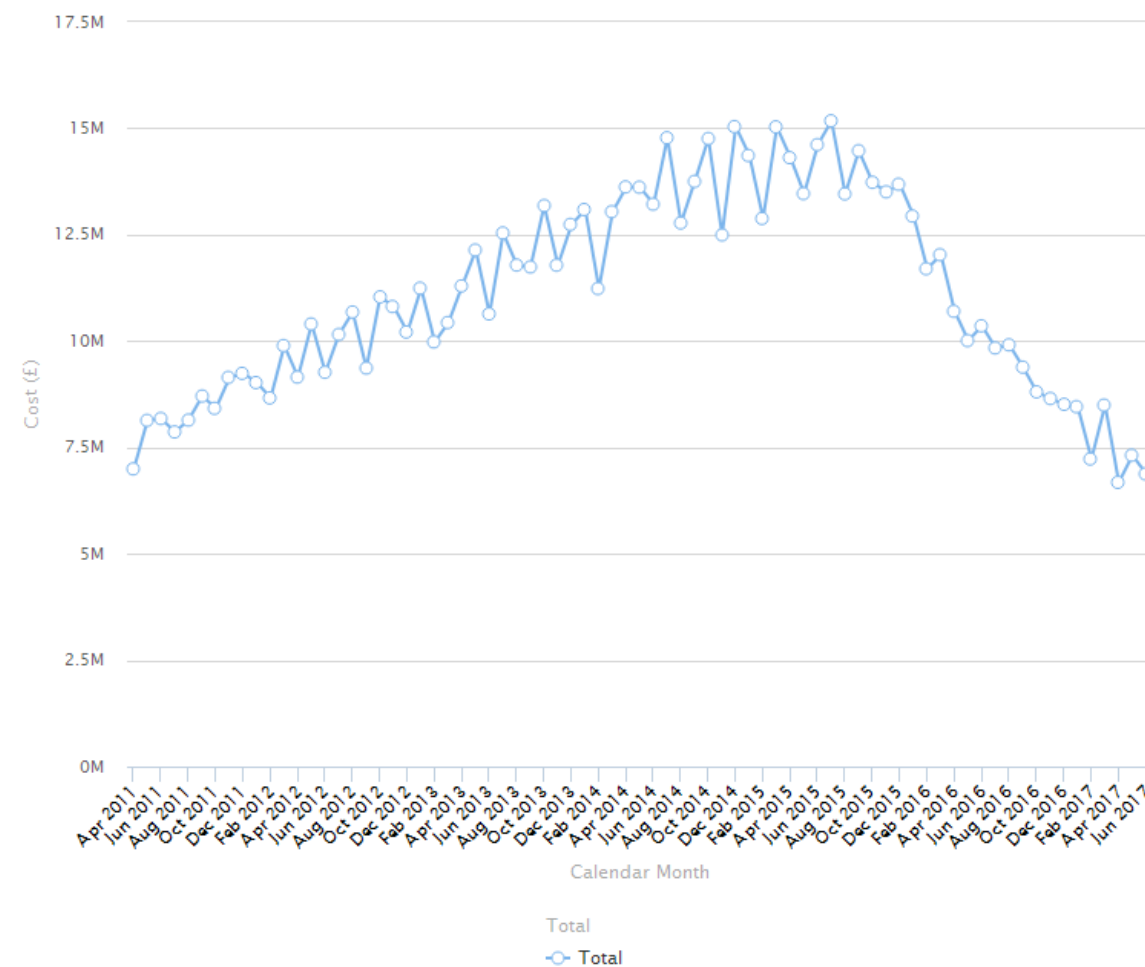
Filter Summary

Date Range: All Time (Apr 2011 - Jun 2017). **Trusts:** Custom. **Drugs:** VMP: 10323 - Infliximab 100mg powder for solution for infusion vials. **Specialties:** Internal (exc. Stock, Sales) (225 of 230). **Prescription Types:** All



Filter Summary

Date Range: All Time (Apr 2011 - Jun 2017). **Trusts:** Custom. **Drugs:** VMP: 10323 - Infliximab 100mg powder for solution for infusion vials. **Specialties:** Internal (exc. Stock, Sales) (225 of 230). **Prescription Types:** All



Growth Chart for J01 – ANTIBACTERIALS FOR SYSTEMIC USE

Figures from period Jul 2016 to Jun 2017 with growth compared to period Apr 2013 to Mar 2014.

