Medicines Optimisation
Polypharmacy Prescribing Comparators
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Is it real?

- In 2002, there were 617 million items dispensed, in 2012, there were 1,000.5 million (an increase of 62%) \(^{(1)}\)
- In 2015, 1,083.6 million prescription items were dispensed overall, a 1.8 per cent increase (19.1 million items) from 2014. This is an increase of 50.4 per cent (363.4 million) on the number dispensed in 2005; 720.3 million items \(^{(2)}\)
- The average number of prescription items per head of the population in 2015 is 19.8, compared to 19.6 items in the previous year and 14.3 in 2005 \(^{(2)}\)
- One third of over 75’s now take at least six medicines \(^{(3)}\)

So what?

- A person taking ten or more meds is 300% more likely to be admitted to hospital \(^{(4)}\)
- 6.5% of hospital admissions are for adverse effects of medicines this rises to 17% in the over 65 age group.
- 30 – 50% of people do not take their medicine as intended by the prescriber.
- Over 70% of hospital admissions for adverse reactions to medicines could be avoided.
We aren’t getting it right…

Evidence from primary care shows

• 1 in 20 prescription items has an error and 1 in 550 is serious\(^5\)

• In 2013 there were over 1 billion items dispensed in England therefore this equates to 1.8 million serious errors\(^3\)

• Adverse drug reactions account for 6.5% of hospital admissions and over 70% of the ADRs are avoidable.

• Over 50% of errors were in 4 disease classes, antiplatelets, NSAIDs, diuretics and anticoagulants\(^5\)
Wessex AHSN workshop November 2015. Metrics identified as a key starting point. No point developing just for one locality? Why not engage NHS BSA and NHS Digital and develop some national measures? RPS also working on this?

So we held a small workshop. GPs, Pharmacists, BSA, RPS, NHS Digital and others.
For each indicator we asked:

- Is it useful?
- Is it valid? (are there any health warnings)
- How would you use it?
- What other data sources might make it more meaningful?
- In or out? i.e. should it be included in the final polypharmacy measures?
- Any other measures that the group could suggest?
BSA and HSCIC worked their magic....
Limitations

• Historically, prescribing information was derived from the reimbursement processes for dispensed medicines. However, the BSA is now able to capture extra information that undoubtedly adds value to prescribing measures.

• The NHS number can now be linked to prescription items. In this way, we are able to demonstrate much better the quality of prescribing in key areas.

• The polypharmacy prescribing comparators are the first suite of measures to take advantage of this development. Currently, 92% of all prescription items can be linked to an NHS number with an accuracy of 99%. Age and date of birth can be linked to 73% of items with an accuracy of 99%. As the utilisation of electronic prescribing (EPS) increases, the coverage and accuracy of this data will increase.

• Therefore, CCGs are encouraged to drive up the uptake of EPS. To support this improvement, EPS levels have been included at the start of these comparators.
So, the final data set

These comparators will be available at GP Practice, and CCG level and will include measure such as...

- The average number of unique medicines prescribed per patient
- Percentage of patients prescribed 8 or more unique medicines, 10 or more unique medicines, 15 or more unique medicines, 20 or more unique medicines
- Percentage of patients with an anticholinergic burden score of 6 or greater, 9 or greater, 12 or greater
- Percentage of patients prescribed multiple anticoagulant regimes
- Percentage of older patients prescribed medicines likely to cause Acute Kidney Injury (DAMN Drugs)
Can we identify those most at risk?

A study found that 80% of patients who were dispensed 15 or more medicines had a potentially serious interaction on their prescription. Individuals with multiple medicines were more likely to receive a medicine with anticholinergic activity.

In 2010, 23.7% were receiving an anticholinergic despite evidence of harm.

Research suggests a link to increased mortality with the number and potency of anticholinergics prescribed.
Portsmouth CCG Percentage of patients with ACB score of 9 or more
Portsmouth CCG
Percentage of patients on 15 or more unique medicines
Health Warning

‘indicators only indicate’
These comparators are NOT the solution to fix problematic polypharmacy.

The Polypharmacy Prescribing Comparators are data sets aimed at helping clinicians to identify variation in practice and to provide support in highlighting which areas to prioritise for action.

Solutions will need multi-professional, multi-faceted approaches.
- The comparator specification document is NOT a prescribing guideline. It simply shows how the comparators were developed and the rationale behind each comparator.
- This data set is the first iteration – we hope to evaluate and learn as we go on.
- We are aware that NHS Scotland has done a lot of work in this area and we are linking with them. Prescribing data in England is collected differently.