Consultation on RPS polypharmacy professional guidance

The polypharmacy guidance referred to in this document, can be found here.

We would appreciate your thoughts and feedback on the following:

1. **Is the scope and purpose of the professional guidance on "Polypharmacy: Getting our medicines right" clear?**

The scope and purpose are not fully clear.

If not, why not?

1.1 It is clear that the aim of this guidance is to emphasise the growing problem of polypharmacy and to outline realistic recommendations of what healthcare systems and professionals could do to address this key issue. However, there is a slight contradiction between the definitions in the first and third sections. The first section defines the target audience as pharmacists and acknowledges the roles of the public and other healthcare professionals. This appears to be at odds with the third section, which defines the scope and purpose as to "*outline the vital role that people themselves (and their carers) must play in the solutions to problematic polypharmacy*", omitting the role of healthcare professionals and systems. We support the view that tackling polypharmacy requires a multi-disciplinary approach and would suggest that this is outlined in section 3.

2. **Does the background in the guidance provide a clear understanding of the issue of polypharmacy?**

The content of this section is good, but the clarity of the argument could be improved by changing the order.

2.1 We think the background section would be easier to read if it was divided into:

- Definition of polypharmacy
- Epidemiology of polypharmacy
- Harms from polypharmacy

2.2 The guideline makes it clear that polypharmacy is the concurrent use of multiple medications by an individual person. However, cut-off values for medication number for definitions vary between studies and publications, and this is not clearly demonstrated in the definition. It may be worth explicitly including the NHS Business Service Authority's ePACT2 polypharmacy-related indicators[1] here (available to all NHS employees)—for example, as a table to allow readers to understand both the numerical and the risk-related indicators used.

2.3 The guidance document specifically focuses on "problematic" rather than "appropriate" polypharmacy. The document should reflect this more clearly in the title and the background section (rather than the appendix). However, the guidance could also explore the issue of "legitimate" polypharmacy in greater detail. Indeed, appropriate polypharmacy, when

[1] NHS Business Service Authority, Wessex Academic Health Science Network. (2017) Medicines Optimisation: Polypharmacy. Available at: https://www.nhsbsa.nhs.uk/epact2/epact2-dashboardsspecifications/medicines-optimisation-polypharmacy

medications prescribed have been optimised according to best evidence, can extend life expectancy and improve quality of life. If it is not possible to expand consideration of this issue, we suggest that the King's Fund definition of polypharmacy[1] is stated early in the document to better set the scene for discussion of "problematic" polypharmacy.

2.4 The background section notes that there are several definitions of "problematic" polypharmacy. Later in the document, it would be useful for the guidance to highlight the definition being used in the context of other sections, for example in the study referenced in 7.1.

2.5 Furthermore, it is important to highlight that polypharmacy encompasses all uses of multiple medicines, from the use of two to tens of drugs concurrently. This is significant because it should be made clear that these guidelines should be applied in all cases of polypharmacy, and not just in the most extreme situations.

2.6 When the four main scenarios covered by the guidance are set out, it could be made clearer that the guidance only covers these problems in the context of patients who are taking multiple medicines. Bullet points 1, 2, and 4 of the definition could all apply to the use of a single drug.

2.7 The background could cover more thoroughly the evidence for the benefits of "deprescribing". For example, what is the evidence that shows that discontinuing the use of medicines can improve efficacy and safety for the patient?

3. The guidance has been developed under the following three key areas:

- **Polypharmacy and people**
- **Polypharmacy and Healthcare systems**
- **Polypharmacy and Healthcare professionals**

Does this format work and is it clear throughout the guidance?

The format works but needs development to be clear.

If not, why not?

3.1 In theory, we believe this is a good way to format the guidance. We would, however, suggest the following order: "Polypharmacy and People", "Polypharmacy and Healthcare professionals", and then "Polypharmacy and Healthcare systems", because concepts introduced in "Polypharmacy and Healthcare professionals" are needed before addressing the healthcare system as a whole.

3.2 There are certain paragraphs within the "Polypharmacy and Healthcare systems" sections that might be better placed under the "Polypharmacy and Healthcare professionals" heading, including "The Prescribing Cascade" and "Stopping Medicines Safely" sub-sections. We also think that section 8.2 "The perspective of people taking medicines" would be more appropriate in the "Polypharmacy and People section".

[1] King's Fund. (2013) Polypharmacy and medicines optimisation: Making it safe and sound. Available at: https://www.kingsfund.org.uk/publications/polypharmacy-and-medicines-optimisation

3.3 "Polypharmacy and People": this section does not address the issue of patients under the care of multiple specialist prescribers for each of their long-term conditions. This is an area in which clinical pharmacologists play a crucial role in providing a holistic and overall view of the patient's drugs list.

4. Are there any financial and/or organisational barriers in practice to using this guidance and actioning the recommendations highlighted?

Yes

If Yes, can you provide more detail?

4.1 The document is reference and resource heavy, and this makes it difficult for a reader to find the most appropriate tool without investing significant time. With the usual resource and staffing issues across the NHS, this may mean that the guidance is of limited use in practice. Report authors might consider developing an easy access summary sheet comprising key points.

4.2 An important barrier for organisations in implementing this guidance could be lack of experience and training. The General Practice Forward View[1] is committed to supporting an extra 1500 clinical pharmacists to work in general practice by 2020/21. As this represents a rapid expansion for the profession, some of these practitioners will be relatively inexperienced. Good clinical supervision, support, and development (eg, through senior and multidisciplinary input and a system for onward referral for difficult patients) will be important.

4.3 The Clinical Pharmacology Skills Alliance (CPSA)* is working with the Chief Pharmaceutical Officer and NHS England to develop support for the management of polypharmacy within Sustainability and Transformation Partnerships (STPs). We believe there is a need for "medicines specialists" (ie, experienced pharmacists and clinical pharmacologists specialising in the use of medicine) to provide support at the primary–secondary care interface. For example, reviewing patients with the most complex polypharmacy at the request of GP/GP pharmacist teams, conducting multidisciplinary reviews with GPs/GP pharmacists of patients identified with polypharmacy using the ePACT2 polypharmacy indicators, and providing advice, training, and networking within the STP.

4.4 The recommendation for "all clinical settings to aim to have systems in place to ensure people taking multiple medicines can be identified" will be difficult to fulfil for organisations that lack electronic prescribing or discharge summaries. This barrier will lessen as more organisations adopt electronic systems.

4.5 One major barrier is the potential for poor communication between those carrying out the medication review and other healthcare professionals involved in the care of the patient. This is especially important at the primary–secondary care interface, where prescribing errors through miscommunication are most likely to arise. Implementation of the summary

[1] NHS England. (2016) General Practice Forward View. Available at: https://www.england.nhs.uk/wp-content/uploads/2016/04/gpfv.pdf

*The CPSA is a partnership between the British Pharmacological Society (BPS), Health Education England (HEE), Faculty of Pharmaceutical Medicine (FPM) and the Association of British Pharmaceutical Industries (ABPI), which aims to support clinical pharmacology workforce planning and development for healthcare and life sciences. More information available here: https://www.bps.ac.uk/news-events/news/articles/2017/clinical-pharmacology-skills-alliance-launched-to

Care record so that medication lists from all patients can be seen in any healthcare setting should be a key recommendation.

4.6 Further additions in the recommendations section might include:

- Advice for all prescriptions to have a stop or review date.
- Advice for prescribers to review existing prescriptions to check if any can be stopped before new medications are prescribed.

4.7 We recommend that the definition of healthcare organisation be clarified, prior to section "3.1 Recommendations for all healthcare organisations"—ie, does this refer to GP surgeries and hospitals only, or also to community pharmacies, other outpatient services, or nursing homes and prisons etc.?

5. Are there any recommendations where you feel that a case study would be helpful to illustrate how to apply the guidance in practice?

Yes

If yes, which one(s)?

5.1 A new section (in "7: Polypharmacy and Healthcare Professionals") could explore the utility of an onwards referral pathway for people with complex problematic polypharmacy. As described in section 4, the CPSA is working with NHS England to promote "medicines specialists" working at the primary–secondary care interface.

5.2 A case history would be useful to include in "7.4 Prescribing cascade".

5.3 In "8.4 Better conversations about medicines from the start": If the case of a hypothetical 60-year-old gentleman admitted with a diagnosis of non-ST elevation myocardial infarction, with a background of type 2 diabetes, is considered: he is likely to require dual antiplatelet therapy (aspirin and clopidogrel); a statin; an ACE-inhibitor; a beta-blocker and anywhere between one and four drugs to treat his diabetes. When discussing the initiation of therapy with a patient, the expected end-points of each treatment should also be discussed. This should include not only the anticipated duration of treatment, but also the reasons that might require therapy to be stopped.

6. Do you have any case studies that show the possible impact of addressing polypharmacy which we could add to the guidance?

Yes

If yes, provide details

6.1 Case study: a study at St George's, University of London is investigating the potential contribution of clinical pharmacologists to the management of patients with complex polypharmacy. Clinical pharmacologists used a diagnosis-based structured assessment and reviewed anonymised data for 43 patients (mean age 74 years [SD 6]) taking 9.4 ±2.4 regular medicines. Despite 30 (70%) patients having undergone primary care medicines review in the

past 12 months, the CP structured assessment recommended potential medication changes in 38 (88%) patients including: in 32 (74%) patients at least one medication should be stopped (73 drugs, mean 1.7 per patient); in 22 (51%) patients at least one medication should be started (30 drugs, mean 0.7 per patient); in 11 (26%) patients the dose should be reduced for at least one medication (18 drugs, mean 0.4 per patient); and in eight (19%) patients the dose should be increased for at least one medication (10 drugs, mean 0.2 per patient). 45 (34%) of 131 recommended changes were to optimise benefit, 45 (34%) to reduce the risk of harm, and 41 (32%) to reduce treatment burden. Further changes were considered for 104 drugs (2.4 drugs per patient), but further information (eg, monitoring and specialist input) was required. A pilot of this model in primary care in Merton, southwest London is now planned to test its efficacy and acceptability as specialist service to support GPs and GP clinical pharmacists in managing patients with the most complex polypharmacy.

7. Do the tools signposted to in Appendix 2 help with polypharmacy reviews?

Yes, but we suggest some amendments.

7.1 This is a really useful compilation of tools to aid polypharmacy reviews. The NHS Scotland 7 steps approach was given a generous summary but other tools (eg, PREVENT, STOPP/START) were limited to a URL link. It would be useful to summarise all tools with at least a couple of sentences to guide readers to the most suitable tool for their needs.

7.2 There should also be a link to NICE 2018 key therapeutic topic on multimorbidity and polypharmacy.[1] This document summarises the evidence base on multimorbidity and polypharmacy, links to resources, and is updated annually. We were unable to find a reference to this resource in the RPS guidance.

7.3 We are concerned about the potential for external links to become out of date and recommend a provision for regular updates to ensure they remain relevant.

8. Do the tools signposted to in Appendix 5 support patients in medication review consultations?

Yes, but we suggest some amendments.

8.1 As per our suggestion for appendix 2, it would be useful to summarise the utility of each tool with at least a couple of sentences in order to guide readers to the most suitable tool for their needs.

9. Are there any supporting references or resources that you think should be highlighted to support implementation of the guidance?

Yes

If Yes, provide details

9.1 In an ageing population a growing number of people are living with more than one long-term medical condition (ie, multimorbidity).[2] There is therefore an increased likelihood that patients are simultaneously prescribed multiple medicines. Several bodies are providing

[1] NICE. (2018) Multimorbidity and polypharmacy. Available at: https://www.nice.org.uk/advice/ktt18)
[2] The Academy of Medical Sciences. (2018) Multimorbidity: a priority for global health research. Available at: https://acmedsci.ac.uk/file-download/82222577

guidance and recommendations regarding the management of polypharmacy and suggestions for implementation. It would be useful if the RPS could reference the NICE 2018 key therapeutic topic on multimorbidity and polypharmacy[1] and the consultation document of the regional medicines optimisation committee London polypharmacy subgroup (shortly to be published on the specialist pharmacy service website).[2]

Also, the academic health sciences network has medicines optimisation and polypharmacy as one of its priorities for improving patient safety.

9.2 Recommendation 3.3 mentioned a risk stratification tool for identifying patients at risk but does not link to the tool.

9.3 Section 7.3 describes the increased risk of morbidity with anticholinergic agents. A link to an anticholinergic burden calculator would be useful here.

9.4 Section 7.6 discusses difficulties when following multiple guidelines. The 2015 study[3] by Dumbreck and colleagues showed that adhering to multiple guidelines for several common conditions could lead to hundreds of potentially serious drug–drug interactions.

10. Are there any other comments that you would like to make about the guidance?

Yes

If yes, provide details

10.1 Overall the guidance is very good. The problem is well described, and a lot of useful documents were brought together. It was helpful to highlight a person-centred approach and emphasise the importance of patients as active decision makers in addressing polypharmacy. It was also helpful to identify the need for a multi-disciplinary approach requiring input from the whole workforce.

10.2 The British Pharmacological Society strongly believe that collaboration between clinical pharmacologists and pharmacists is key to tackling problems such as polypharmacy in the NHS. Clinical pharmacologists have expertise in prescribing and in drug–drug interactions, both of which are key to understanding patients taking multiple medicines. They can provide a holistic overview of a patient's drug list and can provide advice to prescribers when it comes to interpreting multiple guidelines.

10.3 Community pharmacists and GPs report that they feel unable to stop medicines initiated in secondary care, especially in patients with challenging conditions such as chronic pain. Clinical pharmacologists can play a key role in managing complex cases and should be highlighted as a potential source of advice for individual cases and in the development of local implementation guidance.

10.4 On p 5, we suggest changing the phrase "pharmacists, as the experts in medicines" to "pharmacists, as key experts in medicines" as other professions could also be considered to have expertise in this area.

[1] NICE. (2018) Multimorbidity and polypharmacy. Available at: https://www.nice.org.uk/advice/ktt18)
[2] Specialist Pharmacy Service. https://www.sps.nhs.uk/
[3] Dumbreck S, Flynn A, Nairn M, et al. Drug-disease and drug-drug interactions: systematic examination of recommendations in 12 UK national clinical guidelines. *BMJ* 2015; 350: h949.

10.5 In light of the developing partnership between pharmacy and clinical pharmacology, led by the CPSA and NHS England, we suggest modifying the second bullet point on page 8 from: "Pharmacists should ensure that when a medication review is carried out and the person is found to have very complex medicines issues, that mechanisms are in place to refer to their GP or a geriatrician or other services that are able to manage their conditions (for example, intermediate care services etc.)"

to

"Pharmacists should ensure that when a medication review is carried out and the person is found to have very complex medicines issues, that mechanisms are in place to refer to their GP, a medicines specialist (eg, senior pharmacist or clinical pharmacologist), a geriatrician or other services that are able to manage their conditions (eg, intermediate care services etc.)"

10.6 In section 8, p 33 we suggest that the first bullet point may read better as "Risk stratification tools to help healthcare professionals to identify people who have, or are at risk of, problematic polypharmacy".

10.7 We suggest that research gaps on p 33 could also include "What should an onward referral service look like to support the management of people with the most complex problematic polypharmacy?"

10.8 Finally there are a couple of small amendments to be addressed:

- On pp 23-24 Professor Garfinkle's acronym is VOCODFLEX, not VODCOFLEX (dementia and co-morbidity need to be swapped) p24.

- Numbering of subtitles needs to be amended: we notice the subheading numbering in chapter 6 is all in the 7s and in chapter 7 is all in the 8s.