**How does continuity of care influence patient safety?**

**Bottom line (5th February 2019):**

Continuity of care in primary care is being fragmented. While there is a lot of literature on continuity of care, very little explores the impact on prescribing practices and specifically on polypharmacy. However, what we did find was that:

- The more prescribers there are the more complex regimens become (McNamara et al 2017)
- Reduced continuity of informational care can be problematic for prescribers (PRACtiCe Study)
- Increased relational continuity has positive effects in terms of adherence (Kvarnstrom et al 2018) but may result in 'blasé' attitudes to critically reviewing medication lists (PRACtiCe Study) and reduced inclination to make changes if patients are stable (Sinnott 2015)
- While relational continuity of care is valued overall – GPs feel they need support from other professionals to tackle polypharmacy (Kvarnstrom et al 2018; McNamara et al 2017)
- A single RCT which tried to reduce polypharmacy through improved continuity of care and proactive management did not manage to achieve this (Schafer et al 2017)

More research is needed to identify the relationship between CoC and polypharmacy/prescribing more generally:

- The impact of relational continuity on safe/appropriate/effective prescribing
- If there are adverse effects from reduced continuity – how can they be best mitigated against?

Through discussion, the problems associated with de-prescribing medications came up frequently. GPs had experienced:

- Concern about, or actual, legal ramifications after stopping medications
- Difficulties in persuading patients to stop medications when they had previously been told they are lifelong (e.g. in the End of life setting)
- Awareness of some tools e.g. STOPP Start tool but limited experience/knowledge about how to implement these

**Context:**

Further to ideas provided from the James Lind Alliance via the Patient and Public Involvement Team at Keele University, the EBP group developed this question. They identified that continuity of care is threatened in primary care due to workforce pressures and resultant diversification of staff. While polypharmacy can be appropriate, there is a risk of inappropriate polypharmacy and one could hypothesise that this may be more likely if relational continuity of care is reduced as the more tailored non-pharmacological approaches take a long time and are difficult to achieve in a standard appointment with a new patient.

Key sources of background information were:

- The Kings Fund Reports:
  - Continuity of care and the patient experience (2010)
  - Polypharmacy and medicines optimisation (2013)
  - Understanding pressures in general practice (2016)
  - Innovative models of general practice (2018)
- The PRACtiCe study 2012

**PICO:**

**P**OPULATION: consulters in primary care

**I**NTERVENTION: high level continuity of care

**C**OMPARATOR: low level continuity of care

**O**UTCOME(S): polypharmacy

**Evidence sources:**

A brief search including the terms following terms both in free text and linked to MeSH headings was undertaken in 2 databased (EMBASE, MEDLINE):

- Primary care
- Polypharmacy
- Continuity of care

This resulted in around 30 unique articles from the last 10 years, of which only four were related to our topic of interest (quantitative n=1, qualitative n=3).


- Sinnott C, McHugh S, Boyce MB, Bradley CP. What to give the patient who has everything. Br J Gen Pract. 2015. **DOI: 10.3399/bjgp15X684001**
- McNAmara KP, Breken BD, Alzubaidi HT, Bell JS, Dunbar JA, Walker C, Hernan A. Health professional perspectives on the management of multimorbidity and polypharmacy for older patients in Australia. Age and Aging. 2017;46:29109.
- Kvarnstrom K, Airaksinen M, Liira H. Barriers and facilitators to medication adherence: a qualitative study with general practitioners. BMJ Open. 2018.8:e015332 doi: 10.1136/bmjopen-2016-015332
- Schafer I, Kaduskiewicz H, Mellert C, Loffler C, Mortsiefer A, Ernst A, Stolzenbach CO, Wiese B, Abholz HH, Scherer M, van den Bussche H, Altiner A. Narrative medicine-based intervention in primary care to reduce polypharmacy: results from the cluster-randomised controlled trial MultiCare AGENDA. BMJ Open. 2018;8:3017653. doi: 10.1136/bmjopen-2017-017653


The group divided into small groups and read, appraised and fed back on the key results of relevance to this topic. The quality of the papers was reasonable. However, each provided a different insight into the potential or actual relationship between continuity of care and prescribing practices.

**Impact:**

A PICO to address “How do we best ensure we prescribe effectively, appropriately and safely in the context of diminishing continuity of care in primary care settings?” was submitted to the NIHR HTA Out of Hospital Care programme for consideration for development into a commissioned research project.