Pharmacists in Primary Care in Scotland: an exploration of competencies required for the provision of pharmacy services within General Practice

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Background, Aim & Objectives

Due to workload pressures in primary care, pharmacists are increasingly working alongside General Practitioners, providing pharmaceutical services such as medication reviews and authorising prescribing requests [1]. While there is wide interest in the contributions pharmacists can make within primary care, there is limited research exploring the competencies pharmacists need to safely and effectively provide care in this are.

The **study aim** was to identify competencies required for pharmacists providing pharmacotherapy services in General Practice.

Specific **study objectives** were:

- To generate a list of competencies required to undertake pharmacotherapy service tasks within General Practice;
- To establish consensus regarding the importance of these competencies.

Methods

Modified eDelphi study [2], comprising a series of online questionnaires conducted between July 2019 and October 2019; a validation exercise was undertaken in January 2020. Participants were pharmacists working in General Practice in Scotland.

1. **Generate list (eDelphi 1)**
   - Open-ended, free text questions
   - Content analysis [3]
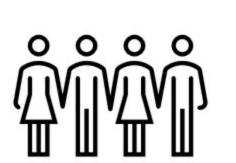   - Framework of competency categories and individual items

2. **Establish consensus (eDelphi 2; validation exercise)**
   - Rating the importance of collated competencies in relation to pharmacotherapy service tasks
   - Rating scale from 1 ("not important") to 10 ("very important")
   - Mode, median, level of agreement among participants [4, 5]

[1] Scottish Government (2017). The 2018 General Medical Services Contract in Scotland.
[2] Hsu & Sandford (2007). The Delphi technique: Making sense of consensus.
[3] Elo & Kyngäs (2008). The qualitative content analysis process.
[4] Diamond et al (2014). Defining consensus: a systematic review recommends methodological criteria for reporting of Delphi studies.
[5] Maher et al (2020). Core competencies for Australian pharmacists when supplying prescribed opioids: a modified Delphi study.

Results

10 pharmacists completed the first questionnaire, and 11 completed the second; 20 participated in the validation exercise (completing a paper-based version of the second questionnaire).

- ~82% of participants were female (31/38, missing demographics data)
- Time in GP practice varied, with ~32% (12/38) having 10 or more years experience; overall, ~87% (33/38) of the participants indicated to be Independent Prescribers

Table 1: Rating of importance of the competency categories as derived from content analysis of eDelphi 1

Competency category	Median Validation (eDelphi 2)	Level of agreement * Validation (eDelphi 2)
General skills	10 (10)	84.7% (87.0%)
Multi-disciplinary team communication skills	10 (9)	83.6% (71.9%)
Clinical knowledge	9 (10)	85.0% (80.2%)
IT skills	9 (10)	82.4% (89.0%)
Legal & professional frameworks	9 (10)	74.6% (82.2%)
Consultation skills	9 (10)	73.4% (75.7%)
Clinical skills	9 (10)	71.8% (68.2%)
Procedural skills	8 (9)	70.9% (71.8%)

* Percent of ratings for competency items with a score of 8-10, aggregated by competency category

Conclusions

- Pharmacists working in General Practice require a wide range of competencies, including advanced clinical and consultation skills; but also covering areas such as the use of IT systems and communicating with a variety of other healthcare professionals.
- This bottom-up approach offers valuable insights, drawing on the experiences of those working in this area.
- The methodology can easily be adopted to accommodate other settings to gain understanding of important competencies regardless of context.

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