

# Development of a set of quality indicators for home pharmaceutical care in Japan

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**Background** In Japan, home pharmaceutical care (HPC) is provided to home-bound elderly who have difficulties in accessing a community pharmacy, for regular medicine supplies and medication management. Although the number of HPC services provided has increased, little is known about variability in care delivery, which could cause differences in the quality of HPC provided. Therefore, the development of a set of quality indicators (QIs) in order to comprehensively evaluate HPC is required.

**Purpose** The aim of this study was to develop a set of QIs for HPC.

**Method** A 4-step QI development procedure was applied. First, in order to establish the quality dimensions (QDs) of HPC (i.e. components which impact the quality of HPC) from the perspectives of home healthcare professionals, 61 multidisciplinary professionals were interviewed, and data were thematically analysed. Second, in line with the identified QDs, QIs were developed based on the following 3 sources; 1) national guidelines, 2) existing QIs for responsible use of medicines, and 3) healthcare professionals' experiences and opinions. Third, in order to assess face and content validity of the preliminary set of QIs, a modified Delphi technique was used. Fourth, a prospective observational study is being carried out in order to evaluate feasibility, applicability, acceptability, variability, and implementation issues.

**Findings** Nine themes and 27 sub-themes emerged from the qualitative study. Subsequently, 21 QIs were developed based on national guidelines. Additionally, 20 QIs were developed based on the existing 2079 QIs, identified by conducting a systematic review. Furthermore, 23 QIs were developed by 50 home healthcare professionals during 1-day workshop held in Japan (2017). Removing duplicates, a total of 52 preliminary QIs were developed. Following this a two round process (online survey and face-to-face meeting) involving 10 expert panel members rated 45 QIs as face and content valid. Using the 45 QIs, 6-month observational study in 65 community pharmacies is currently in progress.

**Conclusion** Forty five face and content valid QIs for HPC have been developed, using a rigorous and systematic approach. A 6-month observational study will determine the feasibility of measuring these QI by community pharmacists providing HPC.