of our method for measuring clinical disintegration time. The clinical disintegration time of the 17 ODT products was between 17.6 and 33.8 seconds in the clinical trial conducted with healthy adult volunteers. In the measurement of the amounts of water required for ingesting CTs and ODTs, no significant difference was observed in the amount of water required for ingesting CTs and ODTs among the 3 groups. The amount of water required for ingesting ODTs was significantly lower than that required for ingesting CTs.

**Conclusion:** This study demonstrates that all the tested products, which are clinically available in Japan, exhibit good disintegration and that the disintegration time varies by the product. This study also showed that the amount of water required for ingesting ODTs is lower than that required for ingesting CTs.

**Disclosure of Interest:** None declared.

**PP009—DEVELOPMENT, VALIDATION AND USABILITY OF SOFTWARE TO CALCULATE THE DRUG BURDEN INDEX: A PILOT STUDY**

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**Introduction:** The Drug Burden Index (DBI), a novel pharmacologic risk assessment tool that measures an individual’s total exposure to anticholinergic and sedative medicines, has been associated with impaired physical function, falls, and increased hospitalization in older adults. **Aims:** (1) To develop software which calculates and generates reports on DBI; (2) to use published case study data to test the DBI software for accuracy; and (3) to test the software for usability and functionality.

**Patients (or Materials) and Methods:** Microsoft Access 2010 was used to build and design The DBI Calculator©. Twenty-five drug regimens from patient case studies published in the *Australian Journal of Pharmacy* (August 2010 to August 2012) were used to compare DBI scores calculated using The DBI Calculator© and those computed manually (gold standard). Cohen’s Kappa statistics were used to calculate the degree of concordance between manual and automated DBI scores. Ten pharmacists accredited to perform medication management reviews were randomly selected from online pharmacist contact lists to participate in the usability testing. The usability test was developed from previous usability studies. Participants were timed to perform a DBI calculation with the software based on a drug regimen from the case studies. A survey was used to rate the interface, functionality, clinical applications, and satisfaction of software.

**Results:** (1) The software has been designed to allow for ease of uploading onto a secured, de-identified, password-protected website. The user enters patient data and clicks “Calculate DBI” and immediately receives a report of the DBI with information on the significance of the calculation for the patient. (2) Results indicate good agreement between the software and manual calculation (Cohen’s Kappa 0.95) among the 16/25 drug regimens from patient case studies tested with DBI > 0. (3) During usability testing, 90% of respondents were satisfied with the software and agreed the content in the software was accurate. The usability study also identified that The DBI Calculator was considered useful for recognizing sedative and anticholinergic medicines in 80% of participants. The average time for participants to complete the task was 7 minutes 21 seconds.

**Conclusion:** We have developed a reliable calculator to report DBI in older patients taking multiple medications. Further studies will assess application of The DBI Calculator© in clinical settings such as pharmacist medication management reviews.

**Disclosure of Interest:** None declared.

**PP008—DRUG-RELATED PROBLEMS IN A GENERAL INTERNAL MEDICINE SERVICE**

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**Introduction:** Patients admitted to internal medicine wards receive a large number of drugs and are at risk of drug-related problems (DRPs) that may be associated with morbidity and mortality. In a French study, the in-hospital incidence rate of adverse drug reactions (ADRs) was 10.1 per 1000 patient-days and 80% of them could be considered preventable. The aim of the present study was to detect suboptimal drug use in 2 pilot wards of a general internal medicine service and to offer a pharmacologic and pharmaceutical evaluation to improve drug prescription.

**Patients (or Materials) and Methods:** This was a prospective study conducted during 6 months in 2 internal medicine wards in a 2000-bed university hospital. Physician rounds were attended once every other week in each ward by a clinical pharmacist and a clinical pharmacologist. All patients met during the physician rounds were included. Prescriptions were analyzed through an assessment grid to detect DRPs. Treatment optimizations were suggested to prescribers during the round. The main outcome measures were: (1) most frequent DRPs and involved drugs or drug classes; (2) types of intervention required: no intervention, verbal suggestion of treatment optimization, or specialized written consultation; and (3) acceptance rate by prescribers.

**Results:** A total of 145 patients (mean age, 68 [21–99]; 48% female) were included with 1523 prescriptions (mean, 10.6 [0–21] prescriptions per patient). A total of 383 DRPs were identified (mean, 2.6 [0–12] DRPs per patient). The most frequently identified DRPs were: (1) drug interactions (21%); (2) untreated indications (18%); (3) overdose (16%); and (4) drug used without a valid indication (10%). The most frequently involved drugs or drug classes were: (1) for drug interactions: tramatol, antidepressants, and alprazolam; (2) for untreated indications: calcium-vitamin D, statins, and aspirin; (3) for overdose: proton pump inhibitors and paracetamol; and (4) for drug used without a valid indication: proton pump inhibitors and aspirin. Fifty-one percent of the identified DRPs were considered as clinically not relevant and were not reported to the prescribers, 42% were reported with a verbal suggestion of treatment optimization, and 7% were considered as complex and triggered a specialized written consultation by a clinical pharmacologist. Suggestions of treatment optimization were accepted by prescribers in 84% of cases. Accepted suggestions were applied by physicians in 64% of cases.

**Conclusion:** The most frequently identified DRPs were drug interactions. One half of the identified DRPs required a suggestion of treatment optimization, which was accepted and applied by prescribers in most cases.

**Disclosure of Interest:** None declared.

**PP010—MEDICATION SELF-ADMINISTRATION IN HOSPITALISED PATIENTS: AN EVALUATION USING DATA FROM AN ELECTRONIC PRESCRIBING AND MEDICATION ADMINISTRATION SYSTEM**

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**Aims:** To develop software which calculates and generates reports on DBI; (2) to use published case study data to test the DBI software for accuracy; and (3) to test the software for usability and functionality.

**Patients (or Materials) and Methods:** Microsoft Access 2010 was used to build and design The DBI Calculator©. Twenty-five drug regimens from patient case studies published in the *Australian Journal of Pharmacy* (August 2010 to August 2012) were used to compare DBI scores calculated using The DBI Calculator© and those computed manually (gold standard). Cohen’s Kappa statistics were used to calculate the degree of concordance between manual and automated DBI scores. Ten pharmacists accredited to perform medication management reviews were randomly selected from online pharmacist contact lists to participate in the usability testing. The usability test was developed from previous usability studies. Participants were timed to perform a DBI calculation with the software based on a drug regimen from the case studies. A survey was used to rate the interface, functionality, clinical applications, and satisfaction of software.

**Results:** (1) The software has been designed to allow for ease of uploading onto a secured, de-identified, password-protected website. The user enters patient data and clicks “Calculate DBI” and immediately receives a report of the DBI with information on the significance of the calculation for the patient. (2) Results indicate good agreement between the software and manual calculation (Cohen’s Kappa 0.95) among the 16/25 drug regimens from patient case studies tested with DBI > 0. (3) During usability testing, 90% of respondents were satisfied with the software and agreed the content in the software was accurate. The usability study also identified that The DBI Calculator was considered useful for recognizing sedative and anticholinergic medicines in 80% of participants. The average time for participants to complete the task was 7 minutes 21 seconds.

**Conclusion:** We have developed a reliable calculator to report DBI in older patients taking multiple medications. Further studies will assess application of The DBI Calculator© in clinical settings such as pharmacist medication management reviews.

**Disclosure of Interest:** None declared.