with physicians but were found hesitant to discuss this in open. Written collaboration contracts did not ensure role specification. Developing trustworthiness through mutual professional interdependence by students being recognized by physicians to contribute to improved patient outcomes, was limited.

**Conclusion** Some challenges to collaboration were identified thereby questioning whether the Medisam program is an effective way to enhance HMR collaboration between educated pharmacists and physicians. Solutions to the identified challenges include students and their pharmacist tutors to find ways to present their collaborative needs to physicians and for students to illustrate more explicitly the benefits patient achieve if physicians implement the recommendations of students.

# Abstract 1449

### Patient adherence to antihypertensives in Slovenia

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**Background** In patients with hypertension, non-adherence is a significant risk factor that is related to the reduced control of blood pressure leading to significant elevation of risk for serious cardiovascular diseases.

**Purpose** To validate a Slovenian version of a self-reported 8 item Morisky Medication Adherence Scale (MMAS-8) and to evaluate patient adherence to antihypertensives in Slovenia. Additionally, to assess risk factors related to patient non-adherence.

Method MMAS-8 was translated to Slovenian language by two experts, consensus was reached on the Slovenian version, which was then back translated to English language and compared to the original version. Validation of the Slovenian versions of MMAS-8 and evaluation of adherence was performed on a sample of adult Slovenian speaking patients which were enrolled by pharmacists in a randomly allocated sample of Slovenian community pharmacies. Patients that were dispensed at least one antihypertensive medicine were asked to fill out the survey at home and return it by regular mail. The survey included MMAS-8 questionnaire and patient socio-demographic data, namely; sex, age, monthly income, education category, smoking status, and the data regarding anthypertensives (AH) (treatment duration, number of medicines taken and the dosage regimen). The degree of adherence was determined according to the score resulting from the MMAS-8 questionnaire. The risk factors of patient nonadherence were estimated using multinominal logistic regression in IBM SPSS Statistics version 21.

**Findings** In total 468 patients returned completed surveys. Among them 58 % were female; 14 % were younger than 55 years, 33 % were between 55 and 65, while 53 % were older than 65; the majority (85 %) were non-smokers. Almost all the patients (95 %) were treated for hypertension more than 1 year; 37 % of the patients were taking only one AH drug, 32 % were concomitantly taking 2 AH drugs, the other were concomitantly taking 3 or more AH drugs; 45 % of the patients take the AH drug once per day. Fifty-three percent of patients had high adherence rate (scored 8 points), 31 % had medium adherence rate (scored 6 or 7 points), 16 % had low adherence rate (scored 6 or less). Older patients were more adherent (odds ratio for adherence was 1.5–1.7; p < 0.01).

Conclusion Approx. 50 % of patients have an ideal adherence score according to MMAS-8. Patients that are older and have less antihypertensives are more adherent.

## Abstract 1450

### Development of shared care guidelines in rheumatology

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**Background** The use and administration of rheumatology drugs such as disease modifying antirheumatic drugs and biological agents requires effective patient monitoring at all settings of care. Within a multidisciplinary team setting such as rheumatology, shared care guidelines improve the management of patient care and outline responsibilities of the pharmacist within the team.

**Purpose** To develop shared care guidelines for rheumatology drugs used in the treatment of various rheumatic conditions with the intent of providing seamless care between primary and secondary care settings.

**Method** A literature review was carried out to identify already existing shared care guidelines in rheumatology Discussions with an expert panel consisting of a consultant rheumatologist, specialised rheumatology nurse, rheumatology specialist trainee, a research and academic pharmacist, general practitioner, and a community pharmacist were undertaken. This was done to identify which rheumatology drugs need revision and amendments, as well as to determine which other drugs necessitate the development of new shared care guidelines. A comparative study was carried out to analyse the key principles required to be included in the template. The designed shared care guidelines will be evaluated by an expert panel at the Rheumatology Clinic. Following approval, the shared care guidelines will be published online for public access.

**Findings** Consultation with the multidisciplinary team yielded the need for revision of the currently available patient management guidelines available for rituximab, infliximab, and zolendronic acid. It was concluded that new guidelines need to be written for the following drugs used in rheumatology: methotrexate, leflunomide, sulphasalazine, gold injections, azathioprine, ciclosporine, etanercept, and adalimumab to help in the standardisation of treatment. The following set of parameters were designated to be included in the guidelines; indication, co-administration of other drugs as necessary, dose, contra-indications, cautions, drug interactions, baseline screening, initial monitoring, stable dose monitoring, vaccination, side-effects and clinical pharmacist responsibilities.

**Conclusion** The shared care guidelines for rheumatology drugs outlined above will provide the necessary information for healthcare professionals to further improve and effectively manage and monitor patients.

### Abstract 1451

When skills are not enough: home medication reviews (HMRs) seen through tutors', pharmacy students' and GPs' competency glasses

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**Background** An HMR program ("Medisam") was launched in 2008–2010 in Denmark. The program involves patients, pharmacy internship students, the (pharmacist) tutors of the pharmacy students and GPs.