events (N=9 of 12, 75%). This may contribute to improved health care utilization, as well as the lowering of the number of hospitalization for emergency department visits (N=7–78%). PMAS also resulted in cost savings in seven of the studies. CONCLUSIONS: Pharmacists lead outpatient anticancer-salvage therapies attained better quality of anticancer control, lower bleeding and thromboembolic events, and lower health care utilization.

PHS12 THE IMPACT OF HOME MEDICATION REVIEW IN PATIENTS WITH TYPE 2 DIABETES MELLITUS LIVING IN RURAL AREAS OF KUANTAN, MALAYSIA
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OBJECTIVES: To investigate whether Home Medication Review (HMR) conducted by a pharmacist can improve the clinical indices, quality of life and medication adherence in patients with Type 2 Diabetes Mellitus (T2DM). METHODS: A prospective, randomized, controlled study Adult T2DM patients taking medications for diabetes for at least two years, with HbA1c>8%, were recruited into the study and randomized to intervention or control. The intervention group received three home visits in five months. RESULTS: 73 patients were recruited and randomized to the intervention group (38) or the control group (35). With no significant difference identified in baseline parameters. Data was analysed in SPSS 10/19 (BMJ) and using ANOVA and paired t-test. There were significant improvements from baseline to 6 months in the intervention group in; HbA1c (mean difference (MD) = 1.57, 95% CI [-0.88, 2.26]; p<0.001), FBS (MD=2.76, 95% CI [-0.59, 9.49], p=0.022), diastolicBP (MD=6.56, 95% CI [-7.05, 21.62], p=0.022), diastolicBP (MD=4.44, 95% CI [-11.77, 0.76]).; p<0.006), medication adherence (MD=−2.49, 95% CI [2.73, 16.51], p<0.001) and medication adherence (MD=−2.19, 95% CI [-2.73, -1.65], p<0.001) showed no significant changes in outcome measures. QoL improved in the intervention group. CONCLUSIONS: HMR conducted by a pharmacist provided significant improvement in health and QoL of patients with Type 2 Diabetes Mellitus. HMR may be beneficial for patients with chronic diseases and for the health care system.

PHS13 INCREASED-DOSE HEPATITIS B VIRUS VACCINE IMPROVE THE IMMUNE RESPONSE IN HIV-INFECTED PATIENTS: A META-ANALYSIS
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OBJECTIVES: Hepatitis B co-infection may lead to increased mortality of HIV patients. All HIV-infected patients are recommended to receive hepatitis B virus (HBV) vaccination to prevent the co-infection. However, HIV-infected patients often fail to produce protective antibodies to HBV vaccine. This study is sought to assess the efficacy of increased-dose HBV vaccine in HIV-infected patients. Methods: A systematic literature review and meta-analysis of clinical trials were conducted. The search was carried out on PubMed, EMBASE and the Cochrane Database of Systematic Reviews. The beginning of immunization was specified. A total of 424 patients used in the electronic searches included hepatitis b”, “HBV”, “vaccine”, “vaccination”, “immunization”, “immunization”, and “ADIS”. We only included studies those published in full texts in English. Baseline and main criteria as follows: English language and random controlled trials. Results: The comparison of the response rates of increased-dose HBV vaccine (increase dose or administration times of standard dose) and standard-dose vaccine (20g; 3 times at month 0, 1, and 6) in HIV-infected patients. Random effect models were used in the meta-analysis. Publication bias was assessed by using funnel plots. Statistical analysis was performed using MetaWin Statistical Software.
RESULTS: Of 1204 references yielded by electronic searches, five trials, which represent a total of 424 patients, were included in the final analysis. The heterogeneity was moderate (I2=32%) according to the Q test. The test of study results showed a significant increase in response rate among increased-dose patients versus control patients, the pooled risk ratio (RR) was 1.17 (95% CI: 1.05–1.30). The number of intent-to-treat is 9. Only one study presented severe adverse reaction reports related to the vaccination, and no increased risk was observed. CONCLUSIONS: Increasing the dosage of vaccine may improve the immune response significantly in HIV-infected patients.

PHS14 IMPROVING HEALTH CARE QUALITY, SAFETY, AND COSTS THROUGH THE INTEGRATION OF CLINICAL PHARMACY SERVICES
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OBJECTIVES: Medications must be prescribed and administered properly to be effective for the treatment of chronic conditions. Medication errors and poor adherence lead to increased costs and poor outcomes. Evidence shows that clinical pharmacists improve when pharmacists are integrated into the care team. The objectives of this study were to improve health care quality, medication safety, and reduce health care costs for high-risk patients through the integration of clinical pharmacy services in the patient-centered medical home. METHODS: Clinical pharmacists, consisting of a pharmacist, resident, and pharmacy technician were integrated into five safety net clinics starting in September 2012. Five additional sites were added in October 2013. These teams target high-risk patients with poor chronic disease control. The services provided include medication and disease state management, medication reconciliation, and medication access. This study has a pre-post design with the absence of the confounding of the use of the care model. CONCLUSIONS: The study results showed a significant increase in response rate among increased-dose HBV vaccine to prevent the co-infection. However, HIV-infected patients often fail to produce protective antibodies to HBV vaccine. This study is sought to assess the efficacy of increased-dose HBV vaccine in HIV-infected patients. Results: Of 1204 references yielded by electronic searches, five trials, which represent a total of 424 patients, were included in the final analysis. The heterogeneity was moderate (I2=32%) according to the Q test. The test of study results showed a significant increase in response rate among increased-dose patients versus control patients, the pooled risk ratio (RR) was 1.17 (95% CI: 1.05–1.30). The number of intent-to-treat is 9. Only one study presented severe adverse reaction reports related to the vaccination, and no increased risk was observed. CONCLUSIONS: Increasing the dosage of vaccine may improve the immune response significantly in HIV-infected patients.