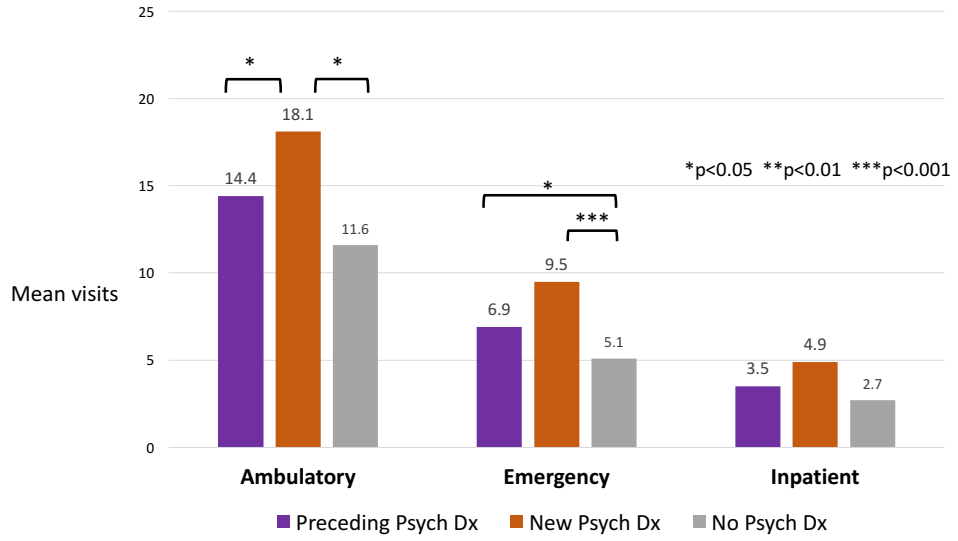
Background: Youth with systemic lupus erythematosus (SLE) have high health care utilization, which may be exacerbated by psychiatric comorbidity. We examined the impact of psychiatric diagnoses on utilization of medical services in youth with SLE.

Methods: We conducted a retrospective cohort study using administrative claims for 2000 to 2013 from Clinformatics^{TM} DataMart (OptumInsight, Eden Prairie, MN), a large US database of privately insured enrollees. We included youth ages 10-24 years with an incident diagnosis of SLE (≥3 International Classification of Diseases, Ninth Revision codes for SLE 710.0, each >30 days apart, with $\geq$ 1 year of preceding continuous enrollment without a code for SLE). We categorized mutually exclusive groups of youth with SLE as those with: 1) no psychiatric diagnosis, 2) a psychiatric diagnosis in the 12 months preceding SLE diagnosis, and 3) an incident psychiatric diagnosis in the 12 months after SLE diagnosis. We calculated mean ambulatory, emergency and inpatient visits for medical (non-psychiatric) services in the year after SLE diagnosis, and used Poisson regression to compare the number of visits among the 3 groups, adjusting for demographic and disease variables.

Results: We identified 650 youth with an incident diagnosis of SLE. The mean age was 18.4 years (SD 3.7), 88% were females and 25% had nephritis. Depression was diagnosed in 117 (18%), anxiety in 78 (12%), and other psychiatric disorders in 176 (27%). Psychiatric diagnoses preceding SLE diagnosis were present in 122 (19%), incident after SLE diagnosis in 105 (16%), and absent for 423 (65%). In adjusted models, youth with incident psychiatric diagnoses had higher mean ambulatory visits in the year after SLE diagnosis compared to those with preceding ($p<0.01$) and without psychiatric diagnoses ($p<0.001$) (Figure 1). Youth with incident psychiatric diagnoses had more primary care and rheumatology visits than the other groups (Figure 2). Emergency visits were higher for those with preceding ($p<0.01$) and incident psychiatric diagnoses ($p<0.001$), compared to those without (Figure 1). Differences in inpatient visits did not reach statistical significance.

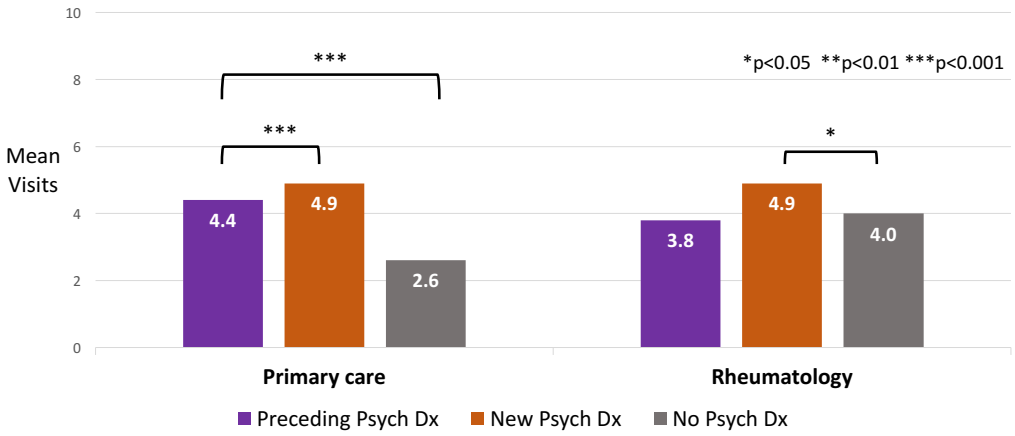
Conclusion: Psychiatric comorbidity is prevalent in newly-diagnosed youth with SLE, and associated with higher utilization of medical services in primary care, rheumatology and acute care settings. Interventions to address existing and newly identified psychiatric comorbidity may decrease health care burden for youth with SLE.

Figure 1: Comparison of Annual Medical Visits by Psychiatric Status for Youth with new-onset SLE



Shown are results from Poisson regression models comparing utilization of medical (non-psychiatric) services by youth in the first year after SLE diagnosis according to psychiatric comorbidity status, adjusting for age, race/ethnicity, household education level, region, history of seizures/stroke, and history of nephritis.

Figure 2: Primary Care and Rheumatology Visits by psychiatric status for youth with new-onset SLE



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