SLEDAI-2K for 1 year as gold standard. After categorizing moderate to severe ≥ 3 of SLEDAI-2K, sensitivity, specificity, positive predictive values (PPV), and negative predictive values for the algorithms to detect patients with moderate to severe SLE were estimated.

Results We included 151 patients with SLE. Their mean age was 34.5 ± 8.8, and 94.7% were female, presenting initial SLEDAI-2K score of 3.8 ± 3.2. For classifying moderate to severe SLE, the PPV of claims-based algorithm ranged from 75.86 to 77.19%. The algorithms (4) and (5) improved PPV up to 77.19%. However, the algorithms modifying glucocorticoid dose to differentiate between moderate and severe SLE or considering any prescriptions of intravenous glucocorticoid did not increase the PPV.

Conclusions The algorithm using diagnostic codes for comorbidities and medications demonstrated PPV of 77.19% to detect moderate to severe SLE. It may be a useful for classifying SLE severity in Korean claims database studies.

LP-073 IDENTIFICATION OF SYSTEMIC LUPUS ERYTHEMATOSUS CLASSIFICATION CRITERIA ATTRIBUTES IN A REGIONAL MEDICAL RECORD DATA NETWORK

[1]Noah Forrest, [1]Kathryn Jackson, [2]Jennifer Pacheco, [1]Vesna Mitrovic, [1,2]Alona Furmanchuk, [1,3]Abel Kho, [4]Rosalind Ramsey-goldman*, [1,3]Theresa Walunas. *[1]Center for Health Information Partnerships, Northwestern University, USA; [2]Center for Genetic Medicine, Northwestern University, USA; [3]Department of Medicine, Division of Internal Medicine and Geriatrics, Northwestern University, USA; [4]Department of Medicine, Division of Rheumatolog, Northwestern University, USA*

10.1136/lupus-2023-KCR.184

Description Systemic Lupus Erythematosus (SLE) is a chronic autoimmune disease characterized by a multi-systemic presentation.[1] Patients with SLE will often see multiple providers operating within different healthcare networks, meaning that pieces of important data related to patients' disease course may be spread across disparate electronic health records[2] (EHR). One method for integrating EHR data from multiple sites leverages clinical data research networks (CDRNs), such as the Chicago Area Patient Centered Outcomes Research Network (CAPriCORN),[3] which includes data from 11 healthcare sites.

Conclusions These results highlight the importance of linking information across multiple healthcare sites in the context of complex diseases such as SLE, as disease-specific information can be gained through data aggregation. Systems such as CAPriCORN may have important applications in improving recruitment for clinical trials, clinical decision-making for rheumatologists, and population-level surveillance of SLE.

REFERENCES

1. Cojocaru M, Cojocaru IM, Silosi I, Vrabie CD. Manifestations of systemic lupus erythematosus. *Maedica* 2011;**6**(4):330.
2. Walunas TL, Jackson KL, Chung AH, Mancera-Cuevas KA, Erickson DL, Ramsey-Goldman R, et al. Disease outcomes and care fragmentation among patients with systemic lupus erythematosus. *Arthritis care & research*. 2017;**69**(9):1369–76.
3. Kho AN, Hynes DM, Goel S, Solomonides AE, Price R, Hota B, et al. CAPriCORN: Chicago Area Patient-Centered Outcomes Research Network. *Journal of the American Medical Informatics Association* 2014;**21**(4):607–11.

LP-074 COST-OF-ILLNESS CHANGES BEFORE AND AFTER DIAGNOSIS OF SYSTEMIC LUPUS ERYTHEMATOSUS: A NATIONWIDE POPULATION-BASED COHORT STUDY IN KOREA

[1]Hyoungyoung Kim*, [1]Soo-Kyung Cho, [1]Jung-Yong Han, [2]Yena Jeon, [3]Sun-Young Jung, [4]Eun Jin Jang, [1]Yoon-Kyoung Sung. *[1]Department of Rheumatology, Hanyang University Hospital for Rheumatic Diseases, Republic of Korea; [2]Department of Statistics, Kyungpook National University, Republic of Korea; [3]College of Pharmacy, Chung-Ang University, Republic of Korea; [4]Department of Information Statistics, Andong National University, Republic of Korea*

10.1136/lupus-2023-KCR.185

Background Systemic lupus erythematosus (SLE) is a chronic autoimmune disorder with various ranges of organ damages, so that patients with SLE might face to considerable medical costs in their early disease courses. We aimed to estimate the progression of direct healthcare costs before and after diagnosis of SLE and to compare healthcare costs by disease severity in Korean patients with SLE.

Methods Incident patients with SLE were identified between 2008 and 2018 using the Korean National Health Insurance databases. Annual direct healthcare costs for five years before and after the diagnosis of SLE were estimated and we compared them with those of age-, sex-, and calendar months-matched controls (1:4). Direct healthcare costs of patients with SLE were compared by disease severity using inverse probability-weighted regression analysis.

Results A total of 11,173 incident SLE patients and 45,500 subjects without SLE were identified. Annual direct healthcare costs per person in SLE group was increasing one year before SLE diagnosis, and reached the highest at the first year of SLE diagnosis, resulting 7.7-fold greater than comparators ($5,694 vs. $736 a year, respectively). Among patients with SLE, having severe SLE resulted in 4.39 times (95% Confidence Interval [CI] 4.123–4.673) higher cost over a period of 1 year. Older age (aged 70–79, 1.455 times, 95% CI 1.304–1.623), having comorbidities such as lupus nephritis (1.89 times, 95% CI 1.801–1.983), avascular necrosis (5.482 times, 95% CI 3.977–7.668), chronic kidney diseases (1.783 times, 95% CI 1.601–1.985), and interstitial lung diseases (1.542 times, 95% CI 1.346–1.765) were associated with higher annual direct healthcare costs of the first year.

Conclusions Patients with SLE incurred significantly high direct healthcare costs compared to subjects without SLE, especially during the first year after diagnosis. Disease severity as well as comorbidities were associated with increased costs of illness in patients with SLE.

LP-078 CHARACTERIZATION OF A COHORT OF PATIENTS WITH A DIAGNOSIS OF SYSTEMIC LUPUS ERYTHEMATOSUS FOLLOWED-UP IN THE CITY OF CALI, COLOMBIA

[1]Diana Fernández, [2]Daniel Fernández, [3]John Jaramillo, [4]Alfredo Vargas, [5]Carlos Toro*. *[1]Rheumatology, Organización Sanitas Internacional. Bogotá, Colombia; [2]Rheymatology, Hospital San Ignacio – Pontifica Universidad Javeriana. Bogotá, Colombia; [3]Rheumatology, Centro de Referencia en Osteoporosis, Reumatología y Dermatología. Cali, Colombia; [4]Rheumatology, Hospital Italiano de Buenos Aires, Argentina; [5]Rheumatology, Centro de Referencia en Osteoporosis, Reumatología y Dermatología. Cali, Colombia*

10.1136/lupus-2023-KCR.186