

Improving the Quality of Care in Systemic Lupus Erythematosus (SLE) through Time-Structured, Information Technology-Enhanced, Quality Improvement Indicator-Driven Patient Management

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SESSION INFORMATION

Date: **Sunday, November 5, 2017**

Session Type: ACR Poster Session A

Session Title: **Systemic Lupus Erythematosus – Clinical Aspects and Treatment Poster I: Biomarkers and Outcomes**

Session Time: 9:00AM-11:00AM

Background/Purpose:

Gaps exist in SLE patient care in monitoring and management of comorbidities, treatment related toxicities, and disease activity, suggesting a lack of well-defined systems of care in SLE. Our hypothesis was that a more time structured, IT enhanced, and QI indicator-driven approach to SLE management would translate to more frequent, comprehensive, and guideline adherent interactions with the lupus patient (“tight” management) that would lead to improved outcomes.

Methods:

To prompt “tight” management of SLE patients at Ochsner main campus (687 patients – 2014 baseline; 644 patients – 2015 interventional; 581 patients – 2016 post-interventional), the following interventions were implemented:

- Lupus Management Module: SLE specific dashboard embedded into Epic EHR. Dashboard incorporates automated SLE management specific reminders, alerts (and facilitates ordering appropriate testing/management), test result tracking, and customized assessments (SELENA-SLEDAI, SLICC- SDI). SLICC-DI assessment is prompted 1x annually. SLEDAI assessment prompted every office visit. The occurrence of flare is prompted tabulated and based on change in SELENA- SLEDAI assessment. Clinicians have the ability to override or confirm the tabulated occurrence of flare. Also, clinicians could manually designate the occurrence of flare independently of the automated tracking system.

- Patient Campaigning: Identification of patients due for SLE specific testing or management activities. Of primary importance were to prompt an office visit at least 1x/6 months and prompt pre office visit lab testing to enable completion of the SELENA- SLEDAI tabulation at the point of care, thereby enabling and facilitating fully informed management decision making at the point of care.

Results:

These interventions prompted improvement in rate of SELENA-SLEDAI application 1x/6 months (26.35% – 2014 baseline period, 43.79% – 2015 interventional period, 39.93% – 2016 post-interventional period; $p < 0.0001$), rate of SLICC-SDI application 1x/12 months (22.83% – 2015 interventional period, 34.25% – 2016 post-interventional period; $p < 0.0001$), rate of performance of ALL appropriate labs 1x/6 months (28.38% – 2014 baseline period, 44.57% – 2015 interventional period, 43.37% – 2016 post-interventional period; $p < 0.0001$), rate of cardiovascular assessment 1x/12 months (35.95% – 2014 baseline period, 51.71% – 2015 interventional period, 46.30% – 2016 post-interventional period; $p < 0.0001$), rate of influenza vaccination 1x/12 months (18.78% – 2014 baseline period, 29.50% – 2015 interventional period, 37.18% – 2016 post-interventional period; $p < 0.0001$), rate of lupus flare (16.30% – 2015 interventional period, 12.05% – 2016 post-interventional period; $p = 0.0338$), and rate of hospitalization (8.59% – 2014 baseline period, 6.68% – 2015 interventional period, 5.68% – 2016 post-interventional period; $p = 0.0466$).

Conclusion:

Time structured, IT enhanced, and QI indicator driven interventional modalities prompted more frequent, more comprehensive, guideline adherent point of care interaction with SLE patients. “Tighter” management resulted in the improved outcomes of both rate of lupus flare and rate of hospitalization in SLE patients.

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