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### **Title**

Developing a continuous quality improvement assessment using a patient-centered approach in optimizing SLE disease control.

### **Permalink**

https://escholarship.org/uc/item/0496s3p4

### Journal

Dermatology Online Journal, 22(9)

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### **Publication Date**

2016

#### DOI

10.5070/D3229032534

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Peer reviewed

# Volume 22 Number 9 September 2016

### **Abstract**

Developing a continuous quality improvement assessment using a patient-centered approach in optimizing SLE disease control.

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**Dermatology Online Journal 22 (9)** 

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Systemic lupus erythematous is a multi-organ autoimmune disease in which the patient has "lost" self- tolerance and developed immune-complexes containing self-antigen that cause disease through tissue inflammation and multi-organ damage. Patients often have unpredictable flares in symptoms with poorly identified triggers. However, it has been suggested in other literature that exogenous exposures, including ingested beef, cigarette smoke, UV radiation, metal-complexing agents, and infections can contribute to exacerbations and improvements in SLE symptoms. New continuous quality improvement assessment survey platform will be develop and utilized to reach out to SLE patients across the globe. This new platform will allow participants to log in and out of the survey enabling them to address 20-50 pages of questions at baseline as well as to edit this delving into the minutia of the activities of daily living as well as lifestyle, diet, and exposures. These exposures can be helpful or harmful to SLE patients. Patients will be asked to update survey responses monthly to capture changes in lifestyle and health as data points over time. Statistical analysis array using complex adaptive systems methodology will be performed on de- identified patient surveys in order to determine if patterns exist in subgroups of SLE patients who experience fluctuations in their disease state over time. Feedback will be given to patients who are then able to adapt accordingly while they participate in the study. Interpretations of this data will then be used to identify which exogenous exposures influence SLE symptoms in specific subgroups of SLE patients. This information will then be used to make improvements in treatment plans for systemic lupus erythematous, and will ultimately result in enhancing the value of SLE patient care.