



# CERVICAL CANCER SCREENING AND PREVENTION IN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS

Through the Rheumatology and Renal clinics

Nancy Desai MD; Michael York MD; Hanni Menn-Josephy MD; Anna Kancharla  
Department of Internal Medicine

## Introduction/Background

- In immunocompromised patients aged 9-26 years, 3 doses of HPV vaccine at 0,1-2 and 6 months are recommended (USPSTF 2018).
- Systemic Lupus Erythematosus (SLE) increases the risk for cervical dysplasia and pre-malignant lesions (Santana et al., 2016)
- General population rate of pap smear completion is 76% (CDC 2016) and rate of HPV vaccination series completion is 49% (CDC 2017).
- We suspect that rates of HPV vaccination and cervical cancer screening in the SLE population at our institution are lower than those of the general population.
- There is currently no process in place to identify these high risk patients as needing screening or prevention in the EMR. These patients are most frequently seen through renal and rheumatology clinic where our institution has a designated coordinator to help arrange appointments and connect to resources. Therefore, there is potential to make high impact changes when patients are seen in these clinics.

## Aim

Part A) To determine how rates of cervical cancer screening and HPV vaccination compare at our institution versus the general population.  
Part B) To design a process to increase rates of cervical cancer screening and HPV vaccination rates in SLE patients in renal and rheumatology clinic.

Goal for pilot:

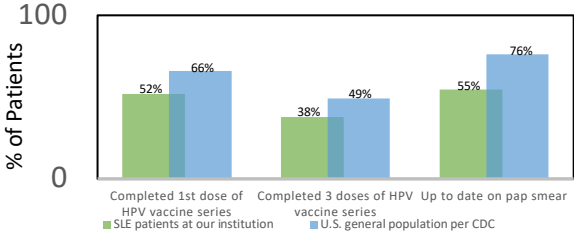
- 80% SLE patients identified as needing a pap smear +/- HPV vaccination notified during next visit
- 80% of SLE patients needing a pap smear are referred to Primary care (PCP) or Gynecology (GYN) clinic
- 80% of SLE patients in renal clinic identified as needing HPV vaccination started on vaccination series
- 80% of SLE patients in rheumatology clinic identified as needing HPV vaccination are referred to PCP or GYN clinic to initiate or complete series

## Project Design

PART A:

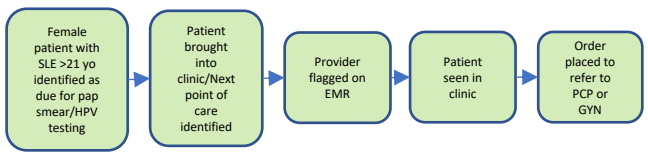
- Comprehensive list of SLE patients seen in renal and rheumatology clinics compiled
- Chart review conducted
- Patients with incomplete HPV vaccination series and/or out of date cervical cancer screening per guidelines identified
- Pre-intervention baseline established

### Pre-Intervention Data

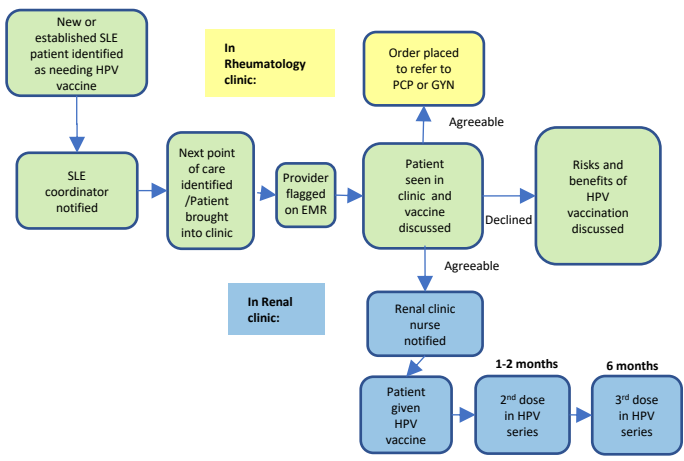


PART B:

### CERVICAL CANCER SCREENING PROCESS MAP



### HPV PREVENTION PROCESS MAP



## Planned Measurements

Process Measures:

- % of patients with SLE seen in rheum clinic with incomplete HPV vaccination series that were referred to PCP or GYN clinic to complete series
- % SLE patients identified needing a pap smear referred to PCP or GYN clinic

Outcome Measures:

- % of patients that are given 1<sup>st</sup> dose of vaccination that complete series in renal clinic
- % of SLE patients with incomplete HPV vaccination series that complete series in renal clinic
- % of SLE patients referred to PCP/GYN that actually undergo pap smear/HPV testing

## Next Steps

- Providers to be flagged about at risk patients through EMR, and appropriate referrals tracked through EMR
- HPV vaccine supply to be procured by renal clinic and administration started by renal clinic nursing staff
- PDSA cycle 1 is ongoing at the time of this submission
- Development of a best practice advisory in EMR