**Program:** Screen, Refer and Track: A Personalized Medicine and Systems-Based Approach to Improve the Outcomes of Patients with Rheumatoid Arthritis at Risk for Cardiovascular Disease at an Academic Medical Center

**A Certified 28 Month Performance Improvement CME (PI CME) Initiative** approved for 20 AMA PRA Category 1 Credits™ and ABIM MOC Part IV points (practice assessment)

**Initiative Goal:** implement a novel rheumatology-focused cardiology consultation service and intervention program for rheumatoid arthritis (RA) patients with increased risk for cardiovascular disease (CVD)

**Background:**

- Patients with RA have an increased risk of CVD as compared to the general population. The European League Against Rheumatism (EULAR) recommends that rheumatologists assess the CVD risks in RA patients. Multiple barriers such as limited time and lack of familiarity of CVD screening guidelines challenge the feasibility of this practice.

- A gap in patient care was identified by our rheumatology and cardiology teams related to RA patients who had modifiable cardiovascular risk factors. Physician leads from each of these clinical areas joined with members of our Professional Education, Biostatistics, Nursing, Medical Assistants, and Health Initiative departments to initiate a 28-month performance and quality improvement (QI) project.
96% of providers reported the activity motivated them to make changes in their practice.

100% reported the process changes are “sustainable” to “somewhat sustainable.”

129% improvement in provider performance across all metrics.

91% increase in referrals of RA patients for CVD risk assessment impacting 371 patients.

Participants:
- 13 Physicians
- 10 Nurses
- 1 RN Patient Navigator
- 3 MAs
- 3 Rehab Therapists

Patient Population = 788 RA patients seen by rheumatology practice during the study interval.

Program Chairs:
- Darlene Kim, MD, FACC
  Assistant Professor
  Department of Medicine
  Division of Cardiology

- Barbara Goldstein, MD, MMSc
  Assistant Professor
  Department of Medicine
  Division of Rheumatology
**PARTICIPATION & TIMELINE**

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<td><strong>PLAN</strong></td>
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**Interventions and Qualitative Achievements:**

- Grand Rounds presentation to increase awareness
- Standing meetings and revised clinic workflow in two divisions (Cardiology and Rheumatology) for improved assessment, documentation impacting best patient care
- Provider and patient education about system resources; Processes and materials sustained
- Order sets for best practice approach to RA patients
- EMR referral to tobacco quitline
- Posters prompting weight management discussion developed for clinic rooms
- Med Facts institution document added to address weight management discussion
- Developed 6-month physical therapy membership program targeted to RA patients
- New weight intervention prompt administered by MAs
- Abstracts accepted and posters presented: ACEhp 2016 ACR, and EULAR Annual Conferences
### IMPROVEMENT: INITIATIVE ONSET TO CONCLUSION

- **Hemoglobin A1c ordered**: 36% vs. 63%
- **Lipid panel ordered**: 16% vs. 45%
- **Quitline referral**: 2% vs. 50%
- **Weight loss intervention**: 16% vs. 69%
- **ASCVD lifetime assessment**: 6% vs. 9%
- **ASCVD 10-year assessment**: 7% vs. 26%
- **MDHAQ/ RAPID3 assessment**: 58% vs. 70%
- **RA patient referral for CVD risk assessment**: 22% vs. 42%

- Of the 788 RA patients seen by the rheumatology practice during the study interval, 371 were referred for evaluation in the RA-CVD clinic because they had at least one modifiable CVD risk factor.

- We have recorded an MDHAQ on 70% of the RA patients and 26% have an ASCVD risk score. Prior to this project, we had not done routine assessments of disease activity or recorded them in our EMR.

- The changes to our workflow have easily enabled the rheumatologists to assess and refer patients. We are successfully meeting 4 CMS Meaningful Use measures.

- The cardiology assessments are useful and can lead to medication additions or changes. Furthermore, the new workflow has enabled the rheumatologists to take part in CVD and diabetes screening and discovery of these diseases.
Combined metrics reflected above -

**RHEUMATOLOGY:**
- Referred to Cardiology for CV risk assessment & appointment scheduled
- MDHAQ / RAPID 3 Assessment
- Weight loss intervention (FitLogix, nutrition consult, BMI card) – for BMI ≥25
- Referred to QuitLogix – for current smoker
- Tobacco cessation intervention – for current smoker
- Document smoking status
- Lipid panel ordered
- Hemoglobin A1c ordered

Combined metrics reflected above -

**CARDIOLOGY:**
- ASCVD 10 year risk assessment
- ASCVD lifetime risk assessment
- Weight loss intervention (FitLogix, nutrition consult, BMI card) – for BMI ≥25
- Referred to QuitLogix – for current smoker
- Document smoking status
- Lipid panel ordered
- Hemoglobin A1c ordered

129% Aggregate improvement in provider performance from baseline to conclusion.