

# Workplace Outreach Program Facilitates Referral Into Physician Care and Diagnosis of Chronic Kidney Disease

# Background

- Chronic kidney disease (CKD) is estimated to affect nearly 15% of adults in the United States.<sup>1</sup>
- Early diagnosis and management can slow the progression of CKD. However, many patients are asymptomatic during the early stages of the disease, making diagnosis difficult.
- Annual employee workplace health programs offer a way to routinely assess estimated glomerular filtration rate (eGFR), a marker of kidney function. Such programs may help identify individuals who may benefit from physician consultation.
- Objective: The investigators of this study evaluated whether a workplace CKD outreach program benefits diagnosis and management of CKD in an employee population.

#### Methods

- Study participants had to meet the following criteria:
  - Participated in an annual health assessment that included measuring eGFR.
  - Had repeated eGFR values at <60 mL/min/1.73 m<sup>2</sup> or repeated albumin-tocreatinine ratios of >30.
- Study coordinators made up to 3 attempts to contact each eligible participant by phone, to explain the risk of CKD and to facilitate referral to physician/specialist care.
- Baseline CKD risk factor profiles were compared among employees who
  participated in the workplace CKD outreach program and those who could not be
  contacted but met the study criteria (ie, control group).
- Claims data were used to determine new CKD diagnoses, nephrologist visits, and physician visits within 5 months after outreach. The likelihoods of each were compared between the participant and control groups.
  - Changes in eGFR values from one year to the next (based on annual health assessments) were evaluated and compared.
  - Analyses were controlled for prevalent CKD.

### Results

- Of the 398 employees who met the study criteria, 156 (39%) participated in the CKD outreach program.
- Baseline CKD risk factor profiles were similar between the participant and control groups.
- Compared to controls, participants had
  - 83% greater odds of being newly diagnosed with CKD (odds ratio [OR], 1.83;
     95% CI, 1.05-3.10)
  - 200% greater odds of having a nephrologist visit (OR, 3.0; 95% CI, 1.38-6.77)
  - 61% greater odds of having a physician visit (OR, 1.61; 95% CI, 1.07-2.42)
  - 41% lower odds of showing a substantial (>5 mL/min/1.73 m²) decline in eGFR in the next annual health assessment (OR, 0.59; 95% CI, 0.32-1.09).
- One participant and none of the control individuals started kidney dialysis.

## Conclusions

 The findings of this study suggests that a workplace CKD outreach program facilitates diagnosis and management of CKD. Poster presentation at the American Society of Nephrology (ASN) Kidney Week, October 22-25, 2020

#### **Authors**

Olga A Iakoubova, Carmen H Tong, Charles M Rowland, Andre Arellano, Lance A Bare, Maren S Fragala, James J Devlin, Charles E Birse

#### **Affiliations**

Quest Diagnostics, San Juan Capistrano, CA, USA

# **ASN Kidney Week 2020**

Date: October 22-25, 2020

# Webpage

https://www.asnonline.org/education/kidneyweek/arch ives/KW20Abstracts.pdf

### References

- United States Renal Data System. 2018 Annual Data Report. Am J Kid Dis. 2019;73:S1-S28. doi:10.1053/j.ajkd.2018.12.001
- Gheewala PA, Zaidi STR, Jose MD, et al. Effectiveness of targeted screening for chronic kidney disease J Nephrol. 2018;31:27-36. doi:10.1007/s40620-017-0375-0
- Galbraith LE, Ronksley PE, Barnieh LJ, et al. The See Kidney Disease targeted screening program for CKD. Clin J Am Soc Nephrol. 2016;11:964-972. doi:10.2215/CJN.11961115