Key Summary of Published Article

COVID-19 Pandemic
Prostate Cancer Screening

Have prostate cancer screening and testing rebounded since the early phase of the pandemic?

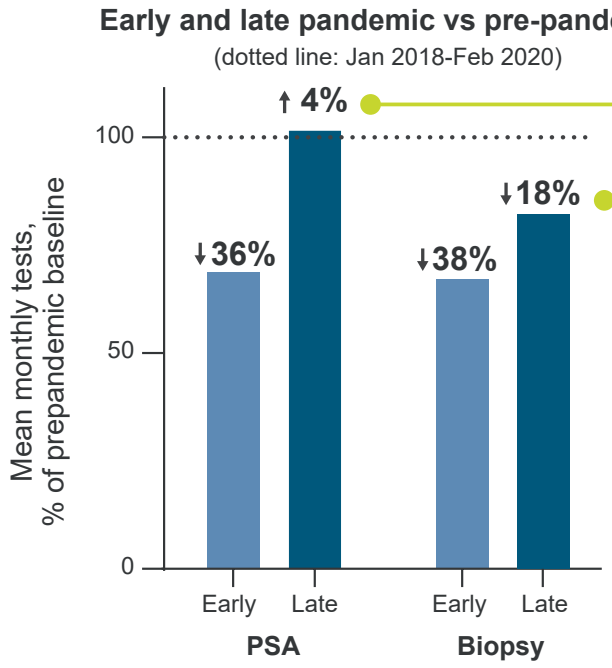
Background

New cancer diagnoses, including prostate cancer, decreased in the early months of the COVID-19 pandemic. How prostate cancer screening may have affected diagnoses has not been explored.

Methods and Results

This study assessed trends in prostate-specific antigen (PSA) and prostate biopsy tests performed at Quest Diagnostics before and during the pandemic (Jan 2018-Dec 2020) for men older than 40 with no history of prostate cancer.

Average monthly PSA and prostate biopsy test volumes[1]



PSA testing rebounded late pandemic but not enough to account for missed testing in the early pandemic period.

Biopsy testing remained below pre-pandemic levels in the late pandemic period.

The numbers of patients with highly elevated PSA (≥50 ng/mL) and biopsy results consistent with prostate cancer (Gleason score ≥8) showed similar trends.

A substantial number of PSA screenings and cancer diagnoses may have been missed during the COVID-19 pandemic. Efforts are needed to return patients to the clinic for screening and diagnostic testing.

[1] Kaufman HW, Chen Z, Niles J, et al. Patterns of Prostate-Specific Antigen Testing and Prostate Biopsies During the COVID-19 Pandemic. *JCO Clin Cancer Inform*. Published online September 5, 2021. doi:10.1200/CCI.21.00074

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Article Title: Patterns of Prostate-Specific Antigen Testing and Prostate Biopsies During the COVID-19 Pandemic

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Background

- During the COVID-19 pandemic, the Centers for Disease Control and Prevention (CDC) recommended that cancer screening and other prevention services be postponed unless considered essential.[1]
- Such guidance led to declines in the rates of diagnosis of several cancer types, including breast, colorectal, lung, pancreatic, gastric, and esophageal cancers, during the early part of the COVID-19 pandemic.[2] Understanding ongoing trends may be helpful in prioritizing efforts to enhance return to care.
- **Objective:** In this study, investigators examined trends in prostate-specific antigen (PSA) testing and prostate biopsy testing during the COVID-19 pandemic.

Methods

- Test results of men ≥40 years of age were included if PSA testing or prostate biopsy testing had been performed at Quest Diagnostics from January 2018 through December 2020 and no previous diagnosis of prostate cancer was indicated by ICD-10 code.
- The mean monthly numbers of PSA tests, prostate biopsy tests, and results consistent with prostate cancer diagnosis were compared between the pre-pandemic period (January 2018-February 2020) and 2 pandemic periods: early (March-May 2020) and later (June-December 2020).

Results

- The analysis included 16,365,833 PSA test and 48,819 prostate biopsy results.
- For PSA tests, the mean monthly number declined 36% from the pre-pandemic period to the early pandemic period (from 465,187 to 295,786; *P*=.01).
  - The mean monthly number of test results ≥50 ng/dL, a level often associated with advanced cancer, declined by 23% (from 659 to 506; *P*=.02).
- For biopsy tests, the mean monthly number declined 38% from the pre-pandemic period to the early pandemic period (from 1,453 to 903; *P*=.01).
  - The mean monthly number of biopsies with a Gleason score of ≥8, indicative of poorly differentiated or high-grade cancer, declined 29% (from 182 to 130; *P*=.02).
- Declines in prostate disease screening were slightly larger among younger (40-59 years of age) than older (≥60 years of age) men.
- During the later pandemic period, mean monthly PSA testing levels rebounded to 4% above the pre-pandemic levels. However, the mean monthly number of biopsy tests was still 18% lower than the pre-pandemic level (*P*=.01).
  - For both PSA tests and biopsies, test volumes rebounded slightly more among older men and men with more severe disease.

Conclusions

- These findings show that prostate cancer screening and diagnoses declined during the early period of the COVID-19 pandemic. Although testing recovered to some extent during the later period of the pandemic, it was not sufficient to account for the missed testing that occurred earlier.
- The findings also illustrate the need to restore routine care for medical conditions unrelated to COVID-19.

References

1. Centers for Disease Control and Prevention. Managing healthcare operations during COVID-19. Accessed August 4, 2021. https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-hcf.html#outpatient-ambulatory
2. Kaufman HW, Chen Z, Niles J. Changes in the number of US patients with newly identified cancer before and during the coronavirus disease 2019 (COVID-19) pandemic. *JAMA Netw Open*. 2020;3:e2017267. doi:10.1001/jamanetworkopen.2020.17267