CANCER SCREENING DURING PANDEMIC

PRAVEEN TUMULA MD FACP

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INTRODUCTION

- Cancer is among the leading causes of death worldwide.
- In 2018, there were 18.1 million new cases and 9.5 million cancer-related deaths worldwide.
- By 2040, the number of new cancer cases per year is expected to rise to 29.5 million and the number of cancer-related deaths to 16.4 million.
- Generally, cancer rates are highest in countries whose populations have the highest life expectancy, education level, and standard of living except for cervical cancer

INTRODUCTION

- 608,570 Americans will die from cancer in 2021, in comparison to 987,000 projected deaths due to COVID-19
- While cancer prevention and screening is integral to personal and population health, the cancer industry is experiencing seismic changes due to the COVID-19 outbreak .
- Disruptions brought by COVID-19 have significantly interrupted almost all aspects of cancer control and prevention infrastructures, including canceled cancer screening services, deferred elective surgeries, dismantled therapeutic regimens, and furloughed health care practitioners.

IMPACT OF COVID ON CANCER SCREENING

- Cancer screening plays a critical role in early cancer detection, but COVID-19 has significantly hampered the cancer screening infrastructure.
- After a US national emergency was declared on March 13, 2020, institutions such as the American Cancer Society have recommended that people should pause their cancer screening plans during the COVID-19 outbreak until further notice. This recommendation, along with other contextual factors (eg, social isolation measures), has caused drastic disruptions in cancer screening services.
- It is estimated that as a result of COVID-19, screenings for cancers of the breast, colon, and cervix have dropped by 94%, 86%, and 94% between January 20, 2020, and April 21, 2020, respectively



Older adults' self-reported screening behaviors and intentions during the COVID-19 pandemic

IMPACT OF THE COVID-19 PANDEMIC ON LONG TRENDS IN CANCER STATISTICS

Delayed Diagnosis	-Reduced screening -Reduced follow up on suspicious findings from screening -Reduced visits to address symptoms	-Treatment delay -Increased Mortality
Deferred Care	-Postponed surgery -Postponed radiation -Postponed chemotherapy	-Treatment delay -Increased Mortality
Reduced/Non-Standard care	-Less intense chemotherapy -Neo-adjuvant chemo instead of immediate surgery	-Reduced response -Increased mortality

 These findings are based on data from IQVIA's medical claims database, which includes more than 205 million patients, over 1.7 billion claims, and 3 billion service records obtained annually

Pandemic effect: Missed cancer diagnoses



Note: Estimates of diagnostics modeled from relevant tumor epidemiology sources. Three-month period ending June 5 compared with baseline month of February 2020.

Source: IQVIA Institute for Human Data Science

 The smaller decrease in CT scans for lung cancer may reflect the generally more serious nature of those tumors or be due to concerns about ruling out COVID-related issues in some patients

Pandemic effect: Cancer screening and monitoring

Reduction in procedures, week ending April 10, versus the weekly average for February.



Note: Medical claims data includes more than 205 million patients, over 1.7 billion claims, and 3 billion service records obtained annually.

Source: IQVIA Real World Claims

CHALLENGES

- Patients
- Health Care Providers
- Health Care Systems

PATIENT CENTERED CHALLENGES

- Social determinants : Lack of insurance, low income due to unemployment, and living in a deprived neighborhood, are often less likely to adopt cancer screening
- Canceling or postponing cancer screenings -> delayed cancer diagnoses could lead to increased mortality. Canceling or postponing cancer screenings may not equate to avoiding a cancer diagnosis, but delayed cancer diagnoses could lead to increased mortality.

HEALTH PRACTIONER CENTERED

- Interruptions in routine job duties and responsibilities,
- Limited knowledge and data during initial phase of Covid
- Decreased patient volumes \rightarrow low revenue (direct and indirect)

HEALTH CARE SYSTEMS

- Loss of lives
- Loss of talent
- Loss of operational activity and revenues.
- Globally, it was estimated that 2,324,069 elective cancer surgeries (37.7%) were canceled or postponed during the 12-week peak disruptions caused by COVID-19

CANCER SCREENING AT RISK POPULATION

- Socioeconomic status
- Racial/Ethnic
- Sex and gender minorities
- Zip code

SOLUTIONS

- Single care visits
- Fewer consultations
- Treatment selection (re-evaluation of risks, reduced intensity therapy, hypofractionation regimens)
- Virtual tumor boards
- Telemonitoring (early discharge)
- Telemedicine/Telehealth (counseling, treatment discussion, follow up, surveillance, Advanced care planning visits, chemo/immunotherapy education classes, survivorship)

THANK YOU