

Impact of COVID-19 pandemic on cancer screening in Eastern North Carolina: Experience of rural health network

Background:

As COVID-19 pandemic was ravaging through United States (US) in early spring, Centers for Medicare and Medicaid Services (CMS) and Centers for Disease Control and Prevention (CDC) issued guidance to health system and general population to delay routine cancer screening and preventive care where deferral is unlikely to result in personal harm.

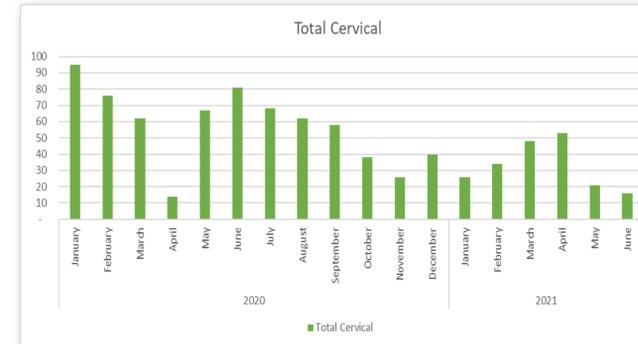
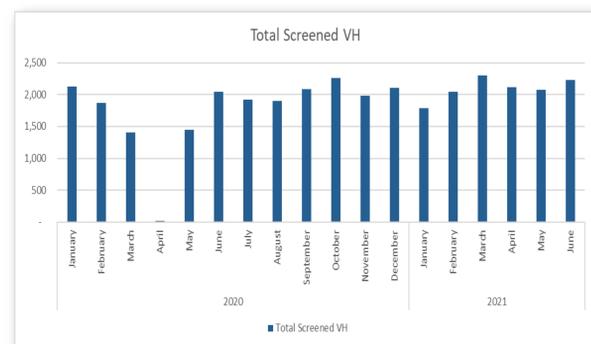
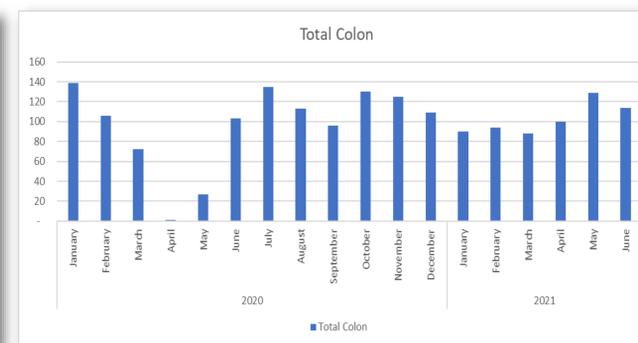
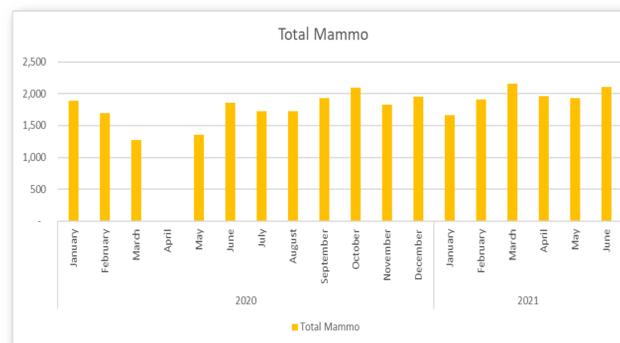
In May 2020, EPIC Health Research Network published a study which reported that preventative cancer screenings dropped to 86% (Colon) and 94% (Breast and Cervical) in US following declaration of COVID-19 National Emergency.

Weekly number of new cancer diagnosis dropped by 46.4% in March 2020 to April 2020.

Purpose of this study is to examine the impact of COVID-19 pandemic on cancer screening at Vidant Health Network. Our rural healthcare network in Eastern NC provides care to 29 counties East of Interstate 95.

Methods:

We analyzed data from our electronic health record EPIC for patients eligible for screening for Breast Cancer, Colonoscopy and Cervical cancer screening as per guidelines from United States Preventive Task Force. We looked our average numbers of screening for mammography, colonoscopy and pap smear by month in 2019 and compared it to same month in 2020.



Results:

The number of cancer screenings had significantly decreased in 2020. Cancer screening rates reached their nadir in April 2020 and started rising. The gap between the expected screenings and the actual screenings created a sizable deficit of “missed” screenings. In later half of 2020 screening rates have begun to rise but has not yet reached previously expected levels. We are planning to use this data to devise strategies to increase awareness to increase screening like public awareness campaign through radio, social media, advertising, community talks and other methods.

Conclusions:

Cancer screening rates dropped down significantly in spring of 2020 because of COVID-19 pandemic. There is a concern that this will lead to patients presenting with advanced disease. Eastern North Carolina has medically- underserved population and existing disparity will only be worsened by pandemic related disruptions.

Screening Test	2020											
	January	February	March	April	May	June	July	August	September	October	November	December
Total Mammo	1,891	1,691	1,269		1,356	1,861	1,722	1,728	1,927	2,092	1,832	1,955
Total Colon	139	106	72	1	27	103	135	113	96	130	125	109
Total Cervical	95	76	62	14	67	81	68	62	58	38	26	40
Total Screened VH	2,125	1,873	1,403	15	1,450	2,045	1,925	1,903	2,081	2,260	1,983	2,104