

INTRODUCTION

- Colorectal cancer (CRC) is the third most common cancer diagnosed in both men and women in the United States and it accounts for the second most common cause of cancer deaths in men and women combined.
- Over the past two decades, the incidence of CRC has decreased due to an increase in patients undergoing screening for CRC.
- Few studies have been performed to investigate the occurrence and mortality rates of CRC over time.
- The objective of this study was to identify time trends for CRC in a large national population cohort admitted to U.S. hospitals from the years 2005-2019.

METHODS

- The National Inpatient Sample (NIS) database for the years 2005-2019 was queried to identify adult (age >18 years) patients admitted with the principal procedural codes for colo-rectal cancer.
- Data were obtained from all US states that contributed to the National Inpatient Sample.
- We estimated trends in the total number of patients yearly, prevalence, mortality, and mortality rate for patients admitted for colorectal cancer.
- Weighted analysis utilizing Stata 17 MP was performed.

RESULTS

- A total of 2,602,474 patients had colorectal cancer, of which 126,735 died.**
- From 2005 to 2019:**
 - the prevalence of colorectal cancer has increased from 0.46% in 2005 to 0.50% in 2019 ($p < 0.01$)**
 - mortality rate has decreased from 6.2% to 4.0% ($p < 0.01$)**
 - hospital length of stay decreased from 7.98 in 2005 to 6.5 days in 2019 ($p < 0.01$)**
 - total hospital charges increased from \$39,309 in 2005 to \$84,790 in 2019 ($p < 0.01$)**
 - mean age decreased from 69.1 to 67.3 ($p < 0.01$) (Table 1).**
- The average mortality rate over this timeframe was 4.8%.**

Table 1: Prevalence and mortality rate of Colorectal Cancer

Year	Total	Prevalence	Mortality (n)	(Mortality rate)	P value (Mortality rate)
2005	182,481	0.46%	11,316	6.2%	$p < 0.0001$
2006	180,528	0.46%	10,454	5.8%	$p < 0.0001$
2007	185,356	0.47%	9,790	5.3%	$p < 0.0001$
2008	184,049	0.46%	10,138	5.5%	$p < 0.0001$
2009	177,130	0.45%	9,242	5.2%	$p < 0.0001$
2010	170,752	0.44%	8,801	5.2%	$p < 0.0001$
2011	178,143	0.46%	8,851	4.9%	$p < 0.0001$
2012	164,795	0.45%	8,035	4.9%	$p < 0.0001$
2013	161,225	0.45%	7,725	4.7%	$p < 0.0001$
2014	162,540	0.46%	7,800	4.8%	$p < 0.0001$
2015	164,420	0.47%	3,658	4.7%	$p < 0.0001$
2016	170,325	0.48%	7,660	4.4%	$p < 0.0001$
2017	171,450	0.48%	7,655	4.4%	$p < 0.0001$
2018	173,910	0.49%	7,945	4.5%	$p < 0.0001$
2019	175,370	0.50%	7,665	4.0%	$p < 0.0001$

DISCUSSION

- Colorectal cancer remains one of the most common malignancies in the US and worldwide.
- Over the past two decades, there have been active measures to increase awareness and surveillance for CRC given its highly-preventable nature.
- The study shows that the efforts to increase screening have significantly improved mortality in CRC and further highlights the importance of further development in detection and treatment options in the future.

DISCLOSURES: NONE