**Reduccions en l’ús de determinats serveis de salut (no relacionats amb la covid) pre-covid vs during-covid**

**Dandena, F., Teklewold, B. & Anteneh, D. Impact of COVID-19 and mitigation plans on essential health services: institutional experience of a hospital in Ethiopia. *BMC Health Serv Res* 21, 1105 (2021).** [**https://doi.org/10.1186/s12913-021-07106-8**](https://doi.org/10.1186/s12913-021-07106-8)

(6 mesos posteriors a la pandemia increment progressiu)

**Abstract**

**Background**

Health systems around the world are being challenged by an on-going COVID-19 pandemic. The COVID-19 pandemic and associated response can have a significant downstream effect on access to routine health care services, and indirectly cause morbidity and mortality from causes other than the disease itself, especially in resource-poor countries such as Ethiopia. This study aimed to explore the impact of the pandemic on these services and measures taken to combat the effect.

**Methods**

The study was conducted at St. Paul’s hospital millennium medical college (SPHMMC) from December 15, 2020 to January 15, 2021 using a comparative cross-sectional study design. We collected data on the number of clients getting different essential health care services from May to October 2019 (Pre COVID) and the same period in 2020 (during a COVID-19 pandemic) from the patient registry book. The analysis was done with SPSS version 24 software.

**Hafidz, F., Kusila, G. R., Nadhira, F., Daniel, Baros, W. A., Revelino, D., Dhanalvin, E., Saut, B., Jaya, C., & Oktavia, A. (2022). Utilization and expenditure of Indonesia National Health Insurance before and during COVID-19 pandemic in Indonesia: a descriptive study. *BKM Public Health and Community Medicine*, *38*(7), 237-244.** [**https://doi.org/10.22146/bkm.v38i7.4964**](https://doi.org/10.22146/bkm.v38i7.4964)

(aquest compara pre pandemia, 2020 i 2021 menciona que comença a augmentar)

**ABSTRACT**

**Purpose:** This study describes the utilization of healthcare facilities before and during the COVID-19 pandemic and the expenditure of national health insurance at primary and secondary healthcare facilities.

**Methods:**This is a descriptive study with a cross-sectional design. We utilized claim data from the National Health Insurance from January 2018 to June 2021. The population included in this study were all Indonesian citizens who contracted COVID-19. Both the Ministry of Health and National Health Insurance expenditure for COVID-19 services were captured. The data were analyzed in frequency and proportions.

**Parikh KD, Ramaiya NH, Kikano EG, Tirumani SH, Pandya H, Stovicek B, Sunshine JL, Plecha DM. COVID-19 Pandemic Impact on Decreased Imaging Utilization: A Single Institutional Experience. Acad Radiol. 2020 Sep;27(9):1204-1213. Epub 2020 Jul 7. PMID: 32665091; PMCID: PMC7340053. DOI:** [**https://doi.org/10.1016/j.acra.2020.06.024**](https://doi.org/10.1016/j.acra.2020.06.024)

**Rationale and Objectives**

Predictive models and anecdotal articles suggest [radiology](https://www.sciencedirect.com/topics/medicine-and-dentistry/radiology) practices were losing 50%-70% of their normal imaging volume during the COVID-19 [pandemic](https://www.sciencedirect.com/topics/medicine-and-dentistry/pandemic). Using actual institutional data, we investigated the change in imaging utilization and revenue during this public health crisis.

**Materials and Methods**

Imaging performed within the 8-week span between March 8 and April 30, 2020 was categorized into the COVID-19 healthcare crisis timeframe. The first week of this date range and the 10 weeks prior were used to derive the normal practice expected volume. A rolling 7-day total value was used for volume tracking and comparison. Total imaging utilization was derived and organized by patient setting (outpatient, inpatient, emergency) and imaging modality (X-ray, CT, [Mammography](https://www.sciencedirect.com/topics/medicine-and-dentistry/mammography), MRI, Nuclear Medicine/PET, US). The three highest volume hospitals were analyzed. Revenue information was collected from the hospital billing system.

**Xu S, Glenn S, Sy L, Qian L, Hong V, Ryan DS, Jacobsen S. Impact of the COVID-19 Pandemic on Health Care Utilization in a Large Integrated Health Care System: Retrospective Cohort Study. J Med Internet Res. 2021 Apr 29;23(4):e26558. Erratum in: J Med Internet Res. 2021 May 5;23(5):e30101. PMID: 33882020; PMCID: PMC8086778. doi:** [**https://doi.org/10.2196/26558**](https://doi.org/10.2196/26558)

**Abstract**

**Background:** The COVID-19 pandemic has caused an abrupt reduction in the use of in-person health care, accompanied by a corresponding surge in the use of telehealth services. However, the extent and nature of changes in health care utilization during the pandemic may differ by care setting. Knowledge of the impact of the pandemic on health care utilization is important to health care organizations and policy makers.

**Objective:** The aims of this study are (1) to evaluate changes in in-person health care utilization and telehealth visits during the COVID-19 pandemic and (2) to assess the difference in changes in health care utilization between the pandemic year 2020 and the prepandemic year 2019.

**Di Bidino R, Cicchetti A. Impact of SARS-CoV-2 on Provided Healthcare. Evidence From the Emergency Phase in Italy. Front Public Health. 2020 Nov 23;8:583583. PMID: 33330324; PMCID: PMC7719765. doi:** [**https://doi.org/10.3389/fpubh.2020.583583**](https://doi.org/10.3389/fpubh.2020.583583)

**Abstract**

The SARS-CoV-2 (COVID-19) pandemic led to an emergency scenario within all aspects of health care, determining reduction in resources for the treatment of other diseases. A literature review was conducted to identify published evidence, from 1 March to 1 June 2020, regarding the impact of COVID-19 on the care provided to patients affected by other diseases. The research is limited to the Italian NHS. The aim is to provide a snapshot of the COVID-19 impact on the NHS and collect useful elements to improve Italian response models. Data available for oncology and cardiology are reported. National surveys, retrospective analyses, and single-hospital evidence are available. We summarized evidence, keeping in mind the entire clinical pathway, from clinical need to access to care to outcomes. Since the beginning, the COVID-19 pandemic was associated with a reduced access to inpatient (-48% for IMA) and outpatient services, with a lower volume of elective surgical procedures (in oncology, from 3.8 to 2.6 median number of procedures/week). Telehealth may plays a key role in this, particularly in oncology. While, for cardiology, evidence on health outcome is already available, in terms of increased fatality rates (for STEMI: 13.7 vs. 4.1%). To better understand the impact of COVID-19 on the health of the population, a broader perspective should be taken. Reasons for reduced access to care must be investigated. Patients fears, misleading communication campaigns, re-arranged clinical pathways could had played a role. In addition, impact on other the status of other patients should be mitigated.

**Faraji-Khiavi F, Jalilian H, Heydari S, Sadeghi R, Saduqi M, Razavinasab SA, Heidari-Jamebozorgi M. Utilization of health services among the elderly in Iran during the COVID-19 outbreak: A cross-sectional study. Health Sci Rep. 2022 Sep 21;5(5):e839. PMID: 36189407; PMCID: PMC9493018. doi:** [**https://doi.org/10.1002/hsr2.839**](https://doi.org/10.1002/hsr2.839)

**Abstract**

**Background and Aims**

Elderly people are potentially vulnerable with a higher need for health services, and utilization of Essential Public Health Services (EPHS) among this group is of high importance. This study aimed to examine the utilization of health services among the elderly in Iran during the coronavirus disease 2019 outbreak.

**Methods**

This was a cross-sectional study conducted in 21 public health centers in Sirjan, Southern Iran, from May to December 2020. A total of 420 elderly patients were selected through a systematic random sampling method. Data were collected using a questionnaire and were analyzed using SPSS v22.0. The binary logistic regression was used to examine the effect of demographic, socioeconomic and morbidity status on inpatient and outpatient healthcare utilization.

**Kazi, D. S., Wadhera, R. K., Shen, C., Ho, K. K. L., Patell, R., Selim, M. H., Urwin, J., Zeidel, M. L., Zimetbaum, P., Tabb, K., & Yeh, R. W. (2020). Decline in Emergent and Urgent Care during the COVID-19 Pandemic. *medRxiv*, 2020.05.14.20096602.** [**https://doi.org/10.1101/2020.05.14.20096602**](https://doi.org/10.1101/2020.05.14.20096602)

**ABSTRACT**

Due to the ongoing coronavirus disease (COVID-19) pandemic, there are concerns that patients may be avoiding care for emergent and urgent health conditions due to fear of contagion or as an unintentional consequence of government orders to postpone “non-essential” services. We therefore sought to evaluate the effect of the COVID-19 pandemic on the number of patient encounters for select emergent or urgent diagnoses at a large tertiary-care academic medical center in Boston. Inpatient diagnoses included acute myocardial infarction (MI) and stroke, and outpatient but urgent diagnoses included new referrals for breast and hematologic malignancies. For each condition, we used a “difference-in-differences” approach to estimate the proportional change in number of encounters during the pandemic (March – April 2020) compared with earlier in the same year (January – February 2020), using equivalent periods in 2019 as a control. After the onset of the pandemic, we observed significant reductions in hospitalizations for MI (difference-in-differences estimate, 0.67; 95%CI, 0.46-0.96; P=0.04) and stroke (difference-in-differences estimate, 0.42; 95%CI, 0.28-0.65; P<0.001) (Table). In the ambulatory setting, there was a reduction in referrals for breast cancer and hematologic cancers, but this did not reach statistical significance until the month after the onset of the pandemic. Our findings suggest an urgent need for public health messaging to ensure that patients continue to seek care for acute emergencies. In addition, decisions by health systems regarding when to reinitiate non-emergent care should carefully factor in the harms of delayed diagnosis and treatment occurring during the COVID-19 pandemic.

**Cao YJ, Chen D, Liu Y, Smith M. Disparities in the Use of In-Person and Telehealth Primary Care Among High- and Low-Risk Medicare Beneficiaries During COVID-19. J Patient Exp. 2021 Dec 13;8:23743735211065274. PMID: 34926805; PMCID: PMC8679021. doi:** [**https://doi.org/10.1177/23743735211065274**](https://doi.org/10.1177/23743735211065274)

**Abstract**

We conducted a retrospective cohort study using a difference-in-differences design to estimate differences in primary care outpatient clinic visit utilization among high- and low-risk Medicare aging beneficiaries from an Accountable Care Organization during the COVID-19 pandemic compared to a control cohort from the previous year. High-risk was defined as having a Hierarchical Condition Category score of 2 or higher. A total of 582 101 patient-month records were analyzed. After adjusting for patient characteristics, those in the high-risk group had 339 (95% CI [333, 345]) monthly outpatient encounters (in-person and telehealth) per 1000 patients compared to 186 (95% CI [182, 190]) in the low-risk group. This represented a 22.8% and 26.5% decline from the previous year in each group, respectively. Within each group, there was lower utilization among those who were older, male, or dually eligible for Medicaid in the high-risk group and among those who were younger, male, or non-white in the low-risk group. Telehealth use was less common among patients who were older, dually eligible for Medicaid or living in rural/suburban areas compared to urban areas. All results were significant at the 95% level. We found significant disparities based on age, gender, insurance status, and non-white race in primary care utilization during the pandemic among Medicare beneficiaries. With the exception of gender, these disparities differed between high- and low-risk groups. Interventions targeting these vulnerable groups may improve health equity in the setting of public health emergencies.

**Mogharab, V., Ostovar, M., Ruszkowski, J. *et al.* Global burden of the COVID-19 associated patient-related delay in emergency healthcare: a panel of systematic review and meta-analyses. *Global Health* 18, 58 (2022).** [**https://doi.org/10.1186/s12992-022-00836-2**](https://doi.org/10.1186/s12992-022-00836-2)

**Abstract**

**Background**

Apart from infecting a large number of people around the world and causing the death of many people, the COVID-19 pandemic seems to have changed the healthcare processes of other diseases by changing the allocation of health resources and changing people’s access or intention to healthcare systems.

**Objective**

To compare the incidence of endpoints marking delayed healthcare seeking in medical emergencies, before and during the pandemic.

**Methods**

Based on a PICO model, medical emergency conditions that need timely intervention was selected to be evaluated as separate panels. In a systematic literature review, PubMed was quarried for each panel for studies comparing the incidence of various medical emergencies before and during the COVID-19 pandemic. Markers of failure/disruption of treatment due to delayed referral were included in the meta-analysis for each panel.

**Grunau, B., Helmer, J., Lee, S. *et al.* Decrease in emergency medical services utilization during early stages of the COVID-19 pandemic in British Columbia. *Can J Emerg Med* 23, 237–241 (2021).** [**https://doi.org/10.1007/s43678-020-00062-y**](https://doi.org/10.1007/s43678-020-00062-y)

**Abstract**

**Objective**

To date in the COVID-19 pandemic, there has been a decrease in patients accessing emergency health services, (EHS) but research has been conducted in areas with a very high incidence of COVID-19. In an area with a low COVID-19 incidence, we estimate changes in EHS use.

**Methods**

We compared EHS encounters in British Columbia from March 15 (the date of school and business closures) to May 15, 2020, when compared to the same period in 2019. We categorized EHS encounters into 18 presenting complaints and prespecified critical care complaints including major trauma, cardiac arrest, stroke, and ST-elevation myocardial infarction. We analyzed by descriptive methods.

**Griewing, Sebastian, Matthias Kalder, Michael Lingenfelder, Uwe Wagner, and Niklas Gremke. 2022. "Impact of the COVID-19 Pandemic on Gyne-Oncological Treatment—A Retrospective Single-Center Analysis of a German University Hospital with 30,525 Patients" Healthcare 10, no. 12: 2386.** [**https://doi.org/10.3390/healthcare10122386**](https://doi.org/10.3390/healthcare10122386)

**Abstract**

The study pursues the objective of drawing a comparison between the data of gyne-oncology, gynecology, and obstetrics patient collectives of a German university hospital regarding the progression of patient number and corresponding treatment data during the five-year period of 2017–2021 to assess the impact of the COVID-19 pandemic on gyne-oncological treatment. Descriptive assessment is based on data extracted from the database of the hospital controlling system QlikView® for patients hospitalized at the Department of Gynecology and Obstetrics of Marburg University Hospital. Gynecology and gyne-oncology experience a maintained decline in patient number (nGynecology: −6% 2019 to 2020, −5% 2019 to 2021; nGyne-Oncology: −6% 2019 to 2020, −2% 2019 to 2021) with varying effects on the specific gyne-oncological main diagnoses. Treatment parameters remain unchanged in relative assessment, but as gyne-oncology constitutes the dominating revenue contributor in gynecology (35.1% of patients, 52.9% of revenue, 2021), the extent of the decrease in total revenue (−18%, 2019 to 2020, −14%, 2019 to 2021) surpasses the decline in patient number. The study displays a negative impact on the gynecology care situation of a German university hospital for the entire pandemic, with an even greater extent on gyne-oncology. This development not only endangers the quality of medical service provision but collaterally pressurizes gynecology service providers.

**Mizee, M., Schaap, L.A., Hoogendijk, E.O. *et al.* Delay or postponement of medical care among older adults in the Netherlands at earlier and later stages of the COVID-19 pandemic. *Aging Clin Exp Res* 34, 2913–2917 (2022).** [**https://doi-org.sire.ub.edu/10.1007/s40520-022-02266-x**](https://doi-org.sire.ub.edu/10.1007/s40520-022-02266-x)

**Abstract**

**Aims**

The aim of the current study was to compare cancellations or postponement of medical care among older adults during the COVID-19 pandemic between 2021 and 2020.

**Methods**

Data of respondents aged ≥ 62 years were used from the longitudinal aging study Amsterdam (LASA), collected in 2020 and 2021, directly after the main COVID-19 waves in the Netherlands. A questionnaire assessed cancellations of medical care and postponed help-seeking behavior. Descriptive analyses were performed.

**Results**

Overall, cancellations declined from 35% in 2020 (sample *n* = 1128) to 17% in 2021 (sample *n* = 1020). Healthcare-initiated cancellations declined from 29 to 8%. Respondent-initiated cancellations declined from 12 to 7%. Postponed help-seeking remained around 8%.

**Hu, N., Nassar, N., Shrapnel, J., Perkes, I., Hodgins, M., O'Leary, F., ... & Lingam, R. (2022). The impact of the COVID-19 pandemic on paediatric health service use within one year after the first pandemic outbreak in New South Wales Australia–a time series analysis. *The Lancet Regional Health-Western Pacific*, *19*, 100311. DOI:** [**https://doi.org/10.1016/j.lanwpc.2021.100311**](https://doi.org/10.1016/j.lanwpc.2021.100311)

**Summary**

**Background**

The first wave of the COVID-19 pandemic hit New South Wales (NSW) Australia in early 2020, followed by a sharp state-wide lockdown from mid-March to mid-May. After the lockdown, there had been a low level of community transmission of COVID-19 over a year. Such pandemic experiences provide unique opportunity to understand the impact of the pandemic on paediatric health service use as countries emerge from the pandemic.

**Methods**

We examined the difference between the observed and the predicted numbers of inpatient admissions and emergency department (ED) attendances, respectively, related to chronic, acute infectious and injury conditions, for each month during the COVID-19 period (January 2020-February 2021), based on the numbers from 2016 to 2019, using records from two major paediatric hospitals in NSW. All analyses were conducted using autoregressive error models and were stratified by patient age, sex and socioeconomic status.

**Conseqüències diagnostics retardats**

**Kim, Seong Hoon, Euna Min, Young Mi Hwang, Yun Suk Choi, and Jin Wook Yi. 2022. "Impact of COVID-19 Pandemic on Thyroid Surgery in a University Hospital in South Korea" Cancers 14, no. 17: 4338.** [**https://doi.org/10.3390/cancers14174338**](https://doi.org/10.3390/cancers14174338)

(aquest diferencia pre-covid, 1 any post-covid I 2 anys post-covid)

**Abstract**

The COVID-19 pandemic has changed healthcare systems around the world. Medical personnel concentrated on infectious disease management and treatments for non-emergency diseases and scheduled surgeries were delayed. We aimed to investigate the change in the severity of thyroid cancer before and after the outbreak of COVID-19 in Korea. We collected three years of data (2019, 2020, and 2021) on patients who received thyroid surgery in a university hospital in South Korea and grouped them as “Before COVID-19”, “After COVID-19 1-year” and “After COVID-19 2-years”. The total number of annual outpatients declined significantly after the outbreak of COVID-19 in both new (1303, 939, and 1098 patients) and follow-up patients (5584, 4609, and 4739 patients). Clinical characteristics, including age, sex, BMI, preoperative cytology results, surgical extent, and final pathologic diagnosis, were not significantly changed after the outbreak of COVID-19. However, the number of days from the first visit to surgery was significantly increased (38.3 ± 32.2, 58.3 ± 105.2, 47.8 ± 124.7 days, *p* = 0.027). Papillary thyroid carcinoma (PTC) patients showed increased proportions of extrathyroidal extension, lymphatic invasion, vascular invasion, and cervical lymph node metastasis. Increased tumor size was observed in patients with follicular tumor (3.5 ± 2.2, 4.0 ± 1.9, 4.3 ± 2.3 cm, *p* = 0.019). After the COVID-19 outbreak, poor prognostic factors for thyroid cancer increased, and an increase in the size of follicular tumors was observed. Due to our study being confined to a single tertiary institution in Incheon city, Korea, nationwide studies that include primary clinics should be required to identify the actual impact of COVID-19 on thyroid disease treatment.

**Kotrych, Daniel, Dawid Ciechanowicz, Jakub Pawlik, Martyna Szyjkowska, Bartłomiej Kwapisz, and Maciej Mądry. 2022. "Delay in Diagnosis and Treatment of Primary Bone Tumors during COVID-19 Pandemic in Poland" Cancers 14, no. 24: 6037.** [**https://doi.org/10.3390/cancers14246037**](https://doi.org/10.3390/cancers14246037)

**Abstract**

Background: The COVID-19 pandemic has affected all of the medical specialties, including orthopedic oncology. Therefore, the aim of the study was to assess how it influenced the diagnostic and therapeutic processes for patients with bone neoplasms. Methods: We evaluated 87 patients treated due for bone neoplasms before (Group I, *n* = 36) and during the COVID-19 pandemic (Group II, *n* = 51). A delay in diagnosis was defined as the period between the initial clinical symptoms and the date of referral to an oncology center. The patients from Group II were asked to complete a short questionnaire regarding the COVID-19 pandemic. Results: The median general delay in diagnosis before the pandemic was 7 months, while during the pandemic, it was 10 months (*p* = 0.728). The biopsy delay was lower in the pre-pandemic group: median-6.5 vs. 12 days (*p* = 0.025). The patients from Group II were diagnosed with larger tumors compared to those in Group I: the median values were 75 vs. 56 mm (*p* = 0.025), respectively. After an X-ray examination, the bone neoplasms were suspected more frequently in the Group II: 63% vs. 44% cases (*p* = 0.024), respectively. In Group II, 20 (60.8%) cases of SARS-CoV-2 infection were reported, however, no respiratory failure cases were noticed. Conclusion: The pandemic affected the diagnostic process of primary bone tumors, resulting in delays in performing biopsies. During the pandemic, the patients reported larger diameters of their bone lesions.

**Teoh, S.E., Masuda, Y., Tan, D.J.H. *et al.* Impact of the COVID-19 pandemic on the epidemiology of out-of-hospital cardiac arrest: a systematic review and meta-analysis. *Ann. Intensive Care* 11, 169 (2021).** [**https://doi.org/10.1186/s13613-021-00957-8**](https://doi.org/10.1186/s13613-021-00957-8)

**Abstract**

**Background**

The coronavirus disease 2019 (COVID-19) pandemic has significantly influenced epidemiology, yet its impact on out-of-hospital cardiac arrest (OHCA) remains unclear. We aimed to evaluate the impact of the pandemic on the incidence and case fatality rate (CFR) of OHCA. We also evaluated the impact on intermediate outcomes and clinical characteristics.

**Methods**

PubMed, EMBASE, Web of Science, Scopus, and Cochrane Library databases were searched from inception to May 3, 2021. Studies were included if they compared OHCA processes and outcomes between the pandemic and historical control time periods. Meta-analyses were performed for primary outcomes [annual incidence, mortality, and case fatality rate (CFR)], secondary outcomes [field termination of resuscitation (TOR), return of spontaneous circulation (ROSC), survival to hospital admission, and survival to hospital discharge], and clinical characteristics (shockable rhythm and etiologies). This study was registered in the International Prospective Register of Systematic Reviews (PROSPERO) (CRD42021253879).

**Di Martino, Giuseppe, Fabrizio Cedrone, Pamela Di Giovanni, Ferdinando Romano, and Tommaso Staniscia. 2022. "Impact of COVID-19 Pandemic on Oncological Surgery Activities: A Retrospective Study from a Southern Italian Region" Healthcare 10, no. 11: 2329. <https://doi.org/10.3390/healthcare10112329>**

**Abstract**

(1) Background: The pandemic had a strong impact on healthcare for other diseases, the so-called collateral damage. This situation heavily impacted the health care system, causing a deferment of surgical admissions. This situation had an immediate and long-term impact on millions of patients with surgical diseases all over the world. The objective of this study was to evaluate the incidence of hospitalizations for colorectal and breast cancers in an Italian region in the year 2020 and compare it with the years 2018–2019. (2) Methods: This retrospective study was performed in the region of Abruzzo, Italy. Monthly number of hospitalizations in the year 2020 was compared with a control period consisting of the average of admissions that occurred in the years 2018–2019 using Poisson regression. (3) Results: A reduction in hospital admissions for all diseases considered was found. In particular, compared with years 2018–2019, admissions for colorectal cancer were 35.71% lower (HRR 0.915; *p* < 0.001), and admissions for breast cancer were 10.36% lower (HRR 0.895; *p* < 0.001) (4) Conclusions: The results of this study showed the decrease of admissions for elective oncological surgery during pandemic, suggesting the need of strategic measures to face the burden of future years’ hospitalizations.

**Ricciardiello, L., Ferrari, C., Cameletti, M., Gaianill, F., Buttitta, F., Bazzoli, F., ... & Laghi, L. (2021). Impact of SARS-CoV-2 pandemic on colorectal cancer screening delay: effect on stage shift and increased mortality. *Clinical Gastroenterology and Hepatology*, *19*(7), 1410-1417. DOI:** [**https://doi.org/10.1016/j.cgh.2020.09.008**](https://doi.org/10.1016/j.cgh.2020.09.008)

**Background & Aims**

The SARS-CoV-2 pandemic had a sudden, dramatic impact on healthcare. In Italy, since the beginning of the pandemic, colorectal cancer (CRC) screening programs have been forcefully suspended. We aimed to evaluate whether screening procedure delays can affect the outcomes of CRC screening.

**Methods**

We built a procedural model considering delays in the time to [colonoscopy](https://www.sciencedirect.com/topics/medicine-and-dentistry/colonoscopy) and estimating the effect on mortality due to up-stage migration of patients. The number of expected CRC cases was computed by using the data of the Italian screened population. Estimates of the effects of delay to colonoscopy on CRC stage, and of stage on mortality were assessed by a meta-analytic approach.

**Mayo, M., Potugari, B., Bzeih, R., Scheidel, C., Carrera, C., & Shellenberger, R. A. (2021). Cancer screening during the COVID-19 pandemic: a systematic review and meta-analysis. *Mayo Clinic Proceedings: Innovations, Quality & Outcomes*, *5*(6), 1109-1117. DOI:** [**https://doi.org/10.1016/j.mayocpiqo.2021.10.003**](https://doi.org/10.1016/j.mayocpiqo.2021.10.003)

**Abstract**

The purpose of this study was to assess the impact of measures designed to mitigate the spread of [coronavirus disease 2019](https://www.sciencedirect.com/topics/medicine-and-dentistry/covid-19) (COVID-19) on worldwide cancer screening. We systematically searched PubMed, Ovid MEDLINE, the Cochrane COVID-19 Study Register, [ClinicalTrials.gov](https://clinicaltrials.gov/), and EMBASE without language restrictions for studies published between January 1, 2021, and February 10, 2021. Studies selected for full-text review contained data on patients screened for any type of cancer during the COVID-19 [pandemic](https://www.sciencedirect.com/topics/medicine-and-dentistry/pandemic) and comparison data from a time interval just prior to the pandemic. Data were obtained through dual extraction. All the included studies were assessed for quality and risk of bias. A meta-analysis was performed on 13 studies: 7 on screening [mammography](https://www.sciencedirect.com/topics/medicine-and-dentistry/mammography), 5 on [colon cancer](https://www.sciencedirect.com/topics/medicine-and-dentistry/colon-cancer) screening, and 3 on [cervical cancer screening](https://www.sciencedirect.com/topics/medicine-and-dentistry/cervical-cancer-screening). Two of our studies reported on more than one type of cancer screening. The screening outcomes were reported as pooled incidence rate ratios using the inverse variance method and random effects models. All studies included in our meta-analysis reported the number of patients screened for cancer in defined time intervals before and during the COVID-19 pandemic. We found that the pooled incidence rate ratios were significantly lower for screening during the COVID-19 pandemic for breast cancer (0.63; 95% CI, 0.53 to 0.77; P<.001), colon cancer (0.11; 95% CI, 0.05 to 0.24; P<.001), and cervical cancer (0.10; 95% CI, 0.04 to 0.24; P<.001). These findings may add further morbidity and mortality to this public health crisis.

**Lee K, Suh M, Jun JK, Choi KS.   Impact of the COVID-19 Pandemic on Gastric Cancer Screening in South Korea: Results From the Korean National Cancer Screening Survey (2017–2021).   J Gastric Cancer. 2022 Oct;22(4):264-272.**[**https://doi.org/10.5230/jgc.2022.22.e36**](https://doi.org/10.5230/jgc.2022.22.e36)

**Abstract**

**Purpose**

The coronavirus disease 2019 (COVID-19) pandemic has significantly disrupted cancer screening services worldwide. We aimed to measure the impact of COVID-19 on gastric cancer screening rates based on age, sex, household income, and residential area.

**Materials and Methods**

We analyzed data from the Korean National Cancer Screening Survey from 2017 to 2021 for adults aged 40–74 years. We evaluated the gastric cancer screening rate within two years in accordance with the National Cancer Screening Program protocol recommendations and that within the previous year. We compared the trends in the pre- and post-COVID-19 outbreak periods.

**Li, T., Nickel, B., Ngo, P., McFadden, K., Brennan, M., Marinovich, M. L., & Houssami, N. (2023). A systematic review of the impact of the COVID-19 pandemic on breast cancer screening and diagnosis. *The Breast*. DOI:** [**https://doi.org/10.1016/j.breast.2023.01.001**](https://doi.org/10.1016/j.breast.2023.01.001)

**Abstract**

**Background**

Breast cancer care has been affected by the COVID-19 pandemic. This systematic review aims to describe the observed pandemic-related changes in clinical and health services outcomes for breast screening and diagnosis.

**Methods**

Seven databases (January 2020–March 2021) were searched to identify studies of breast cancer screening or diagnosis that reported observed outcomes before and related to the pandemic. Findings were presented using a descriptive and narrative approach.

**Bernhard Michalowsky, Wolfgang Hoffmann, Jens Bohlken, Karel Kostev, Effect of the COVID-19 lockdown on disease recognition and utilisation of healthcare services in the older population in Germany: a cross-sectional study, Age and Ageing, Volume 50, Issue 2, March 2021, Pages 317–325,**[**https://doi.org/10.1093/ageing/afaa260**](https://doi.org/10.1093/ageing/afaa260)

**Abstract**

**Background**

There is little evidence about the utilisation of healthcare services and disease recognition in the older population, which was urged to self-isolate during the COVID-19 lockdown.

**Objectives**

We aimed to describe the utilisation of physician consultations, specialist referrals, hospital admissions and the recognition of incident diseases in Germany for this age group during the COVID-19 lockdown.