Welcome to the COVID-19 and Cancer ECHO Series

Use the Q&A portal throughout today’s session to submit your questions! Our expert faculty will be answering your questions live.

All ECHOs take place on the Zoom platform. Review Zoom’s privacy policy at zoom.us/privacy.

This ECHO will be recorded.
# Today’s agenda

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<th>Introductions</th>
<th>Laura Makaroff, DO</th>
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<tr>
<td>Didactic presentation</td>
<td>Thomas K. Varghese Jr. MD, MS, FACS</td>
<td>20 minutes</td>
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<td>Question and answer session</td>
<td>Expert faculty panel</td>
<td>30 minutes</td>
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<td>Wrap-up</td>
<td>Richard Killewald, MNM</td>
<td>5 minutes</td>
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Introductions
INTRODUCTIONS

Expert faculty panel

Lawrence N Shulman, MD, MACP, FASCO
Professor of Medicine
Deputy Director for Clinical Services
Director, Center for Global Cancer Medicine
Abramson Cancer Center at the University of Pennsylvania

F. Marc Stewart, MD
Medical Director and Senior Vice President
Seattle Cancer Care Alliance

Thomas K. Varghese Jr. MD, MS, FACS
Executive Medical Director and Chief Value Officer
Huntsman Cancer Institute – University of Utah
Didactic presentation
Thomas K. Varghese Jr. MD, MS, FACS
Executive Medical Director and Chief Value Officer
Huntsman Cancer Institute – University of Utah
COVID-19 and Cancer ECHO Series
Re-Engaging Patients

Thomas K. Varghese Jr. MD, MS, FACS

May 5, 2020
Cancer Death Rate in U.S. Sees Sharpest One-Year Drop

Breakthrough treatments for lung cancer and melanoma have driven down cancer mortality overall — and from 2016 to 2017 spurred the largest-ever decline.

By Knvul Sheikh

Jan. 8, 2020

US cancer death rate sees largest-ever single-year drop, report says

By Jacqueline Howard, CNN

① Updated 7:17 AM ET, Wed January 8, 2020
Cancer Facts & Figures
2020

Estimated number of new cancer cases for 2020, excluding basal cell and squamous cell skin cancers and in situ carcinomas except urinary bladder. Estimates are not available for Puerto Rico.

Note: State estimates are offered as a rough guide and should be interpreted with caution. State estimates may not add to US total due to rounding.
Figure 1. Trends in Age-adjusted Cancer Death Rates* by Site, Males, US, 1930-2017

*Per 100,000, age adjusted to the 2000 US standard population. †Mortality rates for pancreatic and liver cancers are increasing.

Note: Due to changes in ICD coding, numerator information has changed over time. Rates for cancers of the liver, lung and bronchus, and colon and rectum are affected by these coding changes.

Figure 2. Trends in Age-adjusted Cancer Death Rates* by Site, Females, US, 1930-2017

*Per 100,000, age adjusted to the 2000 US standard population. Rates exclude deaths in Puerto Rico and other US territories. †Uterus refers to uterine cervix and uterine corpus combined. ‡The mortality rate for liver cancer is increasing.

Note: Due to changes in ICD coding, numerator information has changed over time. Rates for cancers of the liver, lung and bronchus, colon and rectum, and uterus are affected by these coding changes.

• Cancer Death rate declined by 29% from 1991 to 2017
  • Largest single-year drop (2.2%) from 2016 to 2017

• Lung Cancer
  • Decline in lung cancer deaths drove the drop
    • Death rates have dropped by 51% in men and 26% in women since 1991
    • Annual reductions in lung cancer deaths of 4-5% per year since 2013

• Some slowing of progress for colorectal, breast and prostate cancer reductions
Reduced Lung-Cancer Mortality with Volume CT Screening in a Randomized Trial


BACKGROUND
There are limited data from randomized trials regarding whether volume-based, low-dose computed tomographic (CT) screening can reduce lung-cancer mortality among male former and current smokers.

METHODS
A total of 13,195 men (primary analysis) and 2,594 women (subgroup analyses) between the ages of 50 and 74 were randomly assigned to undergo CT screening at T0 (baseline), year 1, year 3, and year 5.5 or no screening. We obtained data on cancer diagnosis and the date and cause of death through linkages with national registries in the Netherlands and Belgium, and a review committee confirmed lung cancer as the cause of death when possible. A minimum follow-up of 10 years until December 31, 2015, was completed for all participants.

RESULTS
Among men, the average adherence to CT screening was 90.0%. On average, 9.2% of the screened participants underwent at least one additional CT scan (initially indeterminate). The overall referral rate for suspicious nodules was 2.1%. At 10 years of follow-up, the incidence of lung cancer was 5.58 cases per 1000 person-years in the screening group and 4.91 cases per 1000 person-years in the control group; lung-cancer mortality was 2.50 deaths per 1000 person-years and 3.30 deaths per 1000 person-years, respectively. The cumulative rate ratio for death from lung cancer at 10 years was 0.76 (95% confidence interval [CI], 0.61 to 0.94; P=0.01) in the screening group as compared with the control group, similar to the values at years 8 and 9. Among women, the rate ratio was 0.67 (95% CI, 0.38 to 1.14) at 10 years of follow-up, with values of 0.41 to 0.52 in years 7 through 9.

CONCLUSIONS
In this trial involving high-risk persons, lung-cancer mortality was significantly lower among those who underwent volume CT screening than among those who underwent no screening. There were low rates of follow-up procedures for results suggestive of lung cancer. (Funded by the Netherlands Organization of Health Research and Development and others; NELSON Netherlands Trial Register number, NL580.)
Define the Problem
Identify Risk & Protective Factors
Develop & Test Preventive Strategies
Assure Widespread Adoption

The Public Health Model

Cancer
Screening
Reductions in Smoking
Enrollment into Clinical Trials
Patient Advocacy
Community Awareness
Leadership

• The action of leading a group of people or an organization
• The state or position of being a leader

• *Process of influencing people by providing purpose, direction or motivation to accomplish a goal.*
“A leader is one who knows the way, goes the way, and shows the way.”
— John C. Maxwell
Crisis

- “a time of great danger, difficulty, or confusion when problems must be solved or important decisions must be made”
COVID-19

• March 11, 2020
  • WHO declaration of COVID-19 as a pandemic

• May 4, 2020
  • 3.6 million confirmed cases worldwide
    • 1.2 million in the US
  • 250,000 deaths from the disease
    • 19,000 deaths in NY City
The effective reproduction number ($R_t$) of a viral infection is the mean number of additional infections caused by an initial infection in a population at a specific time.
# of cases

Without Protective Measures

With Protective Measures

Healthcare system capacity

Time since first case

Adapted from CDC / The Economist
From: Public Health Measures and the Reproduction Number of SARS-CoV-2

JAMA. Published online May 01, 2020. doi:10.1001/jama.2020.7878
Preventive Cancer Screenings during COVID-19 Pandemic

**Purpose:** Identify the impact of the COVID-19 pandemic on screening rates for cervical cancer, colon cancer, and breast cancer.

**Data:** These analyses include 2.7 million patients as of April 25, 2020. Data are pooled from 39 health systems representing 190 hospitals spanning 23 states.

**Preliminary Observations:** There is some normal year-over-year variation in screening rates for cervical cancer, colon cancer, and breast cancer. However, screening appointments in March 2020 decreased by 86-94% as compared to mean volumes over January 1, 2017 through January 19, 2020. This decrease in preventive care appointments coincides with the occurrence of the COVID-19 pandemic.

Figure 1. Weekly cancer screening volume vs. time for each type of cancer screening. Colored capsules show the last observed volume.

Figure 2. Weekly cancer screening volume vs. week in year for each kind of cancer screening.

Principles

Core Tenets

Behaviors

@tomvarghesejr
Principles

1. The well-informed leader makes well-informed decisions
2. A leader never forgets the lives s/he impacts
3. “I’ll go first”
4. Human beings are human beings
5. “Teaming is a verb”
Huntsman Cancer Hospital
100 Beds (84 Acute Care, 16 ICU)
8 ORs
6 Endoscopy Suites
Matrix Organization

Huntsman Cancer Institute

Primary Children’s Hospital

Orthopedic Institute

U of U Hospital

Moran Eye Center

Neuro Institute

https://healthcare.utah.edu/locations/

117 Clinical Locations Of Care!
Principles

1. The well-informed leader makes well-informed decisions
   - The Right Team Members
   - The Right Metrics
   - The Right Communication Strategies
<table>
<thead>
<tr>
<th>Metrics</th>
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<tbody>
<tr>
<td>Number of Utahans who have tested positive</td>
</tr>
<tr>
<td>Number of inpatients who have tested positive</td>
</tr>
<tr>
<td>Number of patients in the ICU who have tested positive</td>
</tr>
<tr>
<td>Number of patients in the acute care who have tested positive</td>
</tr>
<tr>
<td>Number of patients in Women’s and Children’s who have tested +</td>
</tr>
<tr>
<td>Number of patients in the ED who have tested positive</td>
</tr>
<tr>
<td>Number of tests pending</td>
</tr>
<tr>
<td>Tests pending in the ICU</td>
</tr>
<tr>
<td>Tests pending in acute care</td>
</tr>
<tr>
<td>Tests pending in ED</td>
</tr>
<tr>
<td>Tests pending in Women’s and Children’s</td>
</tr>
<tr>
<td>Number of patients in all of UHealth who have tested positive</td>
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Five Ways to Follow the Coronavirus Outbreak for Any Metro Area in the U.S.

By The New York Times  Updated April 30, 2020, 8:57 A.M. E.T.

1. The Big Picture: New Cases and Deaths

The simplest way to track the progress of an outbreak is by seeing how many new cases and deaths are reported in a given area each day. For the United States as a whole, these counts appear to have peaked or are starting to flatten:

3. Where outbreaks might come next

4. Where there may be good news ahead

5. The places hit hardest

What is PACE (Surge plan)?

**PRIMARY** – Normal operations. Normal high-quality standard of care. (A busy but typical day in the life of U Health)

**ALTERNATE** – Increased demand but able to flex and maintain normal or near normal operations and standards of care. (An extremely busy day in the life of U Health but we find a way to make do)

**CONTINGENCY** – Demand begins to exceed our capacity. Staffing and workflows drastically alter to accommodate. Standards of care change to triage-base necessities. There is a LIMIT to what we can do

**EMERGENCY** – Demand exceeds ability to deliver care. Crisis standards of care implemented. Distributive justice ensues.
<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
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<tbody>
<tr>
<td>SPACE</td>
<td>Staff housing; other considerations</td>
</tr>
<tr>
<td>STAFF</td>
<td>Essential Roles and expanded roles; Redeployment &amp; train to new roles</td>
</tr>
<tr>
<td>STUFF</td>
<td>Beds; linen; pharmacy; equipment; labs kits; food; PPE</td>
</tr>
<tr>
<td>SECURITY</td>
<td>Access Control; Visitor policy; traffic mgt</td>
</tr>
<tr>
<td>SPECIAL</td>
<td>EVS; Social Work/Case Management</td>
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## PACE: UH Critical Care (DRAFT)

<table>
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<tr>
<th><strong>P</strong></th>
<th><strong>A</strong></th>
<th><strong>C</strong></th>
<th><strong>E</strong></th>
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<tbody>
<tr>
<td>80 ICU 45 VENT</td>
<td>• MICU &amp; SICU primary COVID Units</td>
<td>Routine Staffing</td>
<td></td>
</tr>
</tbody>
</table>
| 115 ICU 80 VENT | • Maximize existing ICUs  
    • Convert UHOSP PACU to 20 bed COVID ICU | PACU & Anesthesia Teams activated to staff |
| 160 ICU 145 VENT | • 10 OR rooms, 20 bed ICU  
    • SSTU- 26+ bed ICU | Platoon-based staffing model |
| >160 ICU >145 VENT | Crisis Standards of Care Implemented | Crisis triage officer team activated |
OR Preparations for COVID-19 Surge

• On March 16, 2020, we limited surgical procedures to those that are emergent, urgent and scheduled but time-sensitive

• Time-sensitive operations are those for which a delay beyond July 15 would result in risk of significant morbidity and mortality
OR Preparations for COVID-19 Surge

• Create Capacity in the Hospital
  • Acute Care Beds
  • ICU Beds
  • New ICU Beds

• COVID-19 Infection control in the OR
  • PPE, aerosolizing procedures, air control, traffic

• Flexing the workforce
Communication

Videos
- Daily Clinical Updates
- Employee Forums
- Management Council
- Nursing Leadership

Click to Start

Web Livestreams
COVID-19 and Cancer

• 3 Issues
  • Delay of Treatment vs. Harm of infection
  • Social Distancing & impact on care delivery
  • Resources
COVID-19 Resources

JNCCN: How to Manage Cancer Care During COVID-19 Pandemic

Experts from the Seattle Cancer Care Alliance (SCCA)—a Member Institution of the National Comprehensive Cancer Network® (NCCN)—are sharing insights and advice on how to continue providing optimal cancer care during the novel coronavirus (COVID-19) pandemic. SCCA includes the Fred Hutchinson Cancer Research Center and the University of Washington, which are located in the epicenter of the COVID-19 outbreak in the United States. The peer-reviewed article sharing best practices is available for free online-ahead-of-print via open access at JNCCN.org.

Coronavirus Disease 2019 (COVID-19) Resources for the Cancer Care Community

NCCN recognizes the rapidly changing medical information relating to COVID-19 in the oncology ecosystem, but understands that a forum for sharing best practices and specific institutional responses may be helpful to others. Therefore, we are expeditiously providing documents and recommendations developed by NCCN Member Institutions or Guideline Panels as resources for oncology care providers. These resources have not been developed or reviewed by the standard NCCN processes, and are provided for informational purposes only. We will post more resources as they become available. Please check back for additional updates.

General
- Visitor Policy Letter (Huntsman Cancer Institute)
- Cancer Patients Factsheet (Huntsman Cancer Institute)
- Patient Scheduling Recommendations (Huntsman Cancer Institute)
- Providing Oncology Treatments in the Outpatient Setting
- PPE Conservation Plan (University of Colorado Cancer Center)
- Self Screen Signs All Translations (UCSF)
Delay Treatment vs. Harm of Infection

• COVID-19 and Cancer
  • Elderly population, lots of co-morbidities
  • Immunocompromised patients
Harm of Infection

• Impact of infection in those undergoing Rx
  • China: 2007 patients from 575 hospitals

Social Distancing Impact

• Traditional Oncology Care
  • Lots of Family Members
  • Patient Advocates
  • Clinical Trials
  • Multiple Clinic visits, Hospital admissions
    • Surgical stays, infusion sessions, radiation planning & Rx, Lab draws, Imaging studies, Collection of biologic specimens
Social Distancing Impact

• New “Normal”
  • Temperature Screening of all individuals coming into the center
  • Zero Visitor Policy
  • Universal Masking Policy
March 25, 2020

Dear Huntsman Cancer Institute patients and visitors,

In order to keep our patients, visitors, providers, and staff safe, Huntsman Cancer Institute (HCI) is taking protective measures against the spread of COVID-19 (coronavirus). These measures follow guidelines from the Centers for Disease Control (CDC) and Utah Department of Health.

At this time, **no visitors (i.e. family, companion) will be allowed** in the HCI cancer hospital.

The decision outlined in this letter was extremely difficult to make, but one we felt was necessary as part of our commitment to keep our patients, staff, and providers safe during the extraordinary circumstances presented by COVID-19.

Visitors may be in HCI’s outpatient clinics, inpatient rooms, and other areas only under the following circumstances:

**End of Life Treatment or Care:**
- 2 visitors only at a time; visitors will have a one-hour time limit, with the exception that 1 partner/support person can remain for the duration of the individual passing.
- No entry is allowed for any person who is suspected of having COVID-19 or has received a positive COVID-19 test.

**1 Visitor Will Be Allowed Under the Following Circumstances:**
- Patients with disruptive behavior, in which a family member is key to their care.
- Patients who have altered mental status or developmental delays (where caregiver provides safety/information).
- All patients who are minors (under age 18)
- No entry is allowed for any individual suspected of COVID-19 or has received a positive COVID-19 test.
Clinical Resources

• Oncology Care consumes Resources!
  • Immunocompromised patients
  • Complex interventions
  • Equipment
We have achieved our goals the past 4-6 weeks of flattening the curve & increasing our capacity
The US doesn’t just need to flatten the curve. It needs to “raise the line.”

How everybody can do their part to help doctors fight coronavirus, in one chart.

By Eliza Barclay, Dylan Scott, and Christina Animashaun | Updated Apr 7, 2020, 3:40pm EDT

Daily number of confirmed cases

Cases without protective measures

Overloaded health system

Goal for increased health system capacity

Cases with protective measures

Current health system capacity

Time since first case

Source: Adapted from CDC and Kumar Rajaram, UCLA

Plan & prepare for a large surge of COVID19 patients

Restore care to our patients at large in the setting of COVID19

The end of stay-at-home orders doesn't mean the pandemic is over. It means they currently have room for you in the ICU.
Path Forward

• **Balance**
  • Risk to Life: Delay in Care vs. Risk of Infection
  • Bed Availability
  • Personal Protective Equipment (PPE)
  • Medications
    • Sedatives – Fentanyl, Propofol

• **Safety for All:** Healthcare Workers, Patients, Team Members
Principles

1. The well-informed leader makes well-informed decisions
2. A leader never forgets the lives s/he impacts
3. “I’ll go first”
4. Human beings are human beings
5. “Teaming is a verb”
• “It is a dynamic activity, not a bounded, static entity.

It is largely determined by the mindset and practices of teamwork, not by design and structures of effective teams.

Teaming is teamwork on the fly.”
How Leaders Make Decisions During Times of Crisis

By Thomas K. Varghese Jr., MD, MS

April 24, 2020

There comes a time in every leader’s job where a crisis emerges. In the Oxford English dictionary, the word “crisis” is defined as “a time of great danger, difficulty, or confusion when problems must be solved or important decisions must be made.”

Two aspects are thus clearly spelled out: the gravity of the situation and the need to make decisions. In health care, when a crisis occurs, lives are at stake. But how does a leader make these decisions? Even better, how does a leader make the right decisions in a world with constantly changing information and where the decisions often need to be made with incomplete information?
Thank You!

thomas.varghese@hsc.utah.edu

@tomvarghesejr
Question and answer session

Use the Q&A portal to submit your questions
How can cancer centers manage the anticipated influx of patients whose treatments we've delayed, while all the ongoing restrictions regarding physical distancing continue to be warranted?
I am working in a high-risk community with a lower than average screening rate to begin with compared to the overall population. Do you have any recommendations for restarting cancer screenings and reengaging patients in screening programs?
What major changes in cancer care delivery will we face once we 'move to our new normal' hopefully post-COVID-19?
How do you think COVID-19 will affect cancer centers' CoC accreditation?
Questions received through Q&A portal

Use the Q&A portal to submit your questions
Wrap up
For more information and COVID-19 resources, visit:

- cancer.org
- nccn.org/covid-19
- cdc.gov

For more about what Project ECHO is doing to respond to COVID-19, visit echo.unm.edu/covid-19
Thank you for joining the COVID-19 and Cancer ECHO Series

You will receive an email later this week that will include the recording and slides used for this session.

Complete the post-survey evaluation and let us know what you liked and what you didn’t about the series.

Look out for future offerings from the American Cancer Society and the National Comprehensive Cancer Network in the summer about how the COVID-19 pandemic impacts cancer.

Questions? Email echo@cancer.org.