

# 2nd Annual

END LUNG CANCER NOW GATHERING Friday, November 4, 2022

NCAA Hall of Champions | Indianapolis, IN

# END LUNG CANCERO NONO



INDIANA UNIVERSITY

MELVIN AND BREN SIMON COMPREHENSIVE CANCER CENTER

ACCELERATING CANCER RESEARCH SINCE 1992



# TABLE OF CONTENTS

Welcome To The Gathering	2
Game Plan	3
Starting Lineup	4
1st Quarter – The Line of Scrimmage	6
2nd Quarter – Key Plays and Strategies	12
3rd Quarter – Team Huddles	20
4th Quarter – Game Purpose	26
Thank You To Our Sponsors	28
Digital Playbook	30
Notes	31



Scan QR code or visit **www.endlungcancernow.iu.edu** to learn more.





Presented by





# WELCOME TO THE GATHERING

On behalf of the End Lung Cancer Now (ELCN) initiative at the Indiana University Melvin and Bren Simon Comprehensive Cancer Center, we welcome you to the 2nd Annual End Lung Cancer Now Gathering. ELCN's vision is to end the suffering and death from lung cancer in the state of Indiana. The formula to do this is to reduce tobacco consumption, increase life-saving screening CTs, improve participation in clinical research, and reduce the stigma around the disease through advocacy.

It's a tall call to action that we realize we cannot do alone. We must build our **team** by identifying, coordinating, and accelerating the ongoing efforts of many informal groups and formal organizations already engaged in this work.

The ELCN Gathering serves as a meeting place for members of these groups and organizations to come together to build relationships and learn alongside one another. The first-ever ELCN Gathering was hosted last year via Zoom and engaged nearly 100 advocates. While the virtual format was successful and served as a launching point to a truly incredible year, we are excited that we will be together in person this year. We have planned a thought-provoking and stimulating morning focused on educating, empowering, and building awareness around the importance of lung cancer screenings. We have an excellent and engaging lineup of keynote speakers and hope that you enjoy the learning and networking opportunities ahead.

Many thanks to those who have helped create this year's Gathering: the ELCN Board, the Gathering planning committee, IU Melvin and Bren Simon Comprehensive Cancer Center, IU School of Medicine, IU Health, our generous sponsors and partners, and ELCN advocates.

Lung screening CT scans can save tens of thousands of lives and having you on our team is the only way we can win.



Nasser Hanna, MD Chair



MacKenzie Church
Executive Director



**Elyse Turula** Advocate Committee Chair

"We need to end lung cancer now, and we can do it." - Elyse, End Lung Cancer Now Advocate

### FOLLOW US ON SOCIAL MEDIA



iusimoncancercenter



**IUCancerCenter** 



iusimoncancercenter



**IUSimonCancerCenter** 



iucancercenter

#ResearchCuresCancer

#EndLungCancerNow

### **GIVE NOW**



https://go.iu.edu/4B13

# GAME PLAN

#### **1**ST QUARTER - THE LINE OF SCRIMMAGE

Room: Auditorium

8:00 a.m. Opening Remarks & End Lung Cancer Now Overview

MacKenzie Church

8:15 a.m. Partner Messages

Bob Whitehead, Lilly Oncology Ninya Bostic, Johnson & Johnson

8:20 a.m. Current State of Lung Cancer

Nasser Hanna, MD

8:30 a.m. Current State of Lung Cancer Screening

Catherine Sears, MD, ATSF

#### 2<sup>nd</sup> QUARTER - KEY PLAYS & STRATEGIES

Room: Auditorium

8:45 a.m. A System-Based Approach to Lung Cancer Screening: The Roswell Park Experience

Mary Reid, MSPH, PhD

9:05 a.m. An Overview of St. Elizabeth's Screening Program - Achieving Success

Michael Gieske, MD

9:25 a.m. Detecting Early Lung Cancer (DELUGE) in the Mississippi Delta

Raymond Osarogiagbon, MD

9:45 a.m. Q&A Panel Discussion

10:15 a.m. Overview of Team Huddles

10:20 a.m. Break

#### **3RD QUARTER - TEAM HUDDLES**

**Rooms: Various** 

10:35 a.m. Team: PCP Education & Engagement / Coach: Dr. Michael Gieske (Auditorium)

Team: Systems-Based Changes / Coach: Dr. Mary Reid (Jesse Owens)

Team: Community Education & Advocacy / Coach: Dr. Raymond Osarogiagbon (Theodore Roosevelt)

11:30 a.m. Break

11:45 a.m. Team Huddle Takeaways & Actions (Auditorium)

12:00 p.m. Break / Lunch

#### **4<sup>TH</sup> QUARTER - GAME PURPOSE**

Room: Palmer Pierce Ballroom

12:30 p.m. Lung Cancer Survivor & Caregiver Story

**12:45 p.m.** Adjourn

# STARTING LINEUP

#### **MacKenzie Church**



MacKenzie Church is the thoracic oncology program manager at the IU Simon Comprehensive Cancer Center, supporting the medical oncology team in maximizing clinical research operations and collaborations. MacKenzie also serves as Executive Director of End Lung Cancer Now, leading the strategic implementation of the initiative's mission.

MacKenzie developed her passion for healthcare education initiatives during her time as program manager at the IU School of Medicine, Division of Continuing Medical Education. She received her bachelor's degree from IUPUI and is currently working towards her Master's in Public Health, with a concentration in Health Policy and Management.

#### Nasser Hanna, MD



Dr. Hanna received his MD from the University of Missouri School of Medicine in Columbia. He followed an internship and residency in internal medicine at the University of Iowa in Iowa City with a fellowship in hematology-oncology at the Indiana University School of Medicine. Dr. Hanna is a professor of medicine at Indiana University School of Medicine, the Tom and Julie Wood Family Foundation Professor of Lung Cancer Clinical Research at IU Melvin and Bren Simon Comprehensive Cancer Center, and serves as the Chair of the End Lung Cancer Now initiative.

Dr. Hanna's research has focused on thoracic oncology, specifically the study and management of all forms of lung cancer. Dr. Hanna's work has been published in book chapters and in journals such as the New England Journal of Medicine, the Journal of Clinical Oncology, and the Journal of Thoracic Oncology.

#### Catherine Sears, MD, ATSF



Dr. Sears is a physician scientist with a focus on lung cancer. Dr. Sears is co-director of the Pulmonary Oncology clinic at the Richard L. Roudebush VA Medical Center, where she sees patients with and at risk for lung cancer. She established and serves as Director of the Indianapolis VA Lung Cancer Screening Program. In addition to her basic and translational research programs, which are focused on understanding early lung cancer development, Dr. Sears participates in clinical research including as site-PI for the multicenter VALOR study (Veterans Affairs Lung Cancer or Stereotactic Radiotherapy, NCT02984761).

Dr. Sears is an active member of a number of professional societies, including the American Thoracic Society, American College of Chest Physicians, the International Society for the Study of Lung Cancer and the American Association for Cancer Research. An important part of her mission is to train and mentor the next generation of clinicians and scientists, serving as a member of the IU Pulmonary and Critical Care Fellowship Committee, as an advisor on graduate student advisory committees and as a research laboratory mentor for post-doctoral fellows (NIH T32 and TL1), residents, medical students (NIH T35) and undergraduates (Life Health Sciences Initiative (LHSI) and the Summer Research Program in Academic Medicine).

### Mary Reid, MSPH, PhD



Dr. Reid is the chief of Cancer Screening, Survivorship and Mentorship at Roswell Park Comprehensive Cancer Center and a key member of the Roswell Park team that is collaborating with Cuban scientists on Cimavax. She is also currently a professor of oncology in the Department of Medicine. As chief of Cancer Screening, Survivorship and Mentorship, Dr. Reid has worked to expand Roswell Park's pioneering Lung Cancer Screening program and develop other cancer screening initiatives within the institute, working with clinical departments to increase the colon and breast screening programs. Dr. Reid is also developing a comprehensive survivorship clinical and outreach program.

She has authored or co-authored more than 95 publications, serves as a regular reviewer for several cancer, nutrition, and epidemiology journals and as a regular ad hoc reviewer for several National Cancer Institute grant mechanisms.

## STARTING LINEUP

#### Michael Gieske, MD



Dr. Gieske graduated from the University of Louisville Medical College in 1984, then completed his family practice residency at St. Elizabeth Medical Center in Edgewood, Ky., in 1987. He subsequently began his family practice career, joining a group of four other independent family practitioners. He was instrumental in growing a large group of 26 independent practitioners across five sites that ultimately transitioned into the larger hospital-based program, St. Elizabeth Physicians, employing more than 180 primary care providers.

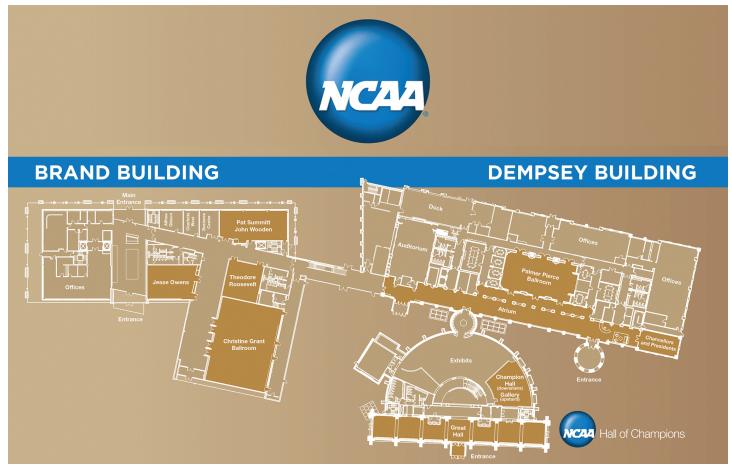
Dr. Gieske serves as the lead physician at his site in Ft. Mitchell, Ky., and the East Division physician director of primary care, overseeing 10 sites. He is the primary care advocate of the Low Dose CT (LDCT) Lung Cancer Screening Program and director of lung cancer screening at St. Elizabeth Hospital, which has evolved to be one of the most successful initiatives in the country ranking in the top 4% worldwide.

#### Raymond Osarogiagbon, MD



Dr. Osarogiagbon is the chief scientist at Baptist Memorial Health Care Corp., director of the Multidisciplinary Thoracic Oncology Program and the Thoracic Oncology Research (ThOR) Group at the Baptist Cancer Center in Memphis, Tenn., and principal investigator of the Baptist Health System/Mid-South Minority-Underserved Consortium NCORP.

Twitter handle: @ROsarogiagbon



# IST QUARTER: THE LINE OF SCRIMMAGE

### The Vision

End the suffering and death from lung cancer in Indiana.

#### The Mission

Educate and empower patient advocates to:

- · Eliminate tobacco use in Indiana.
  - Tobacco causes 80-90% of lung cancer, and more than 1 million Hoosiers still smoke daily.
- Screen all eligible patients with chest CT scans.
  - We know that screening CT scans significantly reduce mortality, but less than 10% of all eligible patients participate in screening chest CT scans in Indiana.
- Increase participation in lung cancer research.
  - Advances in treatment only come from clinical trials but less than 5% of eligible patients currently participate.
- Support lung cancer survivors and their caregivers.
  - Awareness of lung cancer and its associated stigma contribute to ongoing challenges for patients. While support services exist, coordination of these services is often lacking.

#### The Team

A bold group of lung cancer advocates in the Indianapolis community joined forces to find solutions and created an advocate-centric, volunteer-driven, and community-focused initiative.

End Lung Cancer Now (ELCN) is an initiative that was created in 2021 by a bold group of lung cancer advocates in the Indianapolis community who joined forces to find solutions to make lung cancer a rare cause of suffering and death in Indiana. It is an advocate-centric, volunteer-driven, and community-focused initiative that is fully committed to ending this disease. Our team includes a Board of Directors, a diverse group of external advisors, and a growing number of volunteers and advocates.

Teamwork, collaboration, and dedication epitomizes the foundation of this initiative.

Notes			

### The Accomplishments

Since the launch of the initiative in 2021, ELCN has successfully accomplished the following:

- Secured \$140,000 in corporate gifts from Eli Lilly and Johnson & Johnson Pharmaceuticals to support the initiative's community engagement and operational expenses.
- Secured nearly **\$65,000** in sponsorship dollars for the support of the 2nd Annual ELCN Gathering.
- Established key partnerships with both local and national organizations such as:
  - American Cancer Society
  - American Lung Association
  - AstraZeneca
  - Eli Lilly
  - Genentech
  - IU Office of Business Partnerships
  - IU Office of Gift Development

- IUPUI Health & Wellness Promotion
- IUSCCC Cancer Resource Center
- IUSCCC Office of Community Outreach and Engagement
- Johnson & Johnson
- Merck

- Hosted a variety of community engagement events and awareness campaigns to support and engage with advocates, patients, caregivers, and other community members:
  - Power of Your Voice Tobacco Advocacy Training (May 2022)
  - #WeCanBeTheFirst Tobacco Free Generation Campaign (May 2022)
  - National Cancer Survivor's Day Survivor Celebration (June 2022)
  - Participation at the Indiana Black Expo Health Fair (July 2022)
  - Participation at the Indiana Latino Expo Health Fair (October 2022)
- Recruited a team of experts to accelerate the work to achieve our mission, including a board of directors, external advisors, and part-time staff members.

#### **THE PLAN**

ELCN worked closely with the IU School of Medicine Faculty Affairs, Professional Development, and Diversity team to identify key goals to focus time, effort, and resources on over the next 18 months. These goals were identified as being low risk-high reward and have the potential to create tangible, long-lasting impact on our community.

**Goal 1:** Build a dedicated and informed army of advocates and supporters for lung cancer survivors, caregivers, and community members at large.

**Goal 2:** Increase the rate of eligible individuals in Indiana who participate in a lung cancer screening program from 7% to 10%.

**Goal 3:** Establish a diverse and sustainable revenue model and secure enough funding to support 5 years of operations.

#### **CALL TO ACTION**

Join us in the fight to end the suffering and death from lung cancer in Indiana.



#### **BECOME AN ADVOCATE:**

https://endlungcancernow.iu.edu/advocate



#### **GIVE NOW:**

https://go.iu.edu/4B13

#### **BECOME A PARTNER:**

Contact MacKenzie Church, Executive Director, to learn more about how your organization can become an engaged partner in this work.

Contact information: Email: MacKenzie Church | Email- mjchurch@iu.edu | Phone - 317-278-4742

## IST QUARTER: THE LINE OF SCRIMMAGE

### **Current State of Lung Cancer**

#### **KEY INFORMATION**

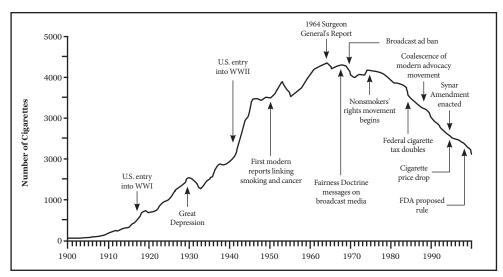
- In 2022, it is expected there will be 39,460 cases of cancer diagnosed in Indiana, including 5920 cases of lung cancer, 5600 cases of breast cancer, 5020 cases of prostate cancer, and 3920 cases of colon cancer.
- In 2022, it is estimated that 1 in 16 men in Indiana will be diagnosed with lung cancer and 1 in 17 women in Indiana will be diagnosed with lung cancer.
- In 2022, for those 70 and older, it is estimated that 1 in 14 women in Indiana will be diagnosed with breast cancer and 1 in 21 will be diagnosed with lung cancer.
- Lung cancer is the leading cause of cancer-related death in both men and women in Indiana.

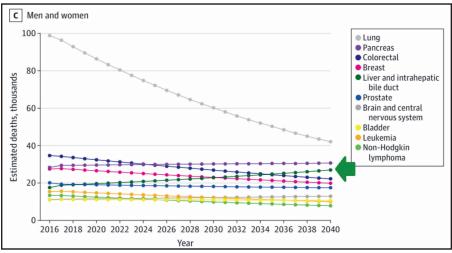
- More women will die from lung cancer this year than breast cancer, ovarian cancer, and cervical cancer combined.
- In 2022, it is expected there will be 13,570 deaths due to cancer in Indiana, including 3470 from lung cancer, 1160 from colon cancer, and 880 from breast cancer.
- Lung cancer mortality is decreasing by 5% per year!
- In 1965, 54% of men and 38% of women between the ages of 18-24 smoked cigarettes on a regular basis; in 2019, this was 8% for men and women.

Figure 3. Leading Sites of New Cancer Cases and Deaths - 2022 Estimates Female 31% 287.850 268,490 27% Prostate Lung & bronchus 118.830 13% Lung & bronchus 117,900 12% Colon & rectum 8% 70,340 Estimated New Cases Colon & rectum 8% 80,690 65,950 7% Uterine corpus Urinary bladder 61.700 6% Melanoma of the skin 42,600 5% Melanoma of the skin 57,180 6% Non-Hodgkin lymphoma 36,350 4% Kidney & renal pelvis 50.290 5% Thyroid 31,940 3% Non-Hodgkin lymphoma 4% 44.120 Pancreas 29,240 3% Oral cavity & pharnyx 38,700 4% Kidney & renal pelvis 3% 28,710 Leukemia 4% 35,810 Leukemia 3% 24,840 Pancreas 32.970 3% All sites 934,870 All sites 983,160 Male **Female** Lung & bronchus 21% Lung & bronchus 61,360 21% 68,820 Prostate 34,500 11% Breast 43,250 15% Colon & rectum 28.400 9% Colon & rectum 24,180 8% **Estimated Deaths** Pancreas 25,970 8% Pancreas 23,860 8% Liver & intrahepatic bile duct 20,420 6% 12,810 4% Ovary 4% 12,550 4% Leukemia 14,020 Uterine corpus 13,250 4% Liver & intrahepatic bile duct 4% Esophagus 10,100 4% Urinary bladder 12,120 Leukemia 9,980 3% Non-Hodgkin lymphoma 11.700 4% Non-Hodgkin Lymphoma 8.550 3% 3% Brain & other nervous system 10,710 3% Brain & other nervous system 7,570 322.090 287,270

Estimates are rounded to the nearest 10, and cases exclude basal cell and squamous cell skin cancers and in situ carcinoma except urinary bladder. Estimates do not include Puerto Rico or other US territories. Ranking is based on modeled projects and may differ from the most recent observed data.

©2022, American Cancer Society, Inc., Surveillance and Health Equity Science





#### **KEY TAKEAWAYS**

- Advocacy to reduce stigma of lung cancer, reduce tobacco consumption, increase screening lung CT scans, and increasing enrollment on clinical trials is the formula to make lung cancer a rare cause of cancer-death.
- Lung cancer was once a rare diagnosis in the early 20th century. With what we do today, it will be a rare cause of death for this next generation of Hoosiers.
- We need a strong partnerships between advocates, system leaders, community leaders, and primary care providers to make lung cancer a rare cause of suffering and death (again).

#### **KEY PLAYS**

- Work with systems leaders to integrate screening lung CT scans into the electronic medical record.
- Work with primary care providers to make ordering screening lung CT scans in eligible people a measure of quality care.
- Work with leaders in the community and government to help educate the public on the importance of screening CT lung scans.

Contact information: Nasser Hanna, MD | Email: nhanna@iu.edu

# IST QUARTER: THE LINE OF SCRIMMAGE

### **Current State of Lung Cancer Screening**

#### **KEY INFORMATION**

- Lung cancer remains the most common cause of cancer death in both men and women.
- Most lung cancer is diagnosed when it has already spread.
- Most people diagnosed with early, potentially curable lung cancer have no symptoms.
- Chest x-ray (CXR) is not sensitive enough to screening for lung cancer, and should not be routinely used for lung cancer screening.
- Chest CT imaging detects lung cancer at an earlier stage.
- In those at high risk, yearly lung cancer screening by lowdose CT chest, lung cancer screening can decrease the risk of dying from lung cancer by at least 20%.
- Lung cancer screening is unique compared to other cancer screening, as selection is based on patient habits (in addition to age) and requires additional components.
- Lung cancer screening needs to include a shared decisionmaking visit discussion, tobacco treatment counseling, low-dose CT chest imaging, protocolized radiologist interpretation and follow-up (ideally with review, referral and further work-up).

- Lung cancer screening programs which include standardized reporting, protocolized follow-up and rapid referral for diagnosis and treatment provide the most benefit.
- Pulmonary nodules are common on screening lung CTs (noted on 25-60% of low-dose CT chest), but < 5% are ultimately lung cancer. High-quality, protocol-driven lung cancer screening programs can minimize risks, including patient anxiety and procedures on benign disease.
- Biggest need in lung cancer screening is to understand and address barriers to screening (patient factors and resources).
- The uptake of lung cancer screening in those eligible for screening is increasing but is well below that needed to change the impact on lung cancer deaths in our population.
- Other areas of need: identification of high-risk exposures/ populations who would benefit but are not currently eligible for screening and to improve compliance with follow-up.
- Improvements focused on tobacco treatment may expand the benefits of lung cancer screening programs.

Notes			

#### **KEY TAKEAWAYS**

- Participation in a lung cancer screening program, which includes yearly low-dose CT chest, increases survival from lung cancer.
- Current eligibility for lung cancer screening (USPSTF 2021): between 50-80 years of age; current smoker or recently quit within the last 15 years; smoked more than 20 pack/year (i.e., 1 pack/day x 20 years, ½ pack/day x 40 years, 2 packs/day x 10 years, etc.).
- For most eligible people, the benefits of lung cancer screening greatly outweigh the risks.
- Lung cancer screening is quick, safe, and covered by most payers.

#### **KEY PLAYS**

- Ask your physician and check your local programs if you fit
  the criteria for lung cancer screening, and encourage those
  you know who fit the criteria to get screened.
- Support allocation of resources to support lung cancer screening programs, which require experienced providers for shared decision making, imaging interpretation, quality control, tobacco treatment counseling and databases for patient tracking and yearly follow-up.
- Advocate for more high-quality lung cancer screening programs for those who will benefit and for better support with tobacco treatment.

Notes		

Catherine R. Sears, M.D. | Email: crufatto@iu.edu

# IST QUARTER: THE LINE OF SCRIMMAGE

# A System-Based Approach to Lung Cancer Screening: The Roswell Park Experience

#### PREVIOUS STATE OF SCREENING PROGRAM

Roswell Park's screening program consisted of very small numbers of patients that we referred only by community providers.

#### **KEY STRATEGIES FOR IMPROVEMENT**

- Get administrative buy-in.
- Know your source population of patients.
- Know your community provider structure.
- Build a business plan that includes downstream revenue and cancer diagnoses.
- Focus on patient-centered care.
- Start small- aim big!

#### **CURRENT STATE OF SCREENING PROGRAM**

The screening program now includes vibrant clinics located at four sites with a mobile CT unit for outreach.

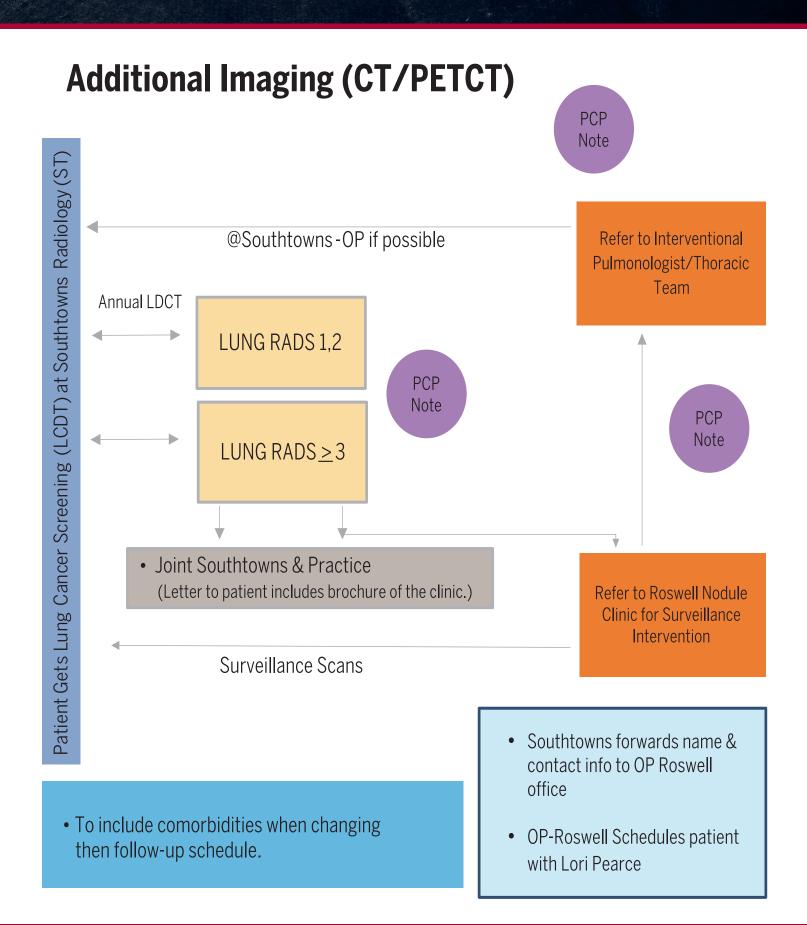
#### **LEASONS LEARNED**

- Understand the barriers to lung cancer screening.
- Know your community population: social determinants, access issues, smoking rates, and how to communicate with them.
- Lung cancer screening makes money.

Notes			

Contact information: Mary Reid, MSPH, PhD

Website - https://www.roswellpark.org/cancer/lung/prevention-screening/lung-cancer-screening-program



## 2ND QUARTER: KEY PLAYS and STRATEGIES

### An Overview of St. Elizabeth's Screening Program - Achieving Success

#### PREVIOUS STATE OF SCREENING PROGRAM

St. Elizabeth's lung screening program originated in 2013 and was began by a radiologist and pulmonologist. It really did not begin to accelerate until we hired a dedicated thoracic surgeon and promoted to the PCPs.

#### **KEY STRATEGIES FOR IMPROVEMENT**

- Leadership and Infrastructure Build a Team
- Physician/Provider, Navigation Expertise
- Accreditation and Registry Participation
- EMR Tools and Prompts Simplify and Encourage
- Data Collection, Performance, and Status Reports
- Communicate, Collaborate, Educate

- Demonstrate and refine ROI FFS & Value-Based Care
- IPNP, IPN Software
- Participate State-Based Initiatives
- National Organizations, Advocacy, Patient Testimonials
- Innovate, Evolve, Research, Policy

#### **CURRENT STATE OF SCREENING PROGRAM**

Our community hospital, through a team-based approach, has built one of the most robust LCS programs in the country. We will complete our 30 thousandth LCS by yearend, 8,000 this year alone. We performed 808 LDCT LCSs in September. Most importantly, 58% of these are in stage I, 70% in the early stages, I or II. We have widespread buy-in of PCPs, SCPs, associates, and administration. We

have demonstrated profound stage migration. We are finding one lung cancer for every 65 LCSs we do, and for every 32 unique patients screened. We had 49.6% uptake by CMS 2015 criteria last year and are on track to attain 51.2% by same measure this year and 46.1% by USPSTF 2021 criteria by yearend. Our adherence rate is 68.5% for 2021.

#### **LEASONS LEARNED**

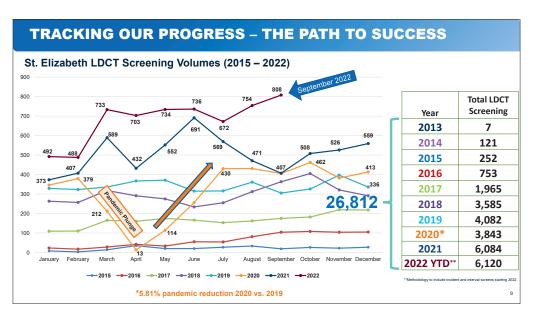
### CRITICAL COMPONENTS TO A SUCCESSFUL PROGRAM:

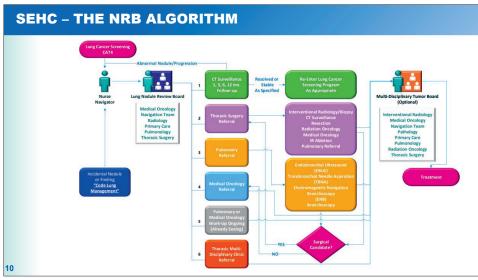
- Primary Care buy-in and confidence
- Executive support
- A programmatic and system-based coordination of care
- Good, homegrown data
- Team-based approach

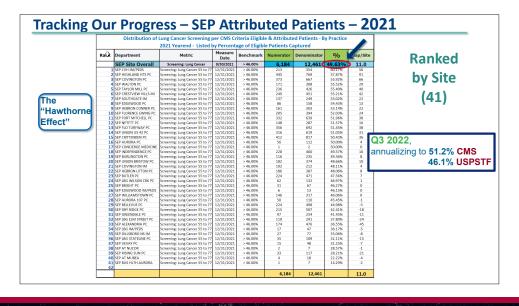
# GREAT AVENUES FOR CATALYZING AWARENESS, IMPROVEMENT, AND ACCELERATION OF A PROGRAM:

- Working with patient advocates & sharing success stories
- Advocacy organizations
- Government policy movers
- Social media
- State-based initiatives

Contact information: Michael Gieske, MD | michael.gieske@stelizabeth.com | SEHC LCSP 859-301-4072







# 2ND QUARTER: KEY PLAYS and STRATEGIES

R		Par	tient	Sex	MRN	DOB	PY	baseline or annua		Date Suspicious Scan	CAT	Location, Size	Presented in NRB	Date Date d Diagnosed Diagnosed (biopsy (pathologist obtained) signed)		oe of Cancer	Stage at cer Diagnosis Synchr. Status Work-up, Additional Procedures AXCa					Treatment							
1	271	Smith, John		м	0000001	8/16/195	i4 47	В	1	1/6/2021	48	RLL, 11 X 14 mm, with multifocal patchy nodules bilat.	YES	2/2/2021	2/3/2021	NSCLC laden	ocarcinoma	a IV		deceased	2/2/21 IR TTNA + adenors; 2/22/21 PET multiple mets throughout liver and abd, both lungs, LN, RLI, SUV+ 6.53; CT brain 2/24/21 - neg.;	, and throughout	hout 2/23/21 Kloeker - Considering his restricted mobility and significant for him to tolerate and we are hoping for targeted thy				prifice		
	272	Smith, Mary		F	0000002	2/15/196	13 43	В	1	1/13/2021	4 A	L Hillar mass, 2 cm, obstruction LUL bronchus	YES	4/14/2021	4/16/2021		istatic iocarcinoma	a IV A alive 4/1/21 PET Linitum SUV 15.8, multi-bilat + LN, R acctabulum SUV 9.7, 4/14/21 IR bx iii 4/128/21 MR lorsin neg.		bx R acetabulum;	Plan for 4 cycl consolidative		palliative Carbo	oplati-					
	273	Jones, Georg	ge	м	0000003	3/3/196	1 40	В	1	1/29/2021	48	RUL, apex, 19 x 15 mm, mult other small scattered nodules	YES	7/20/2021	7/20/2021	NSCLC poort	ocarcinoma, ly differentiated, and acinar types	sted, a I A 2 alive 2/23/21 PET RUL +SUV 5.8 isolated; 6/3/21 CT chest WOC stable			2/23/21 PET RUL +SUV S 8 isolated; 6/3/21 CT chest WOC stable		7/20/21 RATS acinar types, I	RUL wedge, M L5 cm	UV				
	274	Mancion, Jo	nge	м	0000004	3/27/194	15 45	A	2	2/1/2021	4 A	LLL, 7 mm - stable; new 7 mm RUL, prev 5 mm, LUL pleural 10 mm	YES	6/4/2021	6/4/2021	NSCLC aden	ly differentiated locarcinoma with tinal unophenotype	rms with a III A ? alive described above. Interval enlargement and now fully solid appearance of pleural-base the medial aspect LUL now measuring 11 x 8 mm (previously measuring 11 x 4 mm) or		l-based nodule at	6/4/21 RATS F invasion	RP							
	275	Sineva, Chris	stine	,	0000005	1/8/194	6 100	В	1	2/8/2021	4 A	RUL, 1.9 X 1.8 cm, RLL 1 X 0.9	YES	6/24/2021	6/25/2021	NSCLC squar carcin	dinizing mous cell nome, mod to ly differentiated												
>40 metrics tracked for every cancer found																													
SBI WO	TD		Surgery Stage I	Treatment Initiation Date	susp. scan to trtmnt, days	diagnosis to trtmnt, days, biopsy	diagn to trtr days, p	nnt, iath			Response			Complications, Adverse events							Miscellaneous	Date of First	t Age at First LCS	Age at suspicious scan	Smoking Status at 1st LCS	Smoking Status at Susp Scan	Smoking Status subsequent/ Present	Date Quit, or <u>C</u> urrent, <u>D</u> eceased	Date
				NA	NA.	NA	NA														2/21 Biopsy is limited with abundant necrosis and predominantly solid dive and P40 is negative confirming the diagnosis.	1/6/2021	66	66	F	F	F	5/5/2020	4/8/
				6/8/2021	NA	NA	NA										for CK2	10/18/19 LIDCT LCS ordered, not done; 1/29/20 CT CAP WC - neg; The tumor cells are positive for CKT, and negat for CK20, TTF-1 (2 clones), PAV-8, CDK-2, ER, GATA-3, mammaglobin, WT-1, p40. History of lung mass is noted. The immunostatins profile is not specific, but is compatible with lung origin.				57	57	F	F	F	12/30/2012		
	1	woтр	x	7/20/2021	172	0	0															1/29/2021	59	59	s	s	Q	6/15/2021	
		4		6/4/2021	123	0	0										adenoci	Based on clinical and radiographic information the tumor is considered and staged as lung primary adenocarcinoms, however, the immunohistochemical profile is not specific and the differential diagnosis in primary lung adenocarcinoma with intestinal phenotype or metastasis from gastroinestinal/pancreatic ori Additional lusper actionograph and consonory might be helpful to exclude this positility. Neg colonocopy:				7/31/2020	75	75	F	F	F	1/1/2007	
					169	33	32											positive for p40 and negative for TTF-1, confirming the diagnosis of squamous cell carcinoma. C031 immunosta was performed on block TS with appropriate controls and highlights tumor invasion of arterial walls, though no tumor is seen in immohasouslus score.				2/8/2021	75	75	s		Q	4/1/2021	

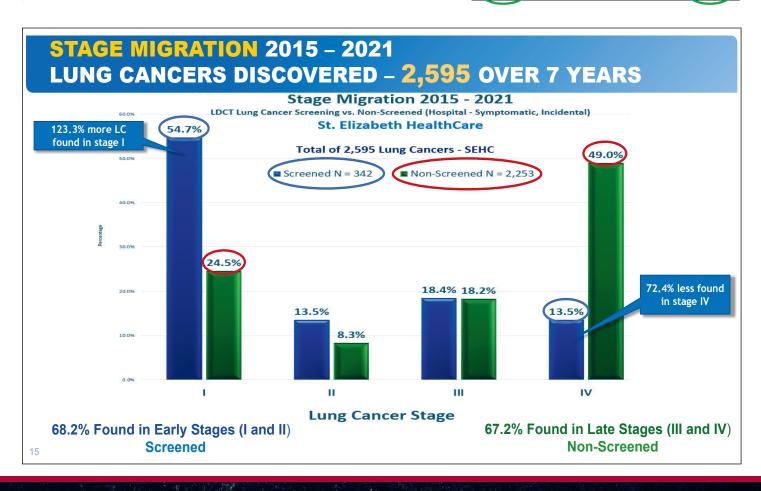
### **Performance of LCSP, Histology - SEHC**

Overall Lung Cancer Discovery									
Stage - all yrs			N		%				
Stage I			245		58.06%				
Stage II			50		11.85%				
Stage III			<b>74</b>		17.54%				
Stage IV			53		12.56%				
Unknown		0			0.00%				
Total		422			69.9% found in				
Stage I & II		69	9.9%		early stages				
Average (Mean)	PY =	= 60.		.5					
Median PY	=		51	.0					
Male		21	6	51	.2%				
Female		20	6		.8%				
		42	2	10	00%				

Lung Cancer Type										
Туре		N	%							
adenocarc	•	178	42.2%							
squamous		134	31.8%							
small cell		48	11.4%							
limited	25									
extensive	22									
large cell		9	2.1%							
carcinoid		6	1.4%							
other		6	1.4%							
unknown		41	9.7%							
		422	100%							

### **REGISTRY SUMMARY – THROUGH SEPTEMBER 2022**

	Analysis of Positive Scans - St. Elizabeth Healthcare 1/1/2015 - 2022 YTD												
Year	2015	2016	2017	2018	2019	2020	2021	2022	TOTAL	% Scans	False Positive	False Discovery	
Total LDCT LC Scr. SCANS	252	753	1965	3585	4082	3843	6084	5767	26331	*	**	***	
Tot. # Unique Patients Scanned	237	716	1649	2751	2267	1332	1964	2064	12980				
Annual					1815	2511	4120	3703	12149				
Baseline					2267	1332	1964	2064	7627				
Annual LCS - % of total					44.5%	65.3%	67.7%	64.2%					
Follow-Up/Interval Screens	9	32	100	168	293	286	430	353	1671				
Cat 1	127	457	1164	2194	2312	2284	3630	3248	15416	58.55%			
Cat 2	76	201	506	887	1250	1118	1760	1775	7573	28.76%			
Cat 3 (Indeterminate)	22	47	143	240	250	256	401	411	1770	6.72%			
Cat 4 (Suspicious) - Total	27	48	152	264	270	185	293	320	1559	5.92%	4.38%	73.89%	
Cat 4A	16	33	108	186	188	134	230	262	1157	4.39%			
Cat 4B	11	15	44	78	82	45	58	54	387	1.47%			
Cat 4X						6	5	4	15	0.06%			
Cat 3 + Cat 4 - Combined	49	95	295	504	520	441	694	731	3329	12.64%	11.10%	87.77%	
Lung Cancer	5	16	37	82	81	51	66	69	407	1.55%	#Lung Cancer	Screens to find 1 LC =	(
										3.14%	#Unique Patients S	creened to find 1 LC =	(



## 2ND QUARTER: KEY PLAYS and STRATEGIES

### Detecting Early Lung Cancer (DELUGE) in the Mississippi Delta

#### PREVIOUS STATE OF SCREENING PROGRAM

Prior to 2015, we had no screening program. In 2014, knowing that the Medicare Coverage Decision for lung cancer screening was likely to be favorable, after the USPSTF recommendation, we decided to prepare to take on the complexity of starting up a screening program by setting up a structured program to promote guideline-concordant

management of patients with incidentally detected lung nodules. Shortly after we went live with the Lung Nodule Program (hired an RN and LPN to do the triaging), the Medicare Coverage Decision was announced, and we wound up developing both programs almost concurrently.

#### KEY STRATEGIES FOR IMPROVEMENT THAT WERE IMPLEMENTED

- We procured a \$1M institutional grant to start up our Lung Nodule Program, including hiring the staff, which expanded to encompass the screening program.
- We constructed a prospective observational database and hired a team of data managers for prospective data collection.
- We negotiated with our healthcare system to defray the co-pays and any additional expenses of participants (typically those in the Lung Nodule Program), including the uninsured.
- We arranged for the Baptist Healthcare Foundation to support providing Charity Care to eligible patients who were uninsured.

#### **CURRENT STATE OF SCREENING PROGRAM**

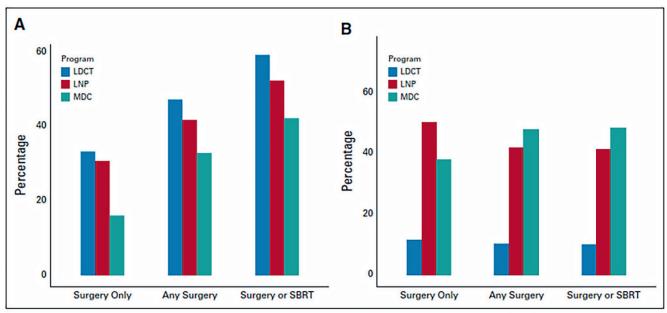
- From 2015 to May 2021, 5,659 persons had been enrolled in our LDCT lung cancer screening program; 15,461 persons in our Lung Nodule Program.
- Over the same time span, 150 and 698 patients had been diagnosed with lung cancer through the screening and nodule programs, respectively.
- 18% of our screened cohort and 29% of our Lung Nodule Program cohort are Black persons (compared to 25% of patients cared for in our healthcare system).
- 3% of persons enrolled in both programs have Medicaid;
   1% of the screened cohort and 10% of the Lung Nodule Program cohort are uninsured.

#### **LEASONS LEARNED**

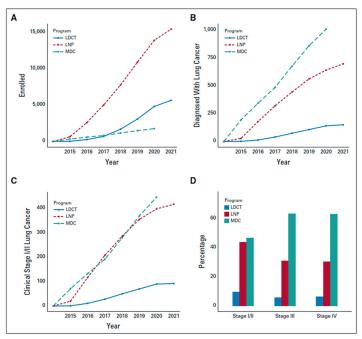
#### **CURRENT STATE OF SCREENING PROGRAM**

- The demographic characteristics of enrolled patients and the patients diagnosed with lung cancer through the two early detection programs is relatively different: more racial and ethnic minorities and the under-insured gain access to early lung cancer detection through the Lung Nodule Program than through screening.
- There are anywhere from 5 to 8 times more lung cancers diagnosed through the nodule program than through screening.
- 13% of the patients diagnosed with lung cancer through the nodule program have never smoked cigarettes; the median quit duration of the 40% of persons diagnosed

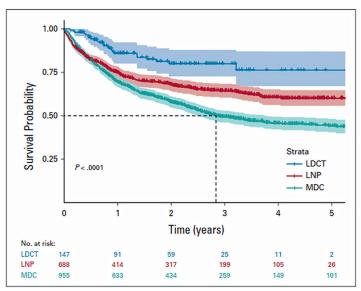
- with lung cancer through the nodule program is 16 years, therefore more than half of these patients would also have been ineligible for screening.
- The stage distribution of lung cancer is almost identical between programs (about 60% stage I/II); but the survival of patients in the screening program is slightly better than that of persons diagnosed through the nodule program.
- Implementation of screening is safe; the 120-day mortality rate of patients with lung cancer diagnosed through the screening program who went to surgery is 0 (zero) thus far.



Use of surgery only, surgery with or without other treatment modality (any surgery), and surgery or stere otactic radiosurgery (surgery or SBRT) to treat patients diagnosed with lung cancer through LDCT, LNP, and MDC Programs: (A) proportions within each program (denominator is patients diagnosed with lung cancer within each program) and (B) porportions of the whole cohort (denominator is all 1,858 patients diagnosed with lung cancer from all three programs combined). LDCT, Low-Dose Computed Tomography Lung Cancer Screening Program; LNP, Lung Nodule Program; MDC, Multidisciplinary Care Program; SBRT, Stereotactic body radiotherapy.



Cumulative enrollment of patients into LDCT, LNP, and MDC Programs: (A) patients enrolled, (B) patients diagnosed with lung cancer who had stage I/II, III and IV lung cancer identified through each program (clinical stage distribution transcohort). LDCT, Low-Dose Computed Tomography Lung Cancer Screeening Program; LNP, Lung Nodule Program; MDC, Multidisciplinary Care Program.



Kaplan-Meier survival plots of patients diagnosed with lung cancer who were enrolled into LDCT, LNP, and MDC Programs. LDT, Low-Dose Computed Tomography Lung Cancer Screening Program; LNP, Lung Nodule Program; MDC, Multidisciplinary Care Program.

Contact information: Raymond Osarogiagbon, MD | Email: rosarogi@bmhcc.org | Administrative Assistant: Juanita.Smith@bmg.md

# 2ND QUARTER: KEY PLAYS and STRATEGIES

Q&A Panel Discussion Notes								
	_							
	_							

Q&A Panel Discussion Notes									

# 3RD QUARTER: TEAM HUDDLES

### PCP Education & Engagement

**COACH: Dr. Michael Gieske** 

### **KEY PLAYS**

<b>PLAY #1:</b> Embrace lung cancer screening; a succe at risk for and with lung cancer. We are all working		LCSP is a powerful platform for bring hope to ALL ether!
Strategies for implementation and/or action steps	:	
	-	
	-	
	-	
	-	
	-	
	-	
<b>PLAY #2:</b> Promote biomarker testing for lung car Strategies for implementation and/or action steps		rediction, detection, and direction of therapy.
	-	
	-	
	-	
	-	
	-	

organizations to promote increased research, lung cancer awareness, and to decrease the nihilism and stigma so entrenched in lung cancer perception and expectations. Strategies for implementation and/or action steps: Other notes/ideas/information you don't want to forget:

PLAY #3: Work in collaboration with hospital systems, provider champions, and other advocacy

# 3RD QUARTER: TEAM HUDDLES

### System-Based Changes Team

**COACH: Dr. Mary Reid** 

### **KEY PLAYS**

<b>PLAY #1:</b> Assess the rates of screening as a baseling	ne- hov	w many LDCTs	are being done.	
Strategies for implementation and/or action steps:				
		_		
PLAY #2: Understand WHO is being screened an	ıd WH	O is not.		
Strategies for implementation and/or action steps:				

PLAY #4: Start working on each barrier to create a permanent solution within your system.  Strategies for implementation and/or action steps:  Other notes/ideas/information you don't want to forget:	<del>-</del>	on steps:			
Strategies for implementation and/or action steps:		1			
Strategies for implementation and/or action steps:					
Strategies for implementation and/or action steps:					
Strategies for implementation and/or action steps:					
Strategies for implementation and/or action steps:					
Strategies for implementation and/or action steps:					
Strategies for implementation and/or action steps:					
Strategies for implementation and/or action steps:					
Strategies for implementation and/or action steps:					
Strategies for implementation and/or action steps:					
Strategies for implementation and/or action steps:					
Strategies for implementation and/or action steps:	PLAY #4: Start working on each barrier	to create a perman	ent solution with	nin your system.	
	Strategies for implementation and/or action	on steps:			
		<del></del>			
Other notes/ideas/information you don't want to forget:					
Other notes/ideas/information you don't want to forget:					
Other notes/ideas/information you don't want to forget:					
Other notes/ideas/information you don't want to forget:					
Other notes/ideas/information you don't want to forget:					
Other notes/ideas/information you don't want to forget:					
Other notes/ideas/information you don't want to forget:					
Other notes/ideas/information you don't want to forget:					
	Other notes/ideas/information you don't	want to forget:			
	Other notes/ideas/information you don't	want to forget:			
	Other notes/ideas/information you don't	want to forget:			
	Other notes/ideas/information you don't	want to forget:			
	Other notes/ideas/information you don't	want to forget:			

# 3RD QUARTER: TEAM HUDDLES

### Community Education & Advocacy

**COACH: Dr. Raymond Osarogiagbon** 

### **KEY PLAYS**

<b>PLAY #1:</b> Institutional buy-in to expand access to indigent populations since they are at higher risk for lung cancer (includes ensuring access to Medicaid, dually-eligible and uninsured persons).
Strategies for implementation and/or action steps:
PLAY #2: Outreach to the communities and trusted networks of high-risk individuals.
Strategies for implementation and/or action steps:
<b>PLAY #3:</b> STRONGLY urge parallel implementation of programs to ensure guideline-concordant management of the large number of incidentally-detected lung nodules found on radiologic images performed for reasons other than suspected lung cancer; for example, a lot of these images are taken in the Emergency Department where, persons at high risk for lung cancer often seek care, and where paradoxically preventive, longitudinal care and patient monitoring are least likely to be available.
Strategies for implementation and/or action steps:

<b>PLAY #4:</b> Outreach to PCP groups, pulmonologis of the challenges and opportunities represented by clinical care delivery by dedicated teams to ensure iatrogenic risks.	early detection of lung cancer and the need for	robust
Strategies for implementation and/or action steps:		
<b>PLAY #5:</b> Refer to these papers.		
Pacheco A, Epperson A, Luttrell J, McCoy D, McHu Robbins T, Ray MA, Smeltzer MP. Lung Cancer Dia A Prospective Observational Study of the Detecting	lor M, Fehnel C, Lane J, Williams SC, Patel AA, Akinbobgh L, Signore R, Bishop AM, Tonkin K, Optican R, Wrigh gnosed Through Screening, Lung Nodule, and Neither P Early Lung Cancer (DELUGE) in the Mississippi Delta (200/JCO.21.02496. Epub 2022 Mar 8. PMID: 3525899	ht J, Program: Cohort. J
2. Potential Impact of Criteria Modifications on Race a	nd Sex Disparities in Eligibility for Lung Cancer Screening	ng.
Matthew P. Smeltzer, Wei Liao, Nicholas R. Faris, C Talat Qureshi, Ayesha Mukhopadhyay, Meredith A.	arrie Fehnel, Jordan Goss, Catherine J. Shepherd, Rodol Ray, Raymond U. Osarogiagbon	fo Ramos,
Other notes/ideas/information you don't want to	Torget:	

# 4TH QUARTER: GAME PURPOSE













# "Lung cancer doesn't discriminate. If you have lungs, you can get lung cancer."

### -Alesha Arnold, lung cancer survivor

Alesha Arnold is a clinical research nurse in breast oncology at IU Simon Comprehensive Cancer Center who has Stage IV lung cancer. She has never smoked, practices a healthy lifestyle, and was shocked by her diagnosis in 2019.

Since her diagnosis, Alesha has become a lung cancer hero, fighting the stigma and raising awareness about lung cancer through her advocacy work with End Lung Cancer Now and a grassroots movement called the White Ribbon Project. The white ribbons that Alesha and her loved ones make and distribute help build a sense of community and promote messages of support, hope, and empowerment.

There are many Hoosiers, like Alesha, who deserve the same level of support as generated by other organizations dedicated to ending other diseases and supporting survivors. A goal of End Lung Cancer Now is to create that network of support for patients, survivors, and their loved ones so they know they aren't alone and that there is a community out there for them.

To watch Alesha's full story and to learn how you can get involved, visit

www.endlungcancernow.iu.edu.

### THANK YOU TO OUR SPONSORS FOR THEIR GENEROUS SUPPORT!

Presented by





Hall of Fame





All-Pro





All-Star









ONCOLOGY







### TRANSFORMING CANCER CARE AT ALL STAGES OF THE DISEASE

Guardant Health is a leading precision oncology company dedicated to helping patients at all stages of cancer live longer and healthier lives. From treatment selection in advanced cancer, to residual disease and recurrence monitoring in early-stage cancer, to soon screening for early signs of cancer, Guardant Health is dedicated to transforming cancer care through the power of liquid biopsy and the data it unlocks.

To learn more about our mission, visit guardanthealth.com.





### Jazz Pharmaceuticals<sup>®</sup>

Jazz Pharmaceuticals plc (Nasdaq: JAZZ) is a global biopharmaceutical company dedicated to developing medicines for people with serious diseases — often with limited or no options. We have a diverse portfolio of marketed medicines and novel product candidates, from early- to late-stage development, in key therapeutic areas. Our focus is in neuroscience, including sleep medicine and movement disorders, and in oncology, including hematologic and solid tumors. We actively explore new options for patients including novel compounds, small molecule advancements, biologics and innovative delivery technologies. Jazz is headquartered in Dublin, Ireland and has employees around the globe, serving patients in more than 90 countries.

For more information, please visit

#### www.jazzpharmaceuticals.com

and follow @JazzPharma on Twitter.



INDIANA UNIVERSITY

### MELVIN AND BREN SIMON COMPREHENSIVE CANCER CENTER

**ACCELERATING CANCER RESEARCH SINCE 1992** 

#RESEARCHCURESCANCER

### **FOLLOW US ON SOCIAL MEDIA**

SCAN THE OR CODE TO VISIT OUR WEBSITE





@iusimoncancercenter



@iusimoncancercenter



@iucancercenter



in linkedin.com/company/iucancercenter



youtube.com/user/iusimoncancercenter

### DIGITAL PLAYBOOK



You can access a digital copy of this playbook, copies of the slides from today's presentations, and other advocacy resources by scanning the QR code above or visiting

www.endlungcancernow.iu.edu.





ACCELERATING CANCER RESEARCH SINCE 1992

Presented by





Genentech  A Member of the Roche Group
--





PREVENTION | SCREENING | RESEARCH

www.endlungcancernow.iu.edu