

VA Partnership to Increase Access to Lung Screening

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Principal Investigator: VA-PALS







The Mystery of VA



VA Demonstration Project (2012-15)



Robert Petzel, Under Secretary for Health
VHA – Central Office
Resigned 2014



Linda Kinsinger, MD, MPH
VHA Chief Consultant for Preventive Services (NCP)
Retired 2015



Charles Anderson, MD, PhD
VHA Chief Consultant Diagnostic Services
Retired 2016

JAMA Internal Medicine | [Original Investigation](#)

Implementation of Lung Cancer Screening in the Veterans Health Administration

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Evaluation of the VA Lung Cancer Screening Clinical Demonstration Project

Prepared for:

Department of Veterans Affairs, Office of the Under Secretary for Health

Prepared by:

- 1-Health Services Research & Development Center of Innovation, Durham Veterans Affairs Medical Center
- 2- National Center for Health Promotion and Disease Prevention, Office of Patient Care Services
- 3- National Radiology Program Office, Diagnostic Services, Office of Patient Care Services
- 4- Veterans Engineering Resource Center, Pittsburgh Veterans Affairs Medical Center

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Report Date:

March 2016

CHALLENGES

1. Approx 2/3 = abnormal finding
2. Tracking = complex
3. Coordination of care = variable

NEEDS

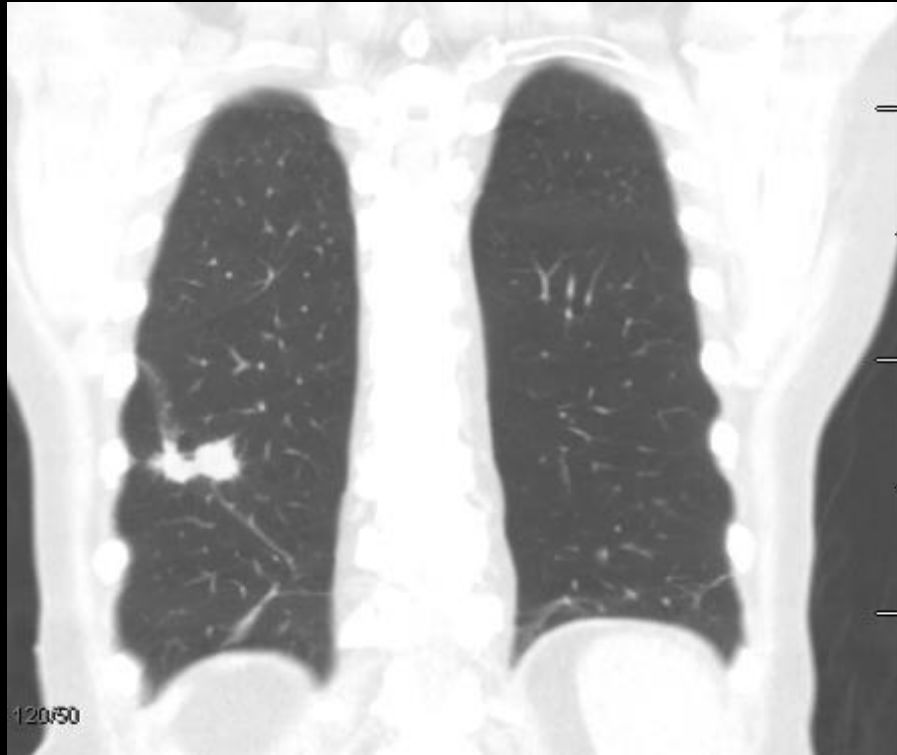
1. System-wide tracking registry
2. Radiologists, CT scanners, staff
3. Training for primary care
4. Engaging pulmonology & oncology

Table 1. VA Patient Population for Screening

Patients:	% Advancing	VA population
Potentially eligible for LDCT		2,780,933
Eligible for LDCT	32.0%	545,063
Qualifying for LDCT; met all criteria	84.3%	494,372
Patients Agree to LCS; Minneapolis excluded	55.5%	274,376
Completed LDCT; included in Eval. Anal.	85.9%	235,689
Positive (Nodules needed tracking + possible Lung Ca + doc. Lung Ca)	51.7%	121,851
Possible Lung Ca	1.50%	3,535
Documented Lung Ca	1.60%	3,771
Negative	48.3%	113,838
Incidental Finding Requiring Follow-up	32.4%	76,363

> 4mm

Why We Can't Sit Still



**Department of
Veterans Affairs**

Memorandum

Date: NOV 27 2017

From: Deputy Under Secretary for Health for Operations and Management (10N)

Subj: Lung Cancer Screening with Low Dose Computed Tomography (VAIQ: 7845332)

To: Network Director (10N1-23)
VISN Chief Medical Officers (10N1-23)

Thru: Assistant Deputy Under Secretary for Health for Clinical Operations (10NC)
Executive Director, Primary Care Operations (10NC3)
Chief Consultant for Preventive Medicine (10P4N)
Chief Consultant for Diagnostic Services (10P11D)



VA-PALS

PARTNERSHIP TO INCREASE
ACCESS TO LUNG SCREENING

Co-Principal Investigators



Claudia Henschke, PhD, MD
Mt Sinai Medical School, NY



Rick Avila, MS
Paraxial

Paraxial
Technologies

 **OSEHRA**
Open Source Electronic Health Record Alliance


vista
Expertise Network

 **VA-PALS**
PARTNERSHIP TO INCREASE
ACCESS TO LUNG SCREENING

 **I-ELCAP**
International Early Lung Cancer Action Program


**Mount
Sinai**



**Bristol-Myers Squibb
Foundation**

VHA Support and Guidance

Central Office

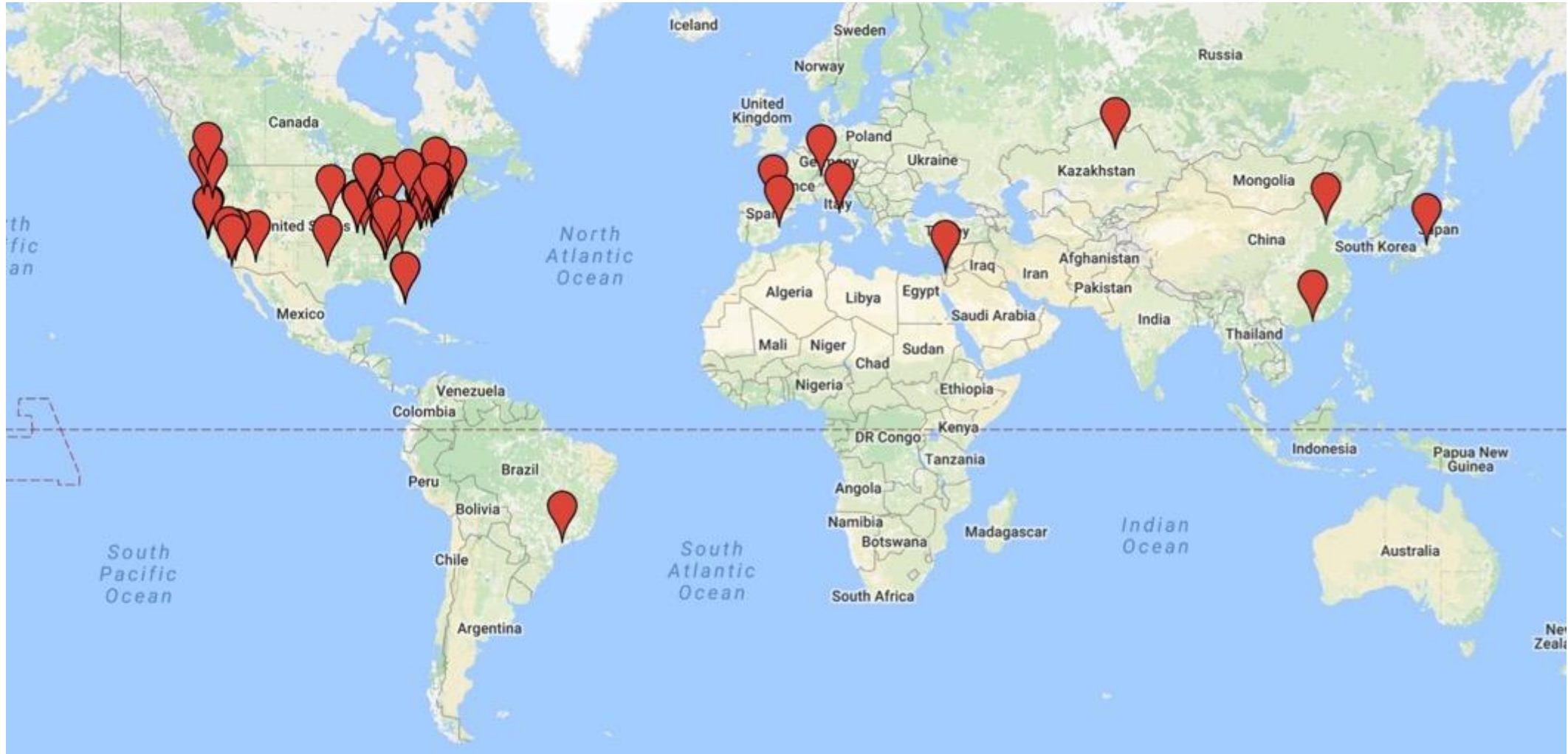
- Office of Strategic Partnerships
- Diffusion of Excellence
- Office of Rural Health
- Center for Innovation

National Programs

- Diagnostic Services
- Office of Information & Technology
- Health Promotion & Prevention (NCP)
- Oncology
- Radiation Oncology
- Quality Enhancement Research Initiative

I-ELCAP – Lung Screening Sites

Since 1992



Project Goals Funded through FY20

1) VAPALS-IELCAP Software Management System

- VistA-based – open source

2) Implement Best Practices at 10 VAMCs

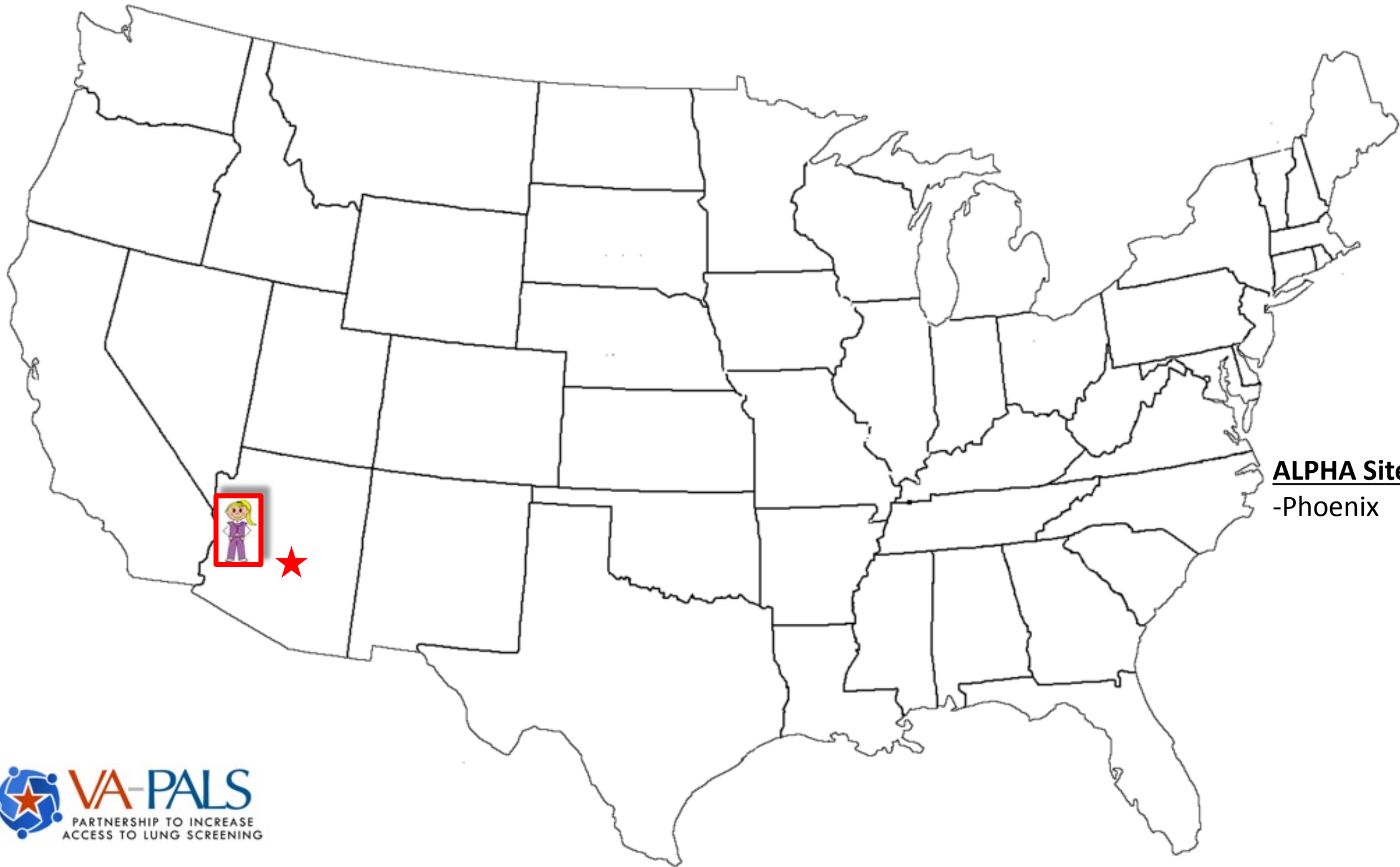
- Structured reporting (**LungRADS or I-ELCAP protocols**)
- LDCT phantoms (Accumetra)

3) Centralized Training and QA

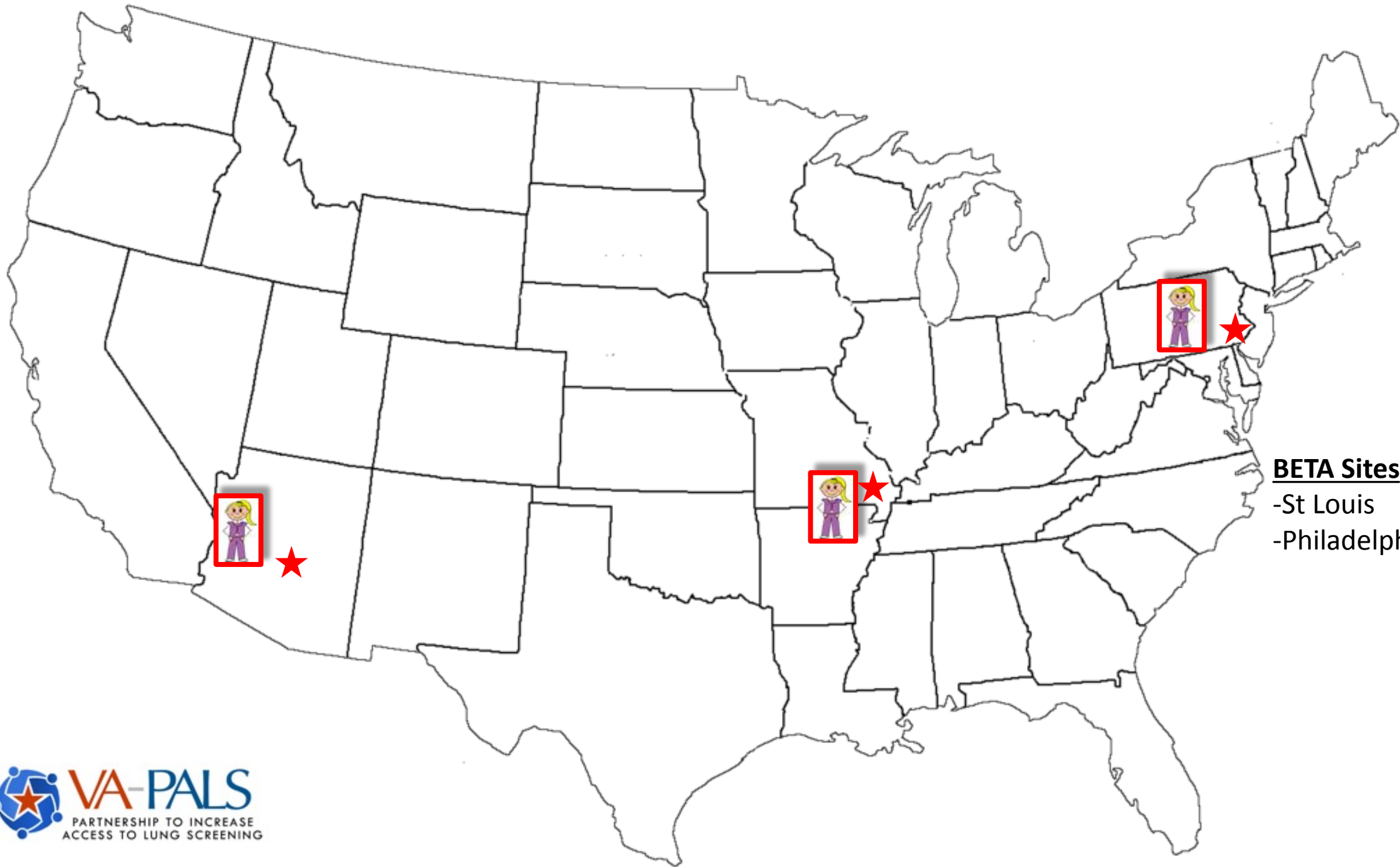
- Navigator training
- Radiology training (dual reads, on-site in-services)

4) Evaluate Implementation, Analyze Outcomes

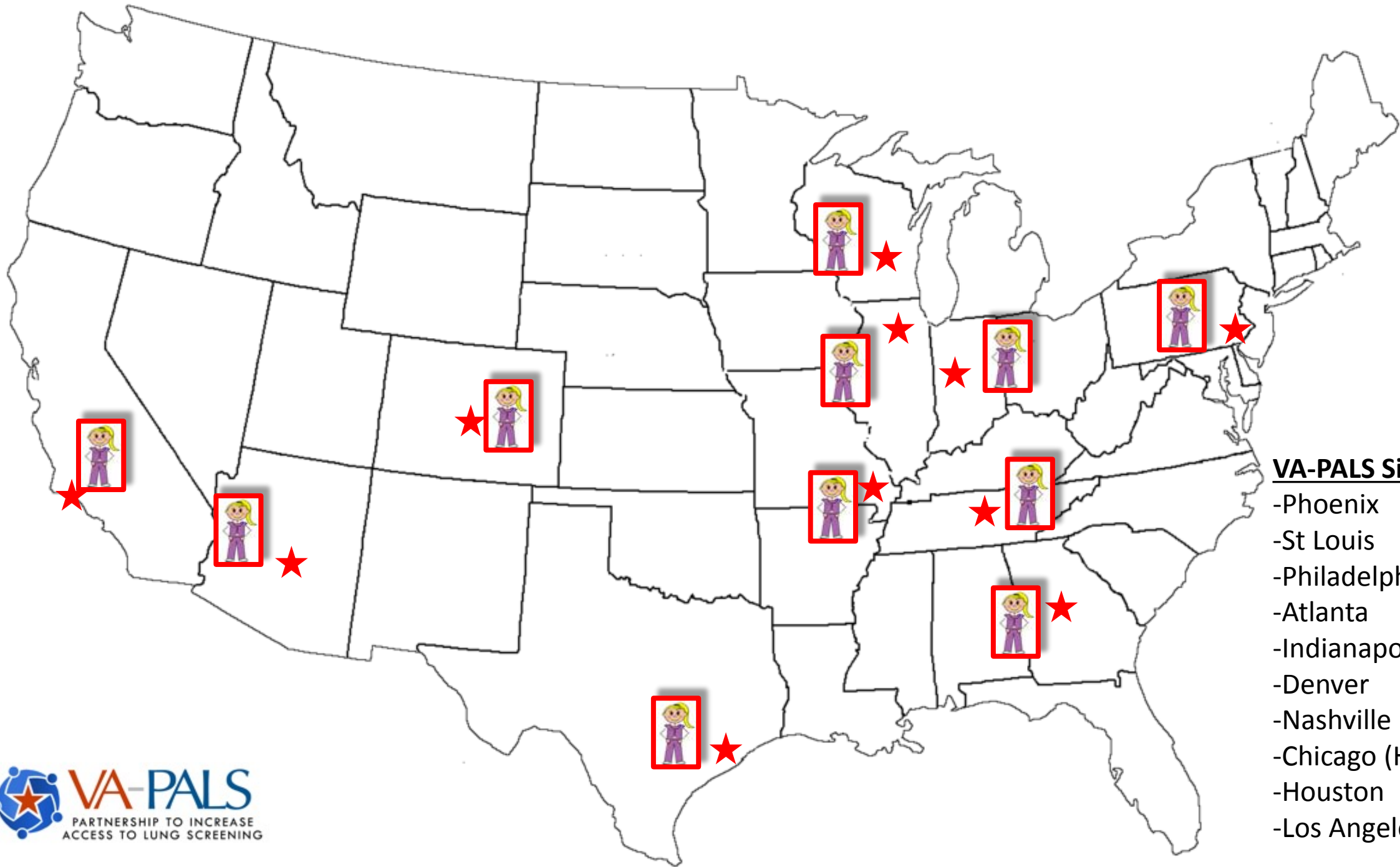
- Present to VA leadership (Quality, Operations, Policy)



ALPHA Site
-Phoenix



BETA Sites
-St Louis
-Philadelphia






VA-PALS Sites

- Phoenix
- St Louis
- Philadelphia
- Atlanta
- Indianapolis
- Denver
- Nashville
- Chicago (Hines)
- Houston
- Los Angeles

Patient Lookup

Patient

Gaylord304, Halie879	Last 5: G5844	DOB: 11/01/1934	Gender: MALE	
Gaylord519, Trent121	Last 5: G6762	DOB: 03/30/1963	Gender: MALE	
Gaylord674, Joyce307	Last 5: G9329	DOB: 09/22/1963	Gender: FEMALE	 VAPALS-ELCAP
Gerhold141, Ora75	Last 5: G2939	DOB: 02/09/1957	Gender: MALE	
Gerhold486, Dixie737	Last 5: G6598	DOB: 04/18/1952	Gender: MALE	 VAPALS-ELCAP
Gerhold486, Eino921	Last 5: G9949	DOB: 02/09/1997	Gender: FEMALE	 VAPALS-ELCAP
Gerhold521, Rogers573	Last 5: G1285	DOB: 07/03/1962	Gender: FEMALE	
Gerhold697, Nicole915	Last 5: G3007	DOB: 09/02/1952	Gender: MALE	



Intake but no CT Evaluation

Enrollment Date	Name	SSN	Followup
5/23/2018	Dibbert829,Bethany196	999-11-2141	baseline
5/24/2018	Toy38,Laverne139	999-68-1215	baseline
6/11/2018	Adams529,Christop677	999-23-4212	baseline
6/12/2018	Effertz802,Caleb131	999-83-3568	baseline
6/14/2018	Abernathy614,Donavon721	999-98-9135	baseline
6/15/2018	Schaefer749,Nicolette831	999-92-6912	baseline
6/27/2018	Auer171,Eliezer702	999-67-1413	baseline
6/28/2018	Nikolaus949,Tobin128	999-75-8602	baseline
8/1/2018	Keebler293,Malinda715	999-34-4835	baseline
8/9/2018	Feeney725,Madilyn343	999-54-3455	baseline
8/10/2018	Altenwerth668,Darius875	999-75-8849	baseline
8/21/2018	Pfeffer335,Jason584	999-64-7860	baseline

Gaylord304, Halie879 999-46-5844 DOB: 11/1/1934 AGE: 84 GENDER: M

CT Evaluation Form

Scan Nodules Emphysema/Coronary Calcifications Other Abnormalities Impression & Follow Up

Scan information

* CT study date

12/10/2018 

MM/DD/YYYY

Signing radiologist

* Radiologist

Clinical information

Include in impression

CT scan performed at outside institution

Scan Nodules Emphysema/Coronary Calcifications Other Abnormalities Impression & Follow Up

+ Add nodule

Nodule ID Nodule 1

* Is it new?

* Endobronchial?

* Most likely location?

* Nodule seen in series

* Nodule seen in images -

* Nodule status

* Nodule consistency

* Length (mm)

* Maximum width (mm)

Mean diameter (mm) -

Height (mm)

Volume (mm³) Calculate

* Solid comp. of part-solid x

Scan Nodules Emphysema/Coronary Calcifications Other Abnormalities Impression & Follow Up

* Solid comp. of part-solid x

Solid mean diameter(mm) ② -

Smooth edges ② Yes

Calcifications Yes

Index Nodule ②

Spiculated Yes

Distance from the costal pleura (mm)? ②

Action ②

Comment ②

Pathologic diagnosis ②

+ Add nodule

Additional non-calcified nodules

Impression

Annual repeat and follow-up CT scans should utilize the same low-dose protocol used for baseline low-dose CT scans.

* Nodules

- No evidence of nodules. Follow-up as recommended.
- Nodule(s) as described. Consistent with old granulomatous disease. Follow-up as recommended.
- Nodule(s) unchanged, as described. Follow-up as recommended.
- Nodule(s) as described. Follow-up as recommended.

Other Findings

- No other significant abnormalities.
- Other abnormalities and suggested follow-up as described above.

Impression remarks



Sharing Screenshot

A link to your screenshot was copied to your clipboard.

Scan Nodules Emphysema/Coronary Calcifications Other Abnormalities **Impression & Follow Up**

Follow Up

 select one or more**CT follow up:** Annual repeat Now 1 month 3 months 6 months Other**Approximate follow-up date:** 

MM/DD/YYYY

Other follow up: Antibiotics Diagnostic CT PET Percutaneous biopsy Bronchoscopy Pulmonary consultation Refer to tumor board No other further follow-up Other*** Specify**

Lung-RADS

*** Category**


- Not applicable
- 0 (incomplete)
- 1 (negative)
- 2 (benign appearance or behavior)
- 3 (probably benign)
- 4A (suspicious)
- 4B (suspicious)
- 4X (suspicious)

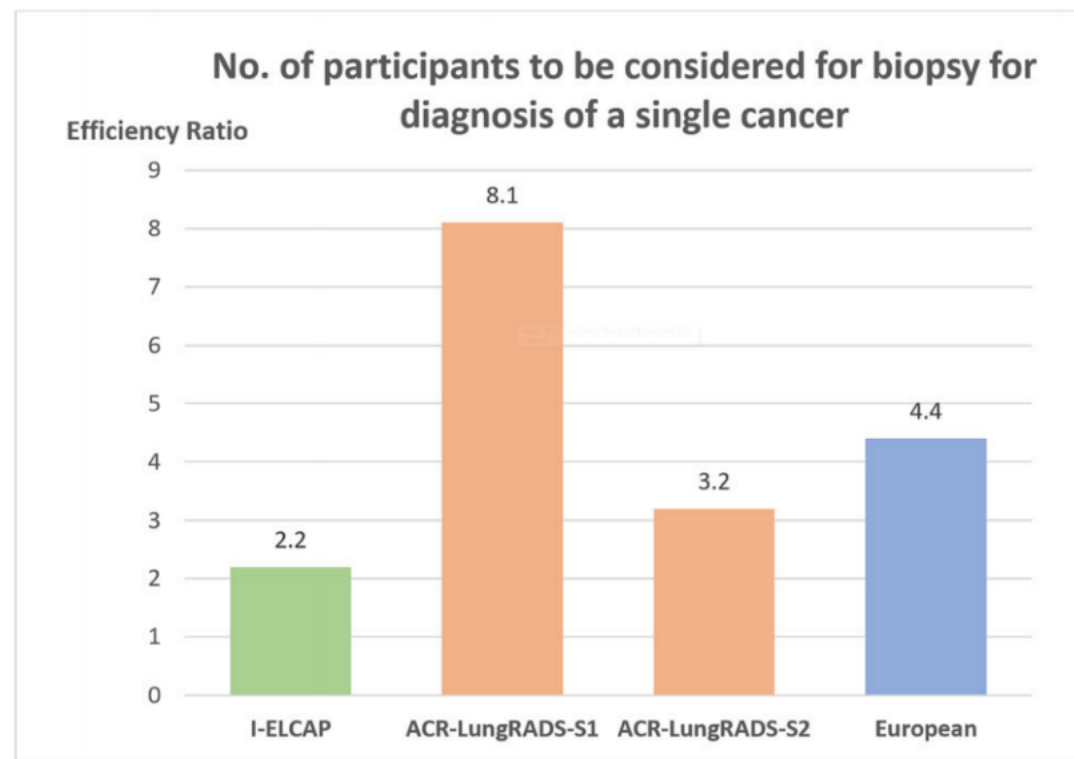
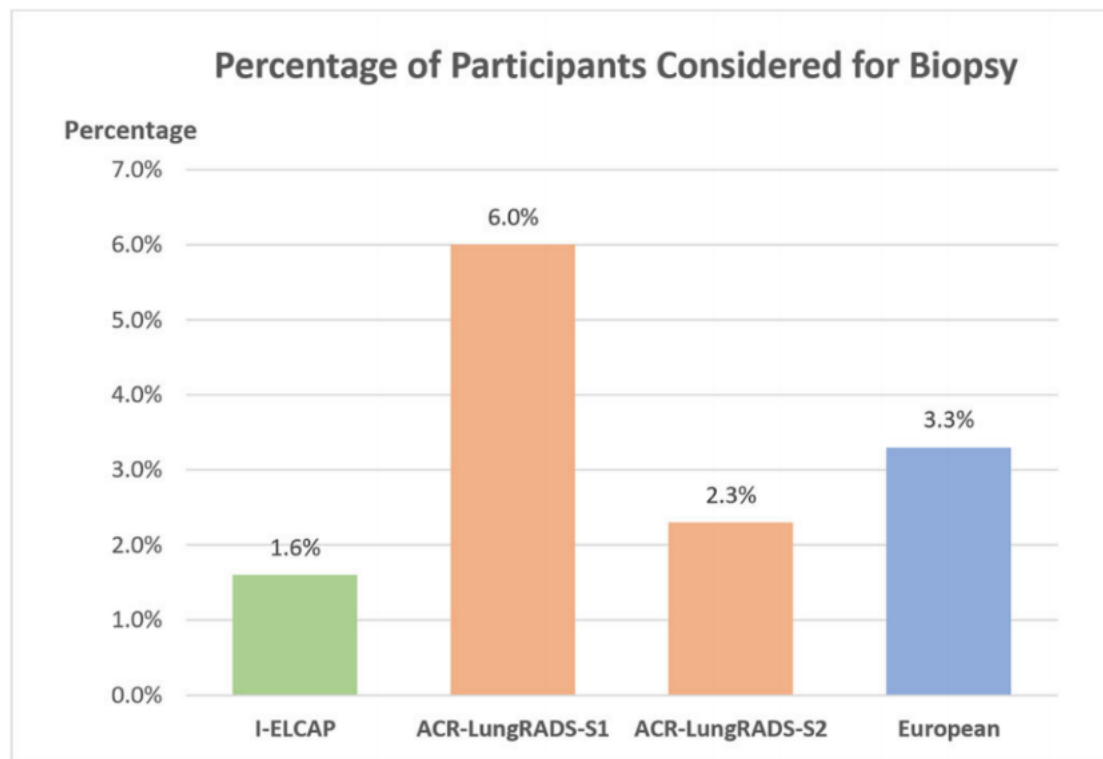
Modifiers

- S - clinically significant or potentially clinically significant findings (non lung cancer)
- C - prior diagnosis of lung cancer who return to screening



CT screening for lung cancer: comparison of three baseline screening protocols

Claudia I. Henschke^{1,2,3}  · Rowena Yip¹ · Teng Ma^{1,4} · Samuel M. Aguayo² · Javier Zulueta⁵ · David F. Yankelevitz¹ · Writing Committee for the I-ELCAP Investigators





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