Name of Project: Lung Cancer Screening: The Views of Patients and Physicians (TRDRP)

Investigator(s). (Include phone numbers and email address, indicate PI and primary contact):
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Research question(s): What are the barriers and facilitators of lung cancer screening among a multiethnic patient population and their primary care providers? What are the best methods and messages for communicating risk, benefits, and options for lung cancer screening? What are the barriers (psychosocial, financial, system) to physician-patient discussions concerning lung cancer risk and low-dose computed tomography (LDCT) screening and determine what might facilitate those discussions and encourage shared decision making?

   Aim 1a. Assess patients’ understanding of LDCT screening; practices, attitudes and beliefs toward LDCT screening; barriers and facilitators to LDCT screening, including access; and the preferred methods of communication of risk, benefits and harms during LDCT screening discussions.
   Aim 1b. Assess PCPs’ understanding of LDCT screening; attitudes and beliefs about LDCT screening; perceived system-, physician- and patient-level barriers and facilitators to LDCT screening; preferred methods of communication during screening discussions; and preferred methods of receiving information at primary care clinics.

Aim 2. Conduct a survey of PCPs practicing in the SF Bay Area to assess lung cancer screening practices, attitudes and beliefs.

Brief Background/Significance:
Lung cancer is the leading cause of cancer death in the U.S. among both men and women. Most cases of lung cancer will be discovered at advanced stages. Consequently, great efforts have been made over the last few decades to identify a screening test. After evaluating the benefits and harms, in December 2013 the USPSTF recommended (grade B: high certainty that net benefit is moderate to substantial) annual lung cancer screening with LDCT scans for high-risk patients. The USPSTF recommends that individuals interested in LDCT screening, together with their physicians, should weigh currently known benefits with limitations and risks to make a shared decision about screening for lung cancer. In February 2015, the Centers for Medicare and Medicaid Services provided final support to cover the costs for LDCT.
To provide patients with lung cancer risk information, it is important to understand how individuals perceive their risk and how to best deliver information about the harms and benefits of LDCT, particularly for those with limited health literacy and/or numeracy skills. While physicians are central to the discussion of LDCT lung cancer screening, there is limited research on physicians’ practices, attitudes and beliefs about lung cancer screening. We will examine the barriers (psychosocial, financial, system) to physician-patient discussions concerning lung cancer risk and LDCT screening and determine what might facilitate those discussions and encourage shared decision making. Our study will assess the barriers and facilitators of lung cancer screening among a multiethnic patient population and their PCPs and determine the best methods and messages for communicating risk, benefits, and options for lung cancer screening.

**Inclusion/exclusion criteria:**

**Inclusion:**
- **Patient Component:** 1) age between 55 and 74; 2) history of smoking of at least 30 pack-years in lifetime; 3) if former smoker, quit within the last 15 years; and 4) no prior history of lung cancer. Participants must also 5) speak Spanish or English; 6) self-identify as API, black, Latino or white; 7) be a patient at a study clinic; and 8) have or have not received LDCT screening.
- **Physician Component:** DGIM physicians in internal medicine and family practice

**Exclusion:**
- **Patient Component:** Non-smokers
- **Physician Component:** Non-DGIM physicians

**Method of contact/recruitment (be specific):**

**Aim 1.**
- **Patient Component:** Potential participants from UCSF who meet study eligibility criteria will be identified though the Recruitment Research Service from the Clinical and Translational Science Institute (CTSI) at UCSF. Electronic health records will be used by CTSI to identify patients with specified demographic criteria, including information about current and past smoking and language needs from the study's selected clinics. The researchers will recruit a total of 25 patients. Two groups of patients will be recruited, those who have not received (n=15) and those who have received LDCT screening (n=10). Eligible patients whose PCPs do not object will be sent an invitation letter with an opt-out/in postcard. Two weeks later, those who have not opted out will be contacted. We will conduct a short baseline-screening interview that will include basic demographic questions and confirm a smoking history of at least 30-pack years. Participants will be given $40 as a reimbursement for their time and effort.
- **Physician Component:** Ten physicians will be contacted via e-mail by Dr. Kaplan. The researchers will then follow up with physicians who express interest in the study. At least three physicians will be enrolled.

**Aim 2.**
- **Physician Component:** Aim does not involve contacting DGIM physicians.

**Benefits/burden for participants (clearly identify potential for harm):**
There are no physical risks to the participants in this study. There is some risk that the participants will feel discomfort or anxiety resulting from discussing lung cancer diagnosis and treatment, but the participants do not have to answer any questions that they are uncomfortable with and can drop out of the study at any time.

**Any benefits or burden to DGIM practitioners?**

- **Benefit:** Their patients may be able to better understand their lung cancer risk in the future.
- **Burden:** None.

**Timeline for recruitment (projected start and stop dates):**

Starting August 1, 2015 and ending July 31, 2016.

**Funding source:** Tobacco-Related Disease Research Program

**Potential for DGIM collaborators? (We encourage DGIM resident and fellow involvement in particular):** Yes, Dr. Kaplan and Dr. Karliner are both part of the DGIM.

**Do you agree to notify us when recruitment is completed?** Yes

**Date form completed:** 8/5/2015