

WALKING FORWARD

Addressing Health Equity in Vulnerable Communities

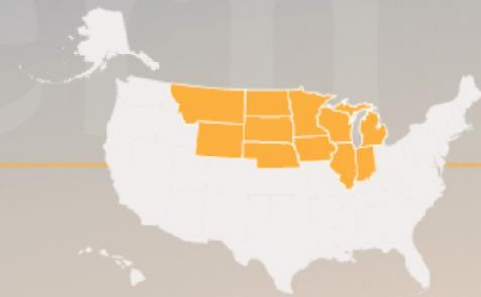
October 28-30 Quantitative Imaging Workshop Webcast

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Regional Cancer Care Institute, Rapid City, SD

Northern Plains



AI/AN in the Northern Plains experience some of the **highest** cancer diagnoses and death rates in the United States.

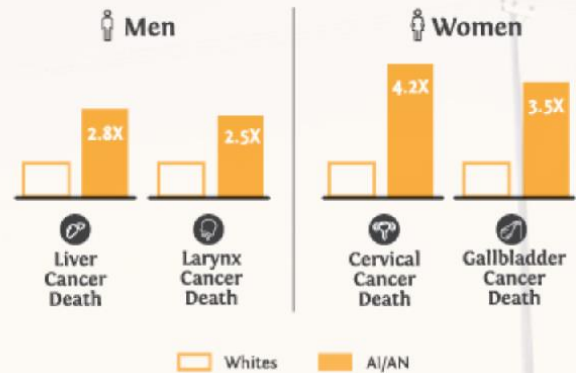
Most Common Cancers: Northern Plains

Cancer Diagnosis	Women	Cancer Deaths
#1 Breast		#1 Lung *
* #2 Lung		#2 Breast
* #3 Colorectal		#3 Colorectal *

Cancer Diagnosis	Men	Cancer Deaths
#1 Prostate		#1 Lung *
* #2 Lung		#2 Colorectal *
* #3 Colorectal		#3 Prostate *

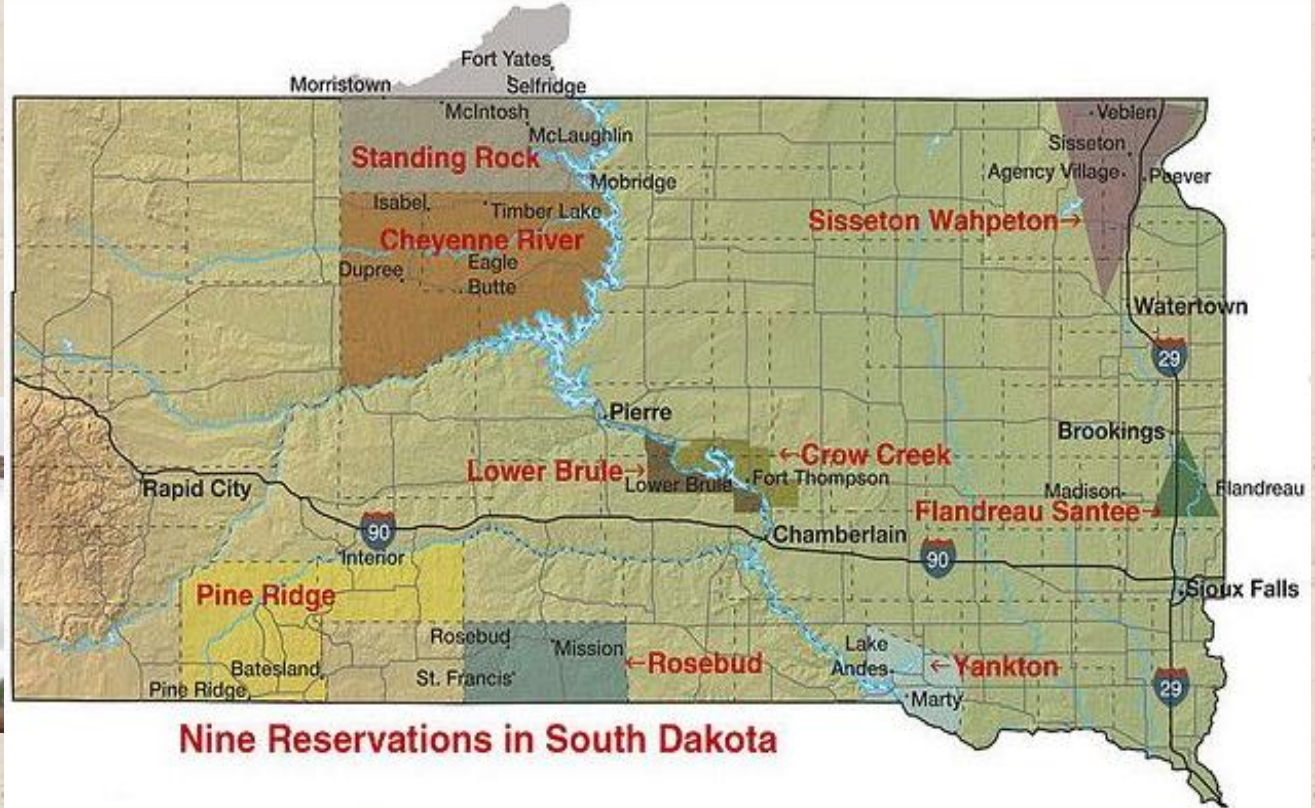
* Indicates higher rate for AI/AN than whites

Cancer Disparities for AI/AN vs. Whites: Northern Plains



Prevention

Lung cancer is the leading cause of cancer death in the Northern Plains. Improved access to tobacco cessation services like quit lines, medications, and counseling can help AI/AN people quit commercial tobacco and reduce their risk for lung cancer.



Western South Dakota

Pine Ridge

Rosebud

Cheyenne River

Rapid City

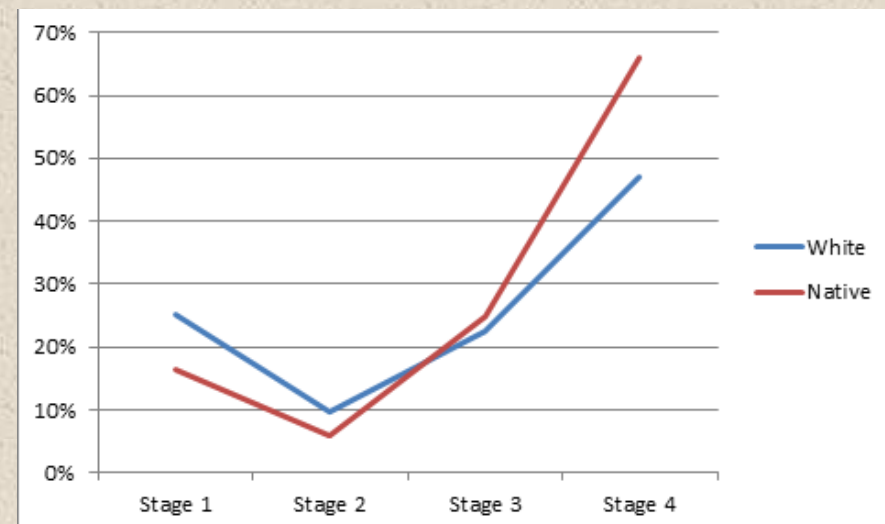
Walking Forward Phases

- **Phase I and II: Cancer Disparity Research Program
2002-2011**
- **Phase III: Mobile health smoking cessation program
2011-2017**
- **Phase IV: Lung Cancer Screening Project (LDCT)
2018-2022**
- **Phase V: Palliative Care Grant
2018-2022**

Smoking and Lung Cancer in South Dakota

- High smoking rates: State average 20%, 7 counties over 30% (Todd County highest at 41%)
- High lung cancer mortality rates:
 - American Indian: 95 per 100,000
 - Whites: 55 per 100,000
 - **Northern Plains AIs: highest lung cancer mortality rate in the US**

New diagnosis of Non-Small-Cell Lung cancer 2009-2015 Rapid City



Increasing Lung Cancer Screening for High Risk Smokers in a Frontier Population

Research Question:

will provider and/or individual level interventions increase low dose computerized axial tomography (LDCT) lung cancer screening among high risk smokers living in western South Dakota?

Project Goal:

To increase lung cancer screening rates by educating primary care providers and their clinic staff as well as community members in western South Dakota.

Increasing Lung Cancer Screening for High Risk Smokers in a Frontier Population

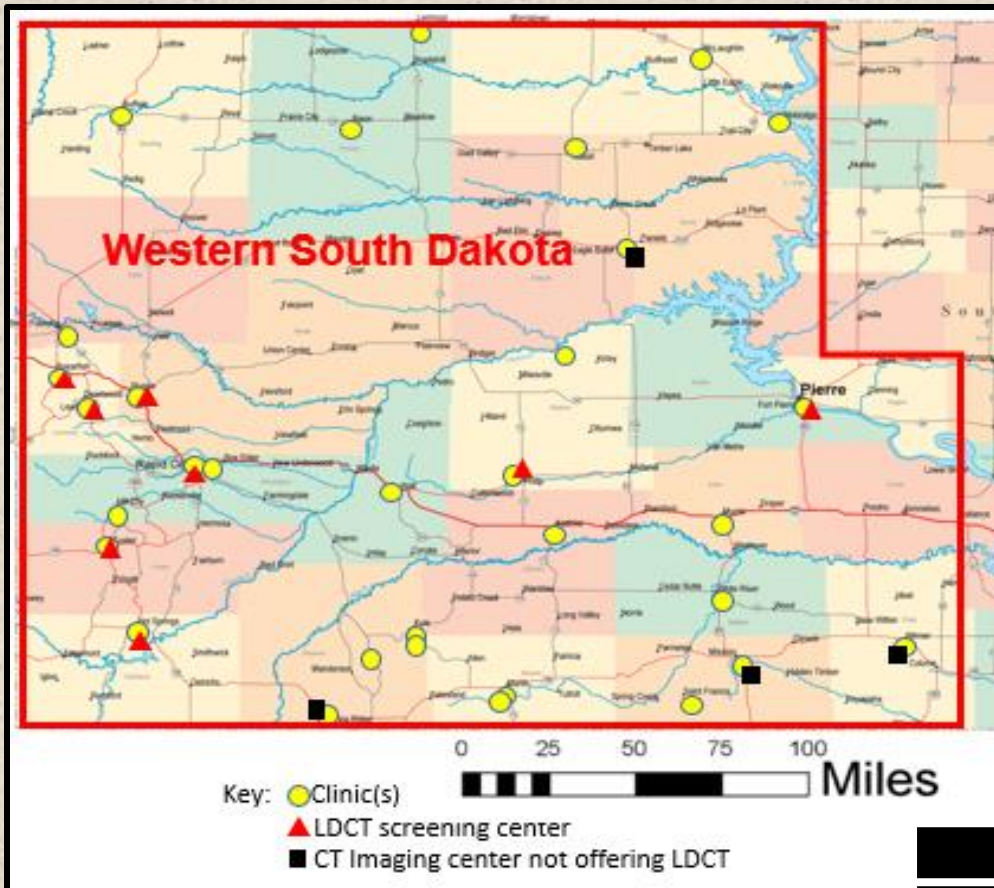
- **Aim 1: Screening awareness**
 - Build on previous research to improve provider and individual awareness of LDCT lung cancer screening
 - Initial and follow-up surveys at baseline and 6 months
- **Aim 2: Evaluate the efficacy of two interventions with PCPs and community members to increase awareness of LDCTs**
 - Main outcome measure: number of LDCTs completed
- **Aim 3: Policy Symposium and Lung Health Forum**
 - Partnership with Georgetown University: Bette Jacobs, PhD
 - Engage community members, state and tribal leaders, primary care MDs
 - Develop sustainable, evidence-based, culturally- and regionally-appropriate practice and policy recommendations

Increasing Lung Cancer Screening for High Risk Smokers in a Frontier Population

Bristol-Myers Squibb Foundation - Funded February 2017

- **2 x 2 study design to evaluate provider (n=135) and individual level (n=1000) interventions**
- **Both interventions include education and introduction to the online resource**
- **Metric will be increase in screening LDCTs**
- **14,000 patients at risk in Western, SD**

****First WF Project to include all of western SD**



Challenge:
Limited access
to screening
LDCT

2 X 2 Design

Intervention:	Study Groups:			
	A	B	C	D
Provider	No*	Yes	No*	Yes
Individuals	No*	No*	Yes	Yes

*delayed intervention based on study findings

Education sessions

Provider Workshops/CME sessions

Began September 2018

13 clinic sites completed

Provider accrual 95

Target goal: 135

Community Workshops/Education sessions

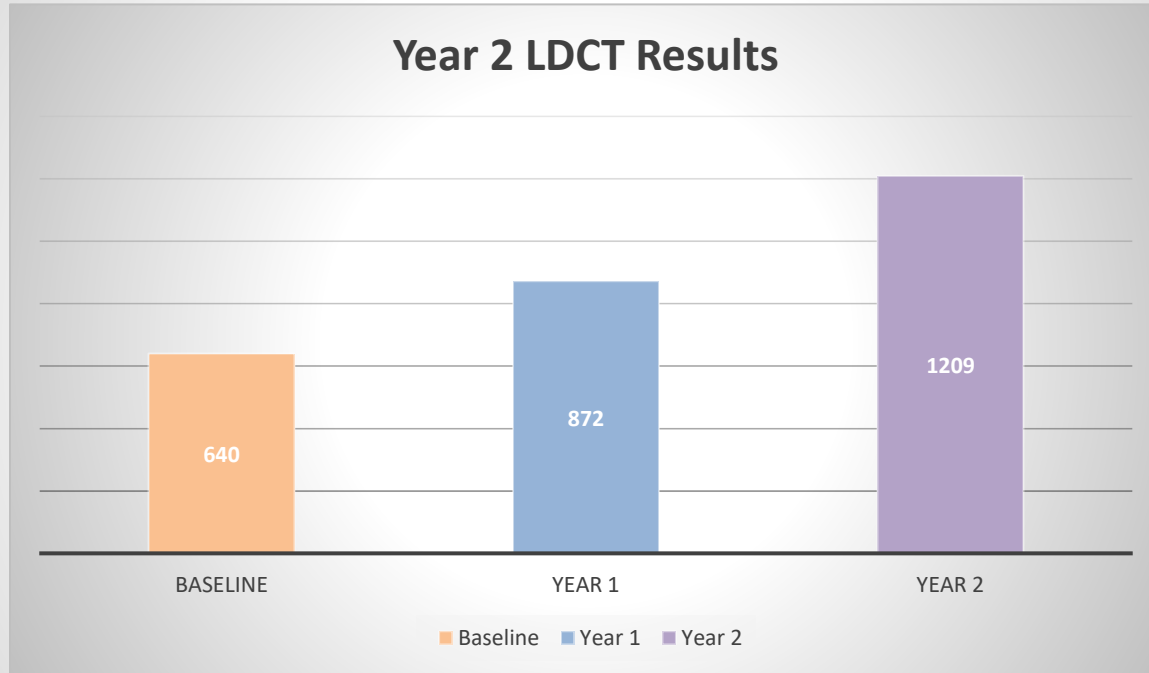
Began August 2018

460 participants

To date: 100 LDCT referrals have been obtained with 81 completed



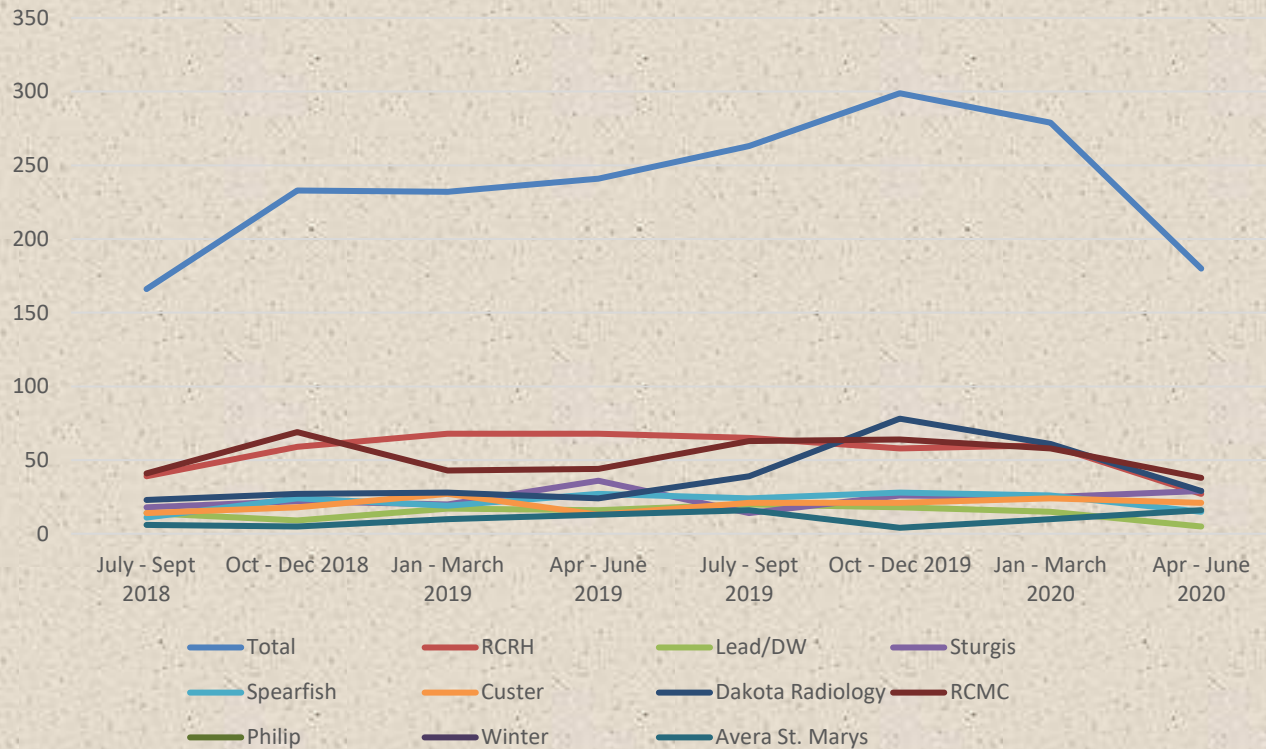
Year 2 LDCT Results





LDCTS BY SITE AND QUARTER

LDCT Totals Year 1 and Year 2



Negative Impact of COVID



OVERCOMING CHALLENGES

- Indian Health Service is not currently covering the cost nor providing LDCTs
- **Grant received from the Irving A. Hansen Memorial Foundation for 105K**
 - Will allow us to screen 200 American Indians at no cost to the patient
- Indian Health Service (IHS): “life and limb” policy
- COVID pandemic



OVERCOMING CHALLENGES



Increasing Lung Cancer Screening for High Risk Smokers in a Frontier Population

- **Aim 1: Screening awareness**
 - Build on previous research to improve provider and individual awareness of LDCT lung cancer screening
 - Initial and follow-up surveys at baseline and 6 months
- **Aim 2: Evaluate the efficacy of two interventions with PCPs and community members to increase awareness of LDCTs**
 - Main outcome measure: number of LDCTs completed
- **Aim 3: Policy Symposium and Lung Health Forum (May 2021)**
 - Partnership with Georgetown University: Bette Jacobs, PhD
 - Engage community members, state and tribal leaders, primary care MDs
 - Develop sustainable, evidence-based, culturally- and regionally-appropriate practice and policy recommendations