SCAN360

www.SCAN360.com

SYLVESTER COMPREHENSIVE CANCER CENTER
UNIVERSITY OF MIAMI HEALTH SYSTEM

NCI Cancer Center
A Cancer Center Designated by the National Cancer Institute

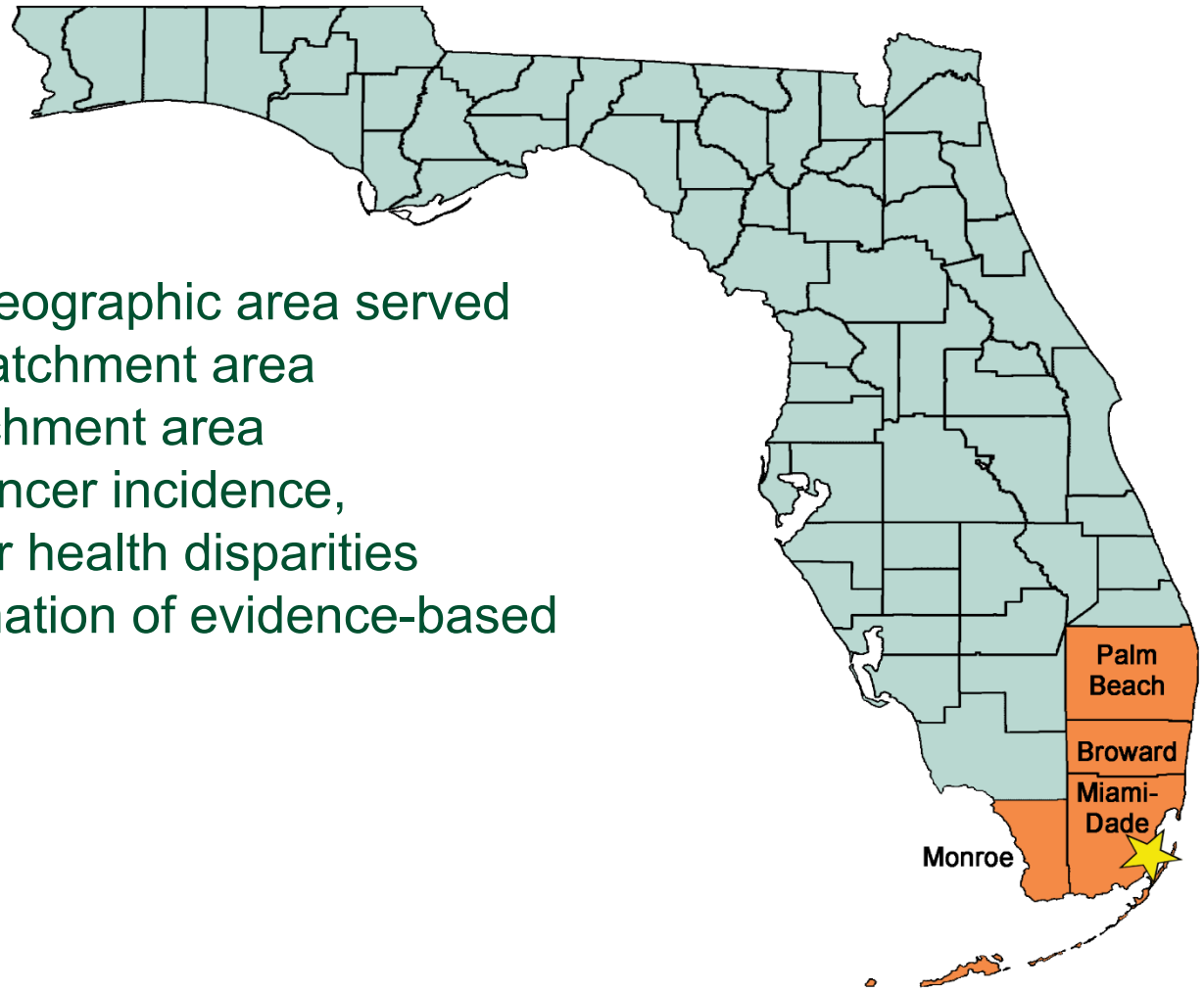
Outline

SCAN360

- SCAN 360 overview
- Current state
  - ✓ Data sources
  - ✓ Features & capabilities
- Future plans

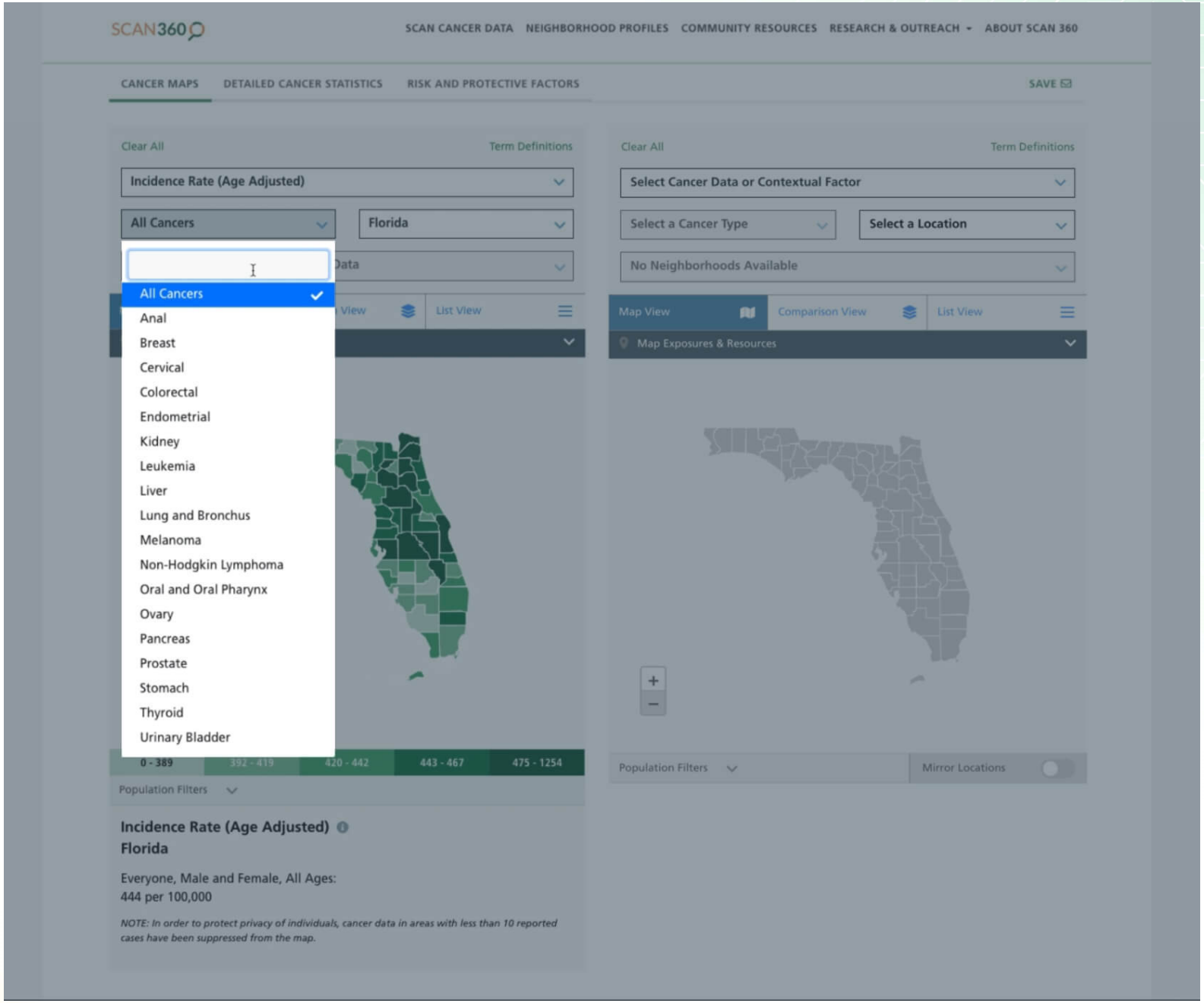
Community Outreach and Engagement

- Define catchment area based on geographic area served
- Perform research relevant to the catchment area
- Engage populations within the catchment area
- Emphasis on unique or unusual cancer incidence, underserved populations, or cancer health disparities
- Establish partnerships for dissemination of evidence-based findings



SCAN360

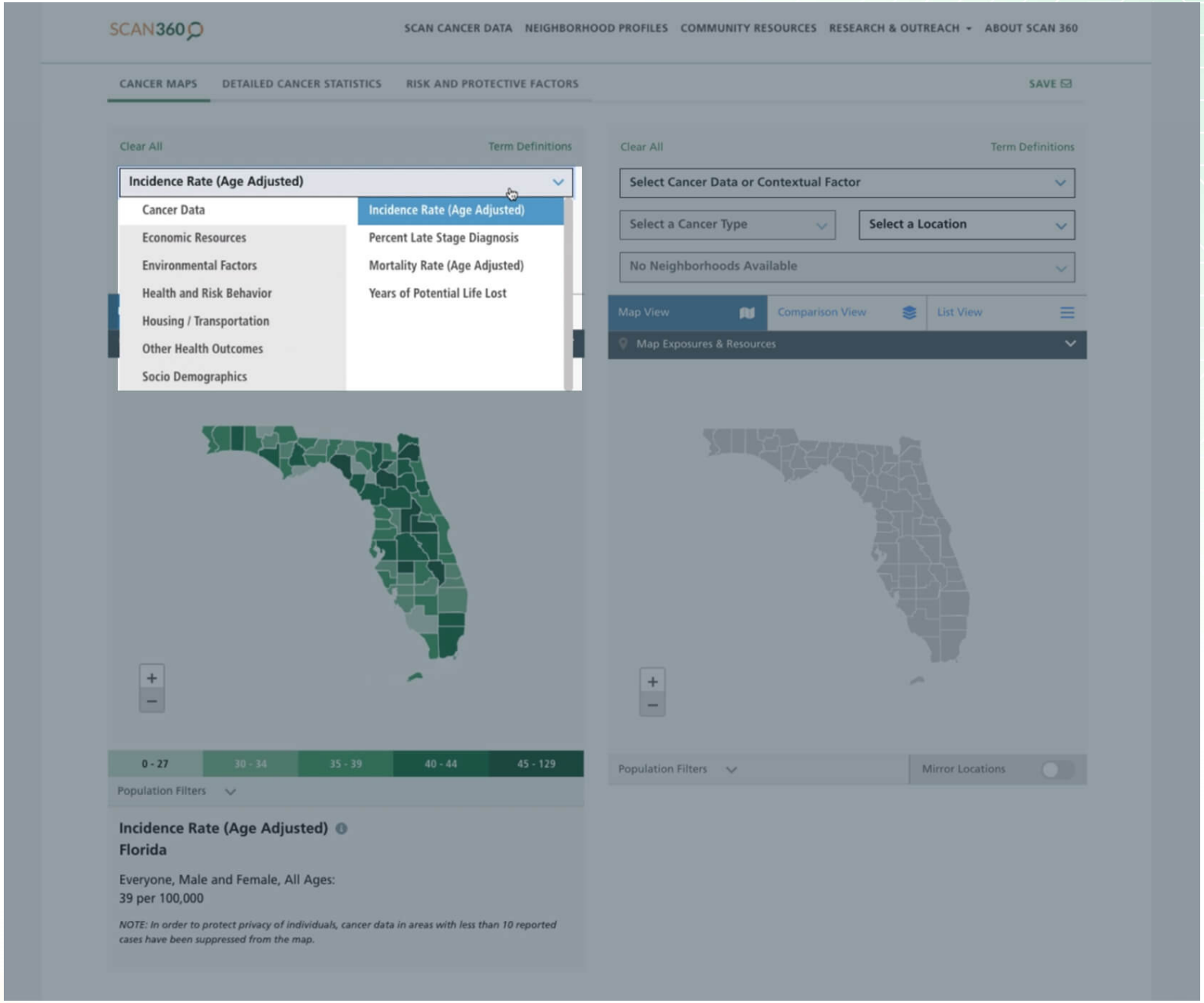
Impact for 18 different cancers



SCAN360

Impact for 18 different cancers

4 different measures of public health significance

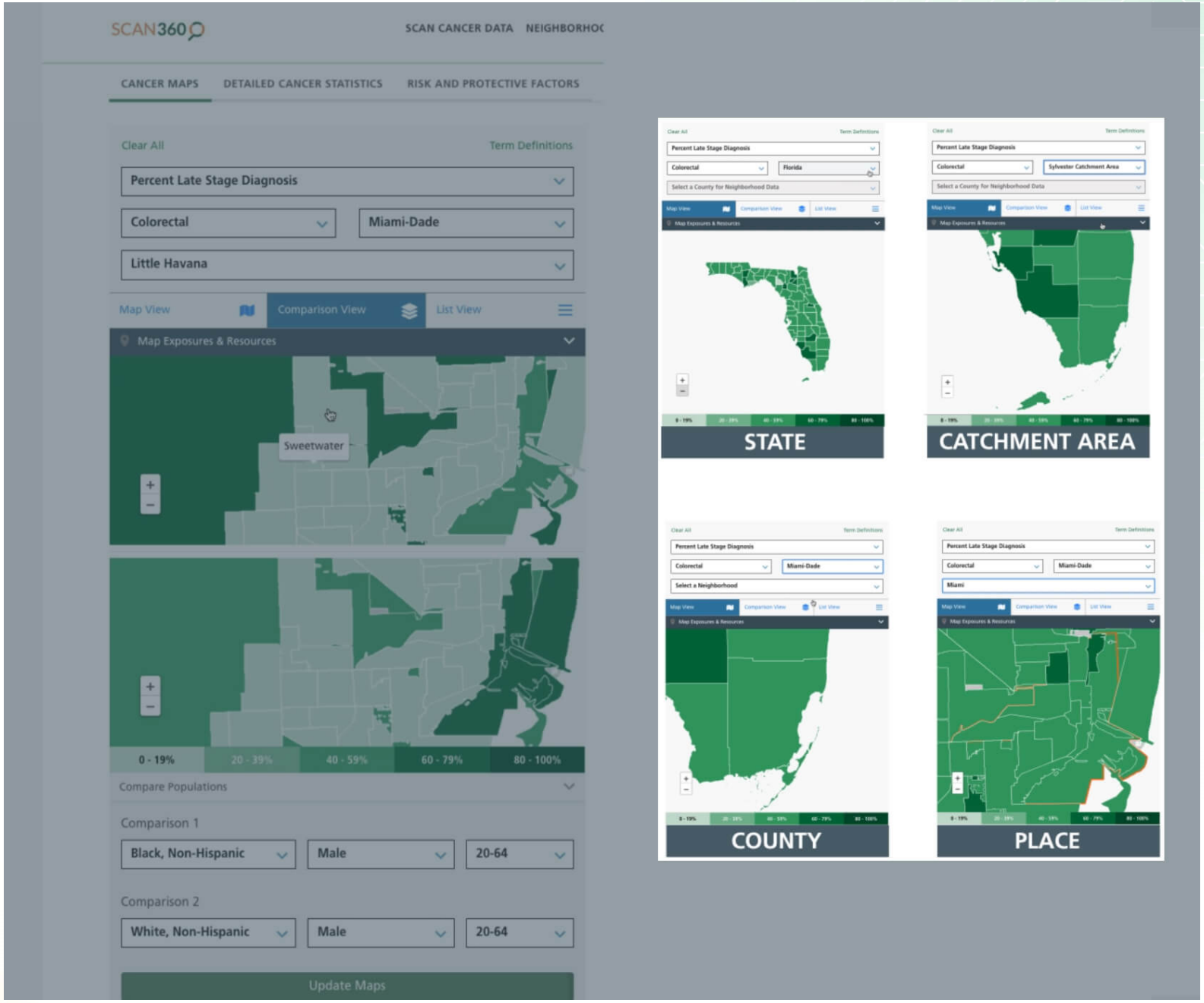


SCAN360

Impact for 18 different cancers

4 different measures of public health significance

4 levels of geography



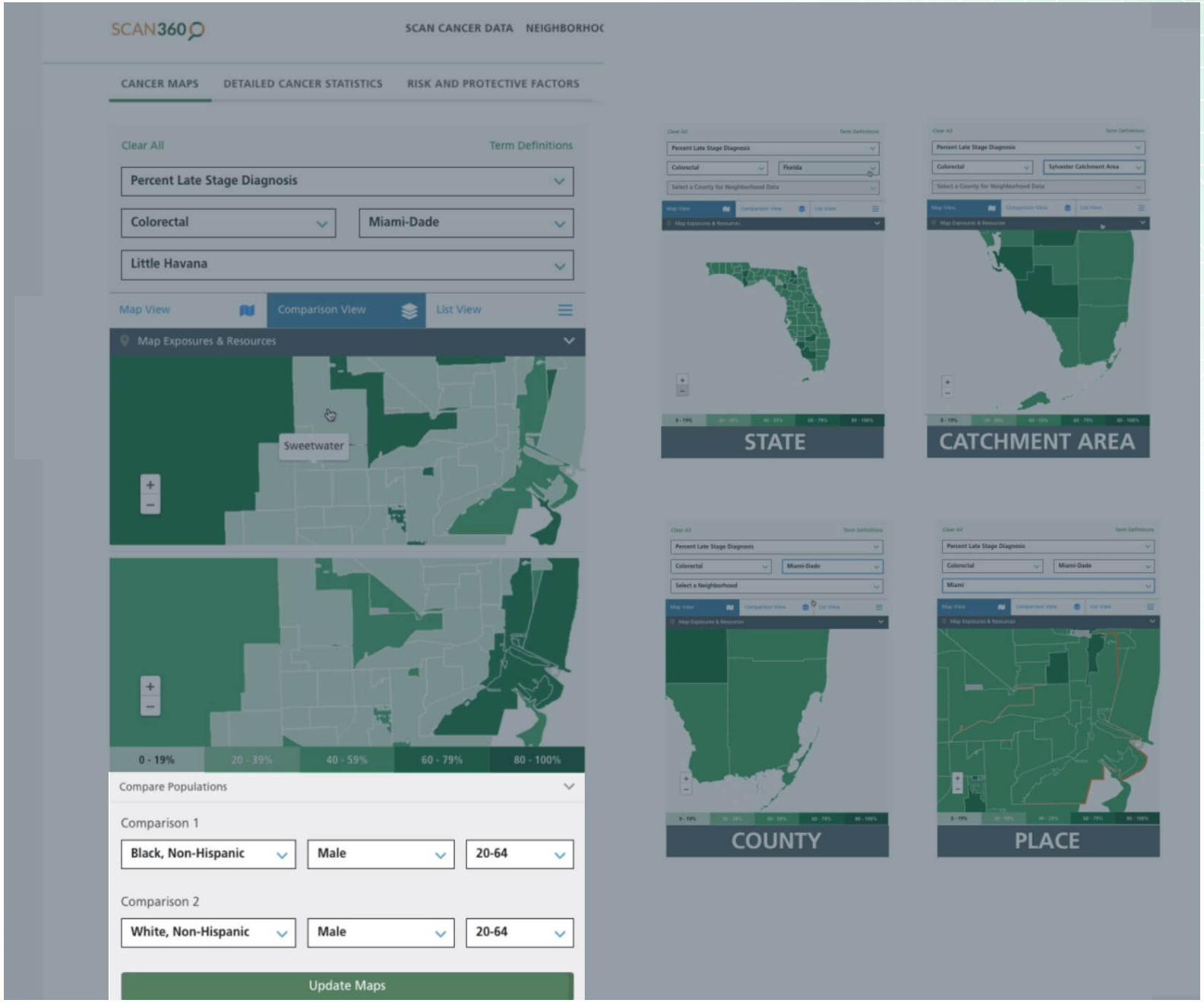
SCAN360

Impact for 18 different cancers

4 different measures of public health significance

4 levels of geography

Comparisons by race/ethnicity, age, sex



SCAN360

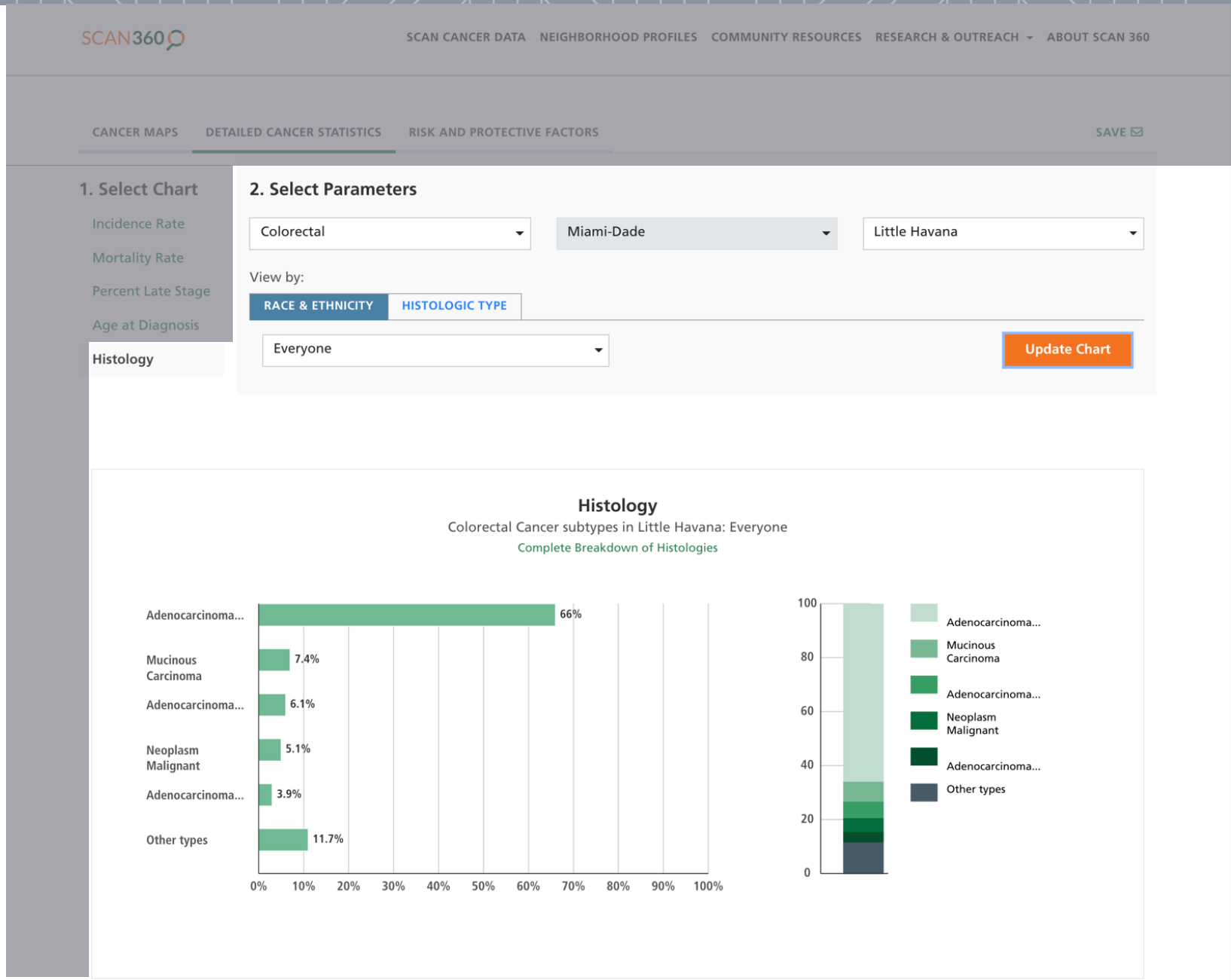
Impact for 18 different cancers

4 different measures of public health significance

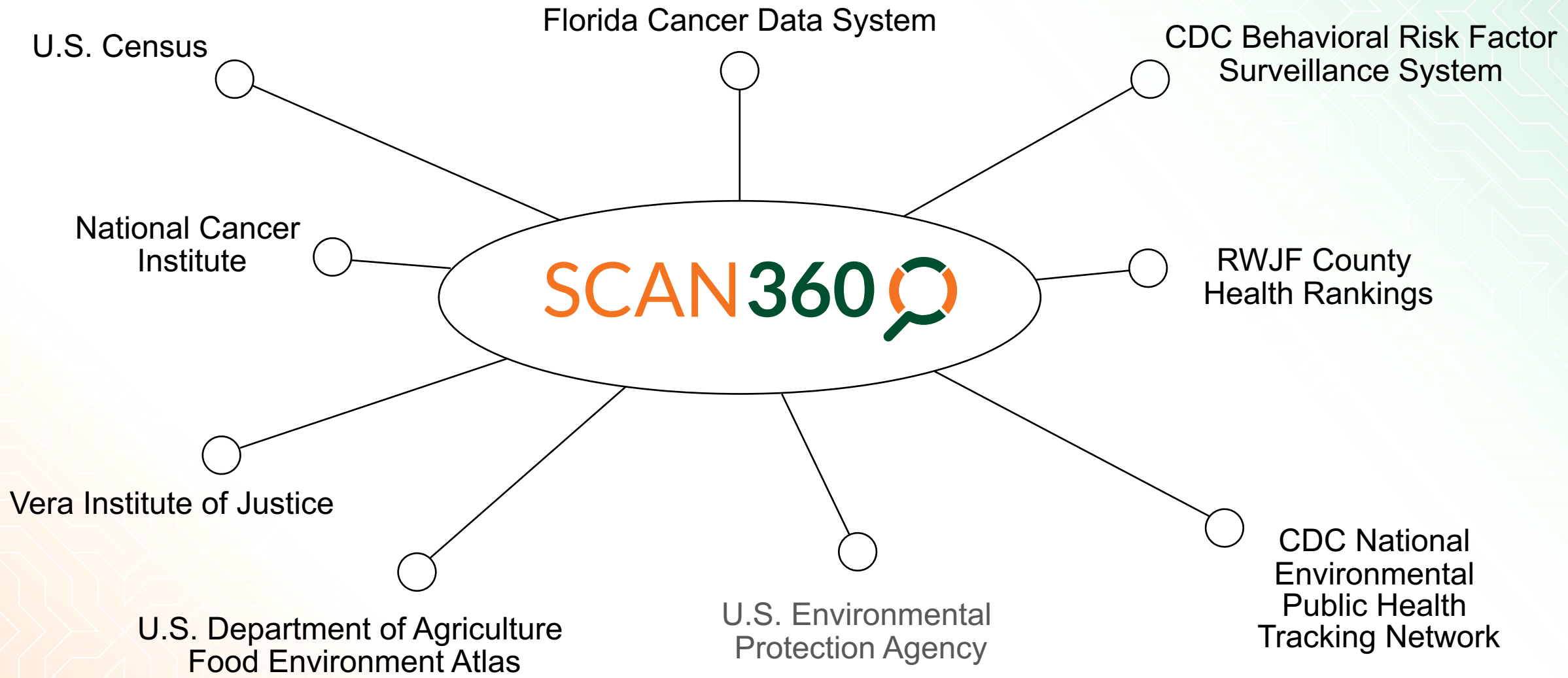
4 levels of geography

Comparisons by race/ethnicity, age, sex

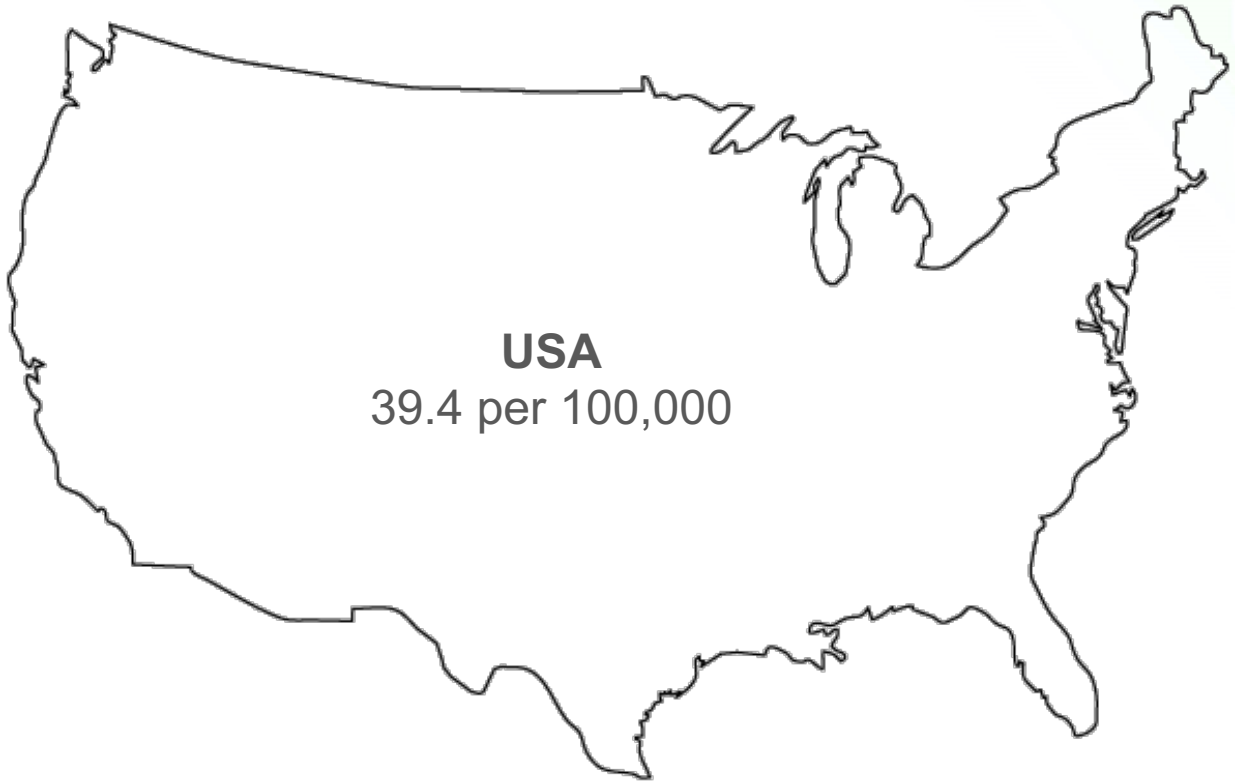
Cancer Histology



Integrating Disparate Sources

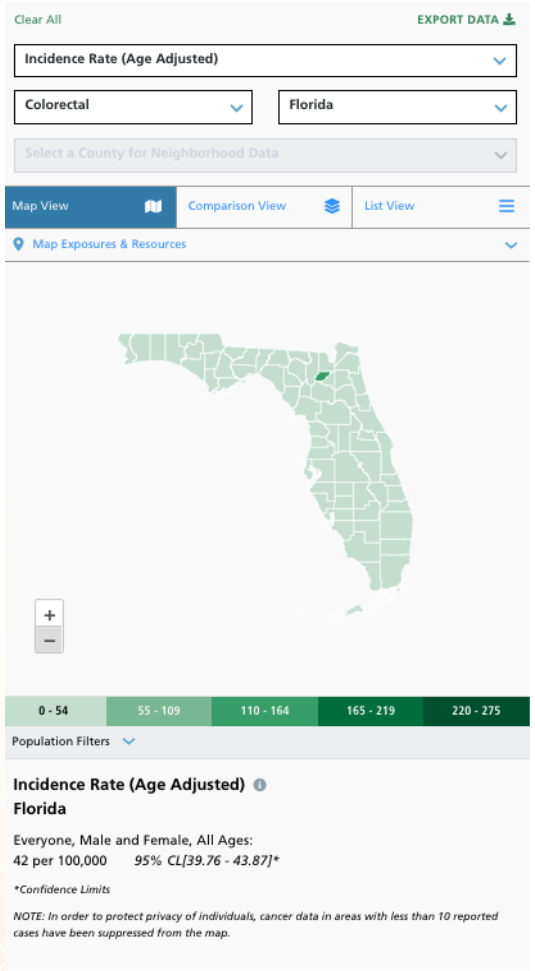


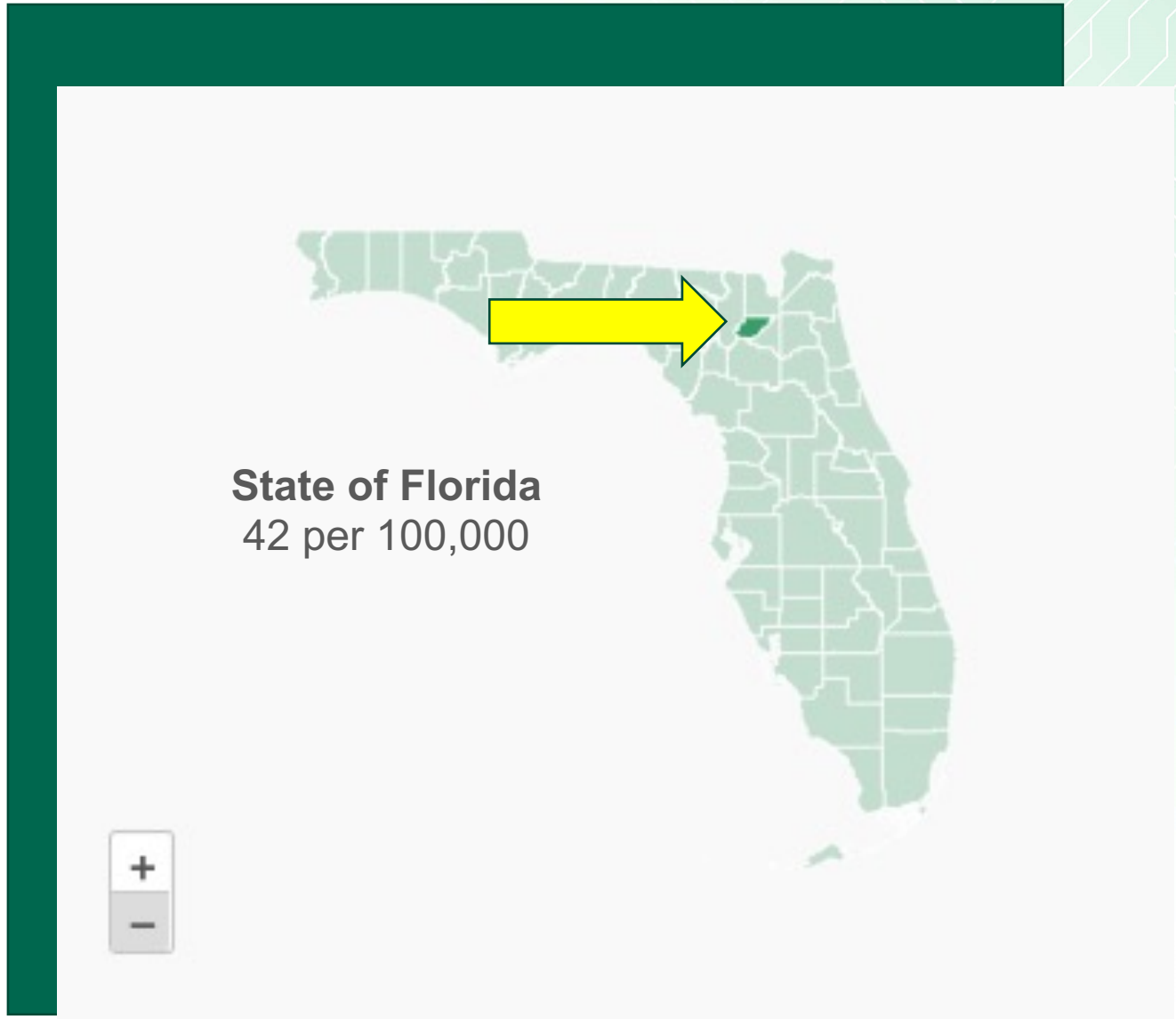
Colorectal Cancer



By State

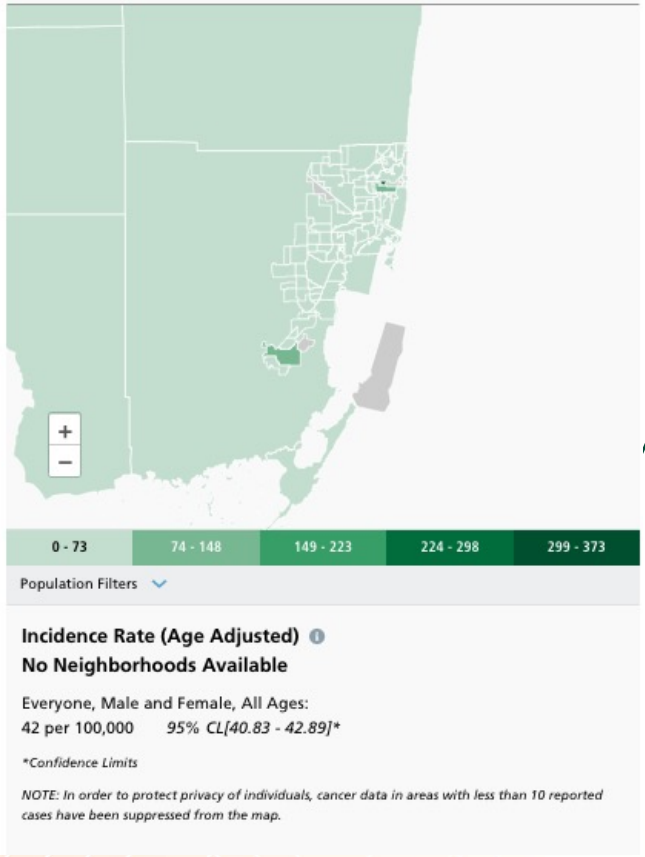
Colorectal Cancer

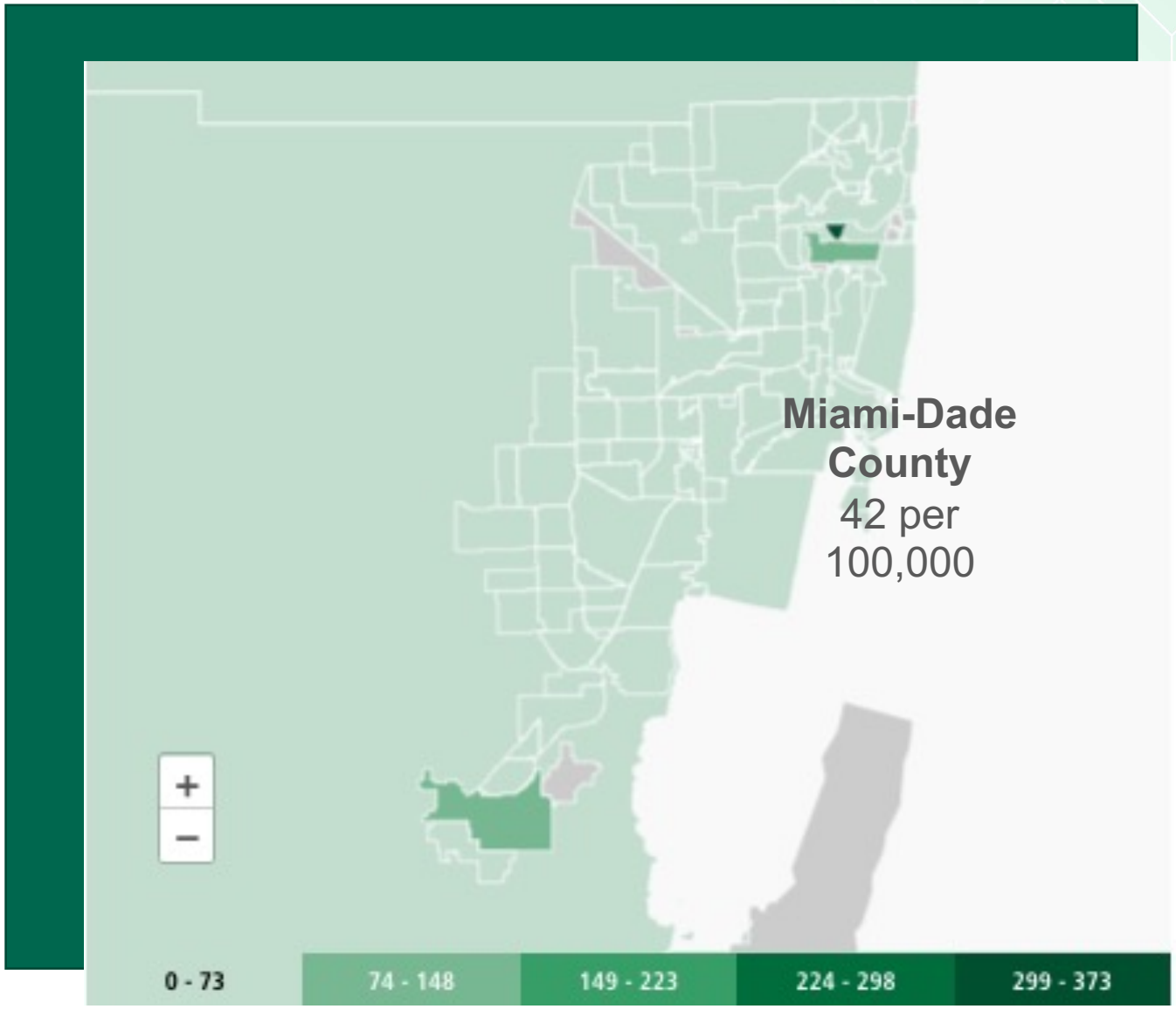




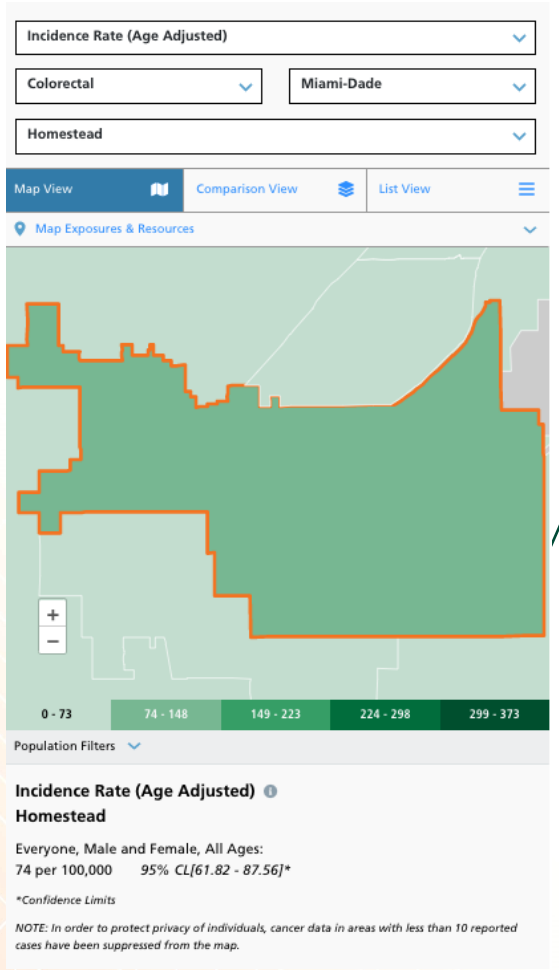
By County

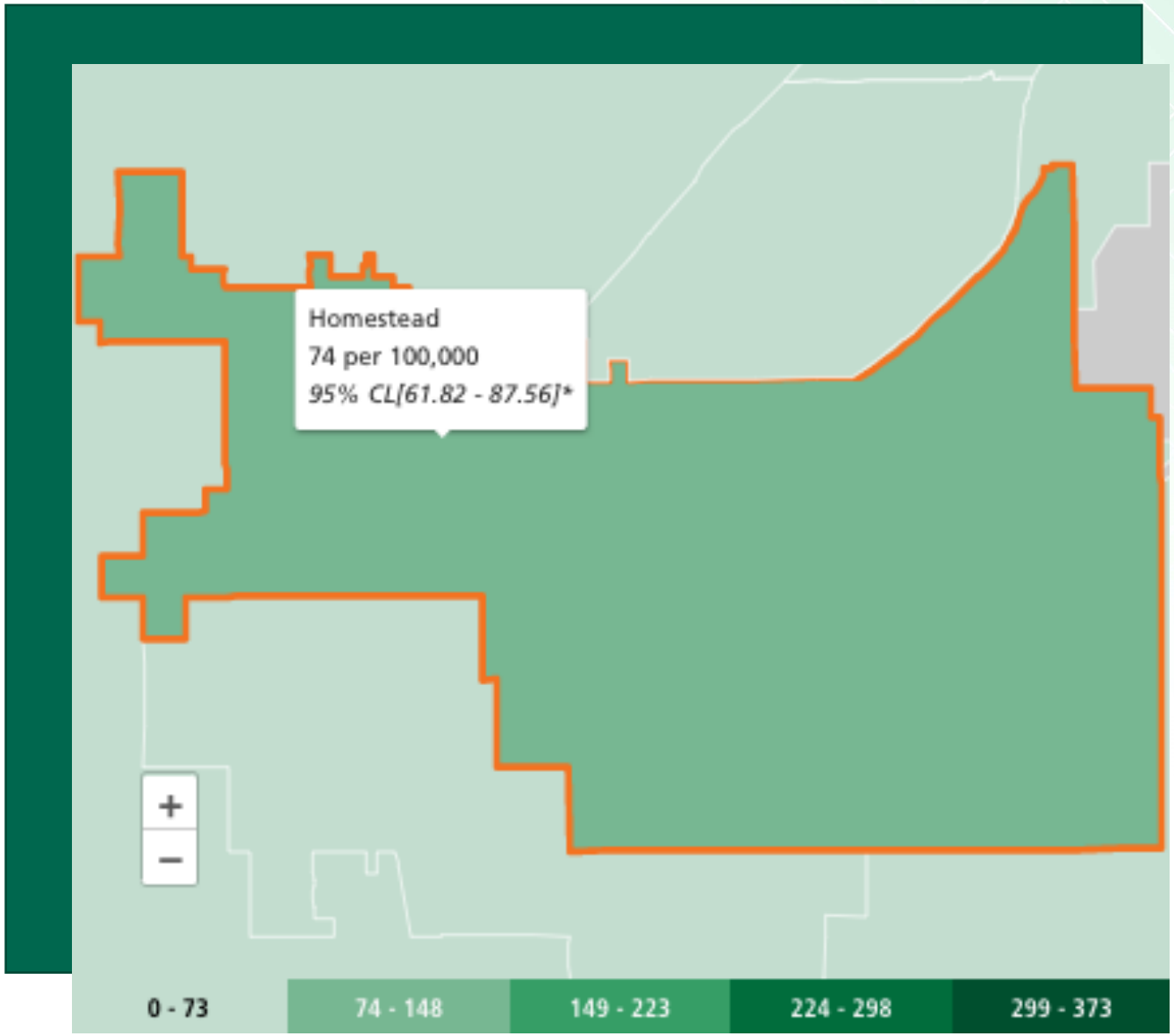
Colorectal Cancer





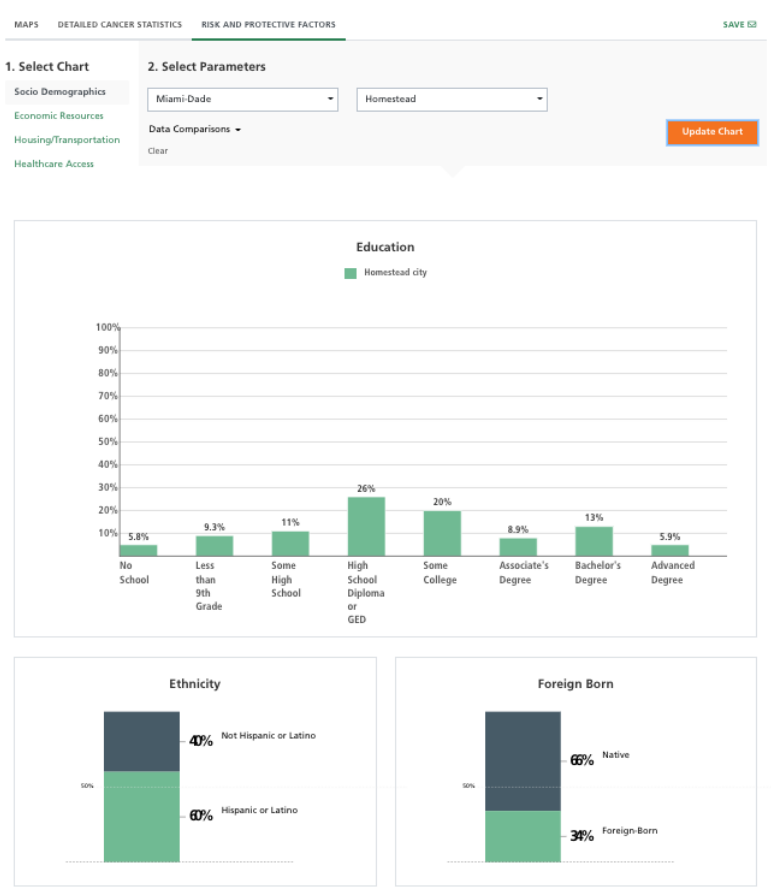
By Place
Colorectal Cancer

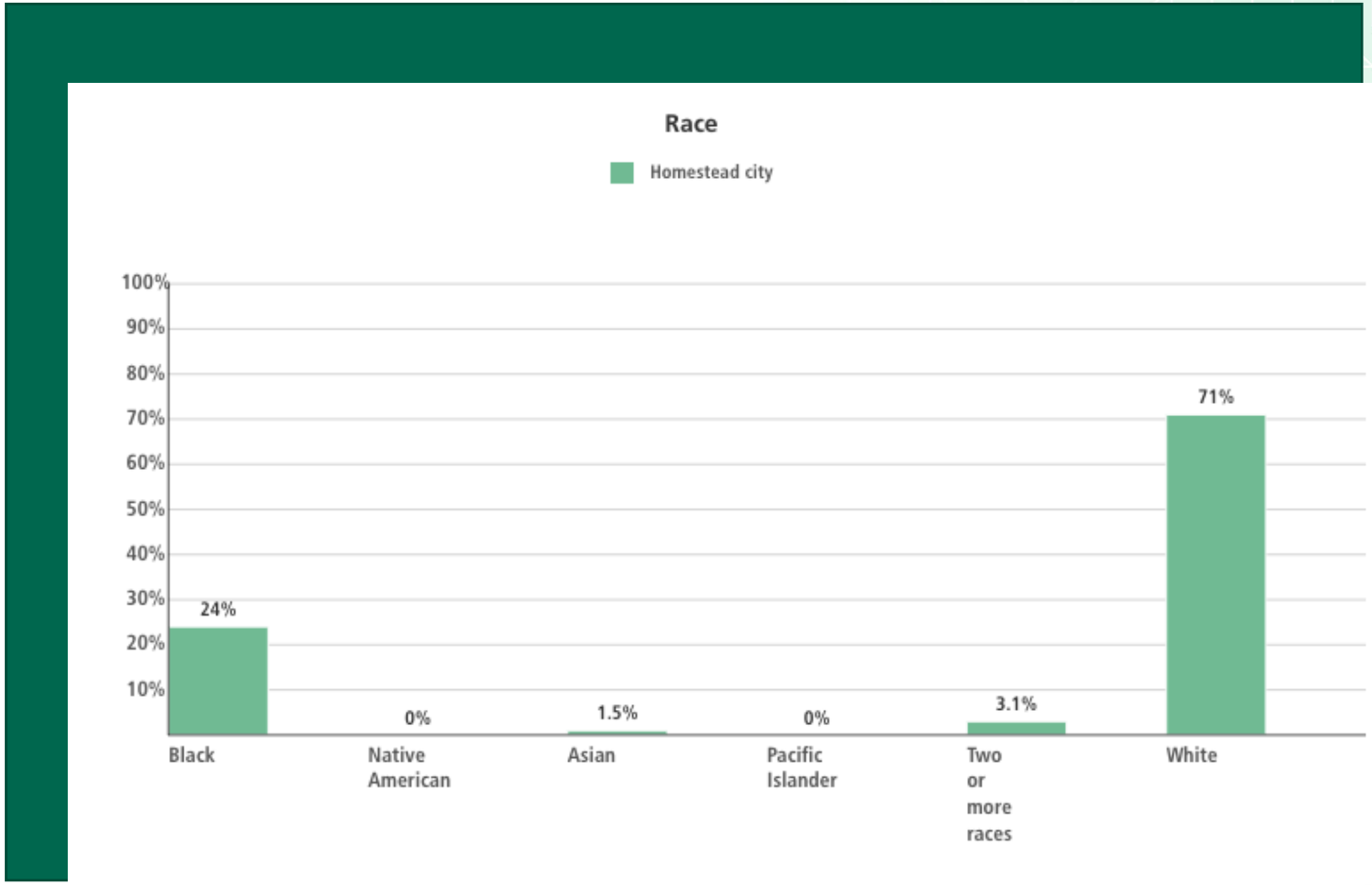




Demographics By Place

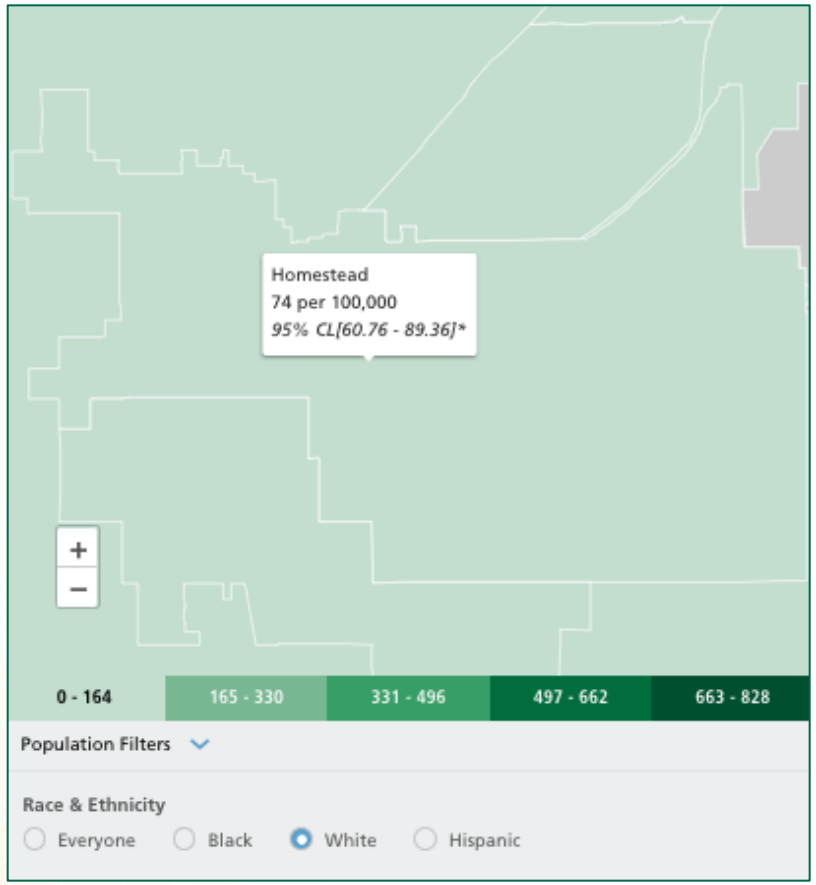
Homestead



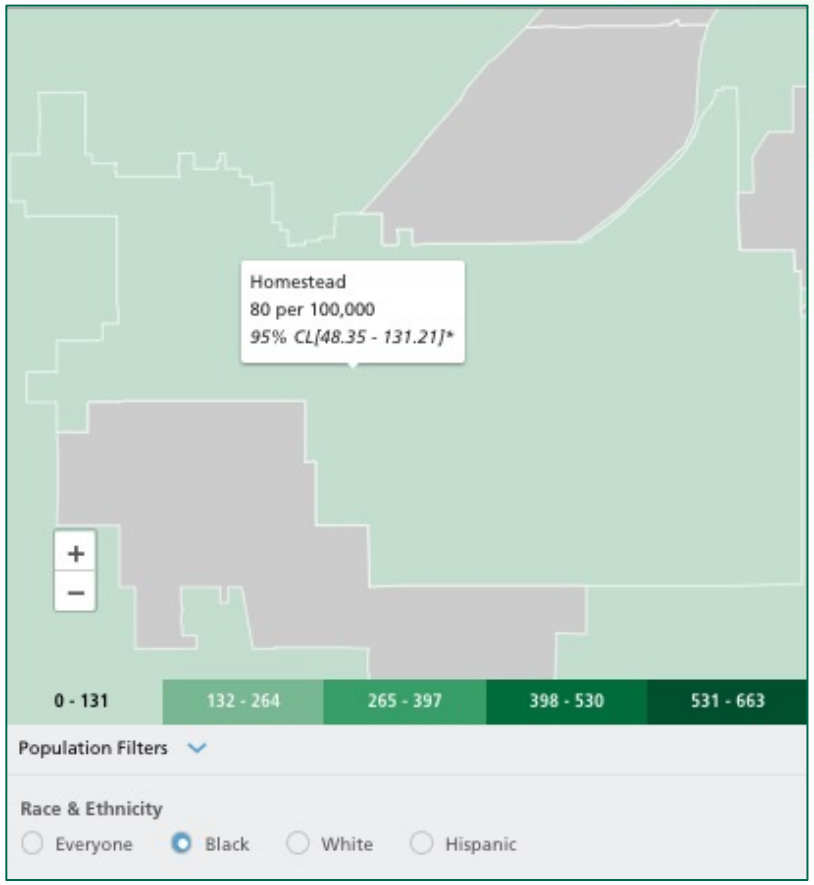


By Race

Colorectal Cancer



White: 74 cases per 100,000



Black: 80 cases per 100,000

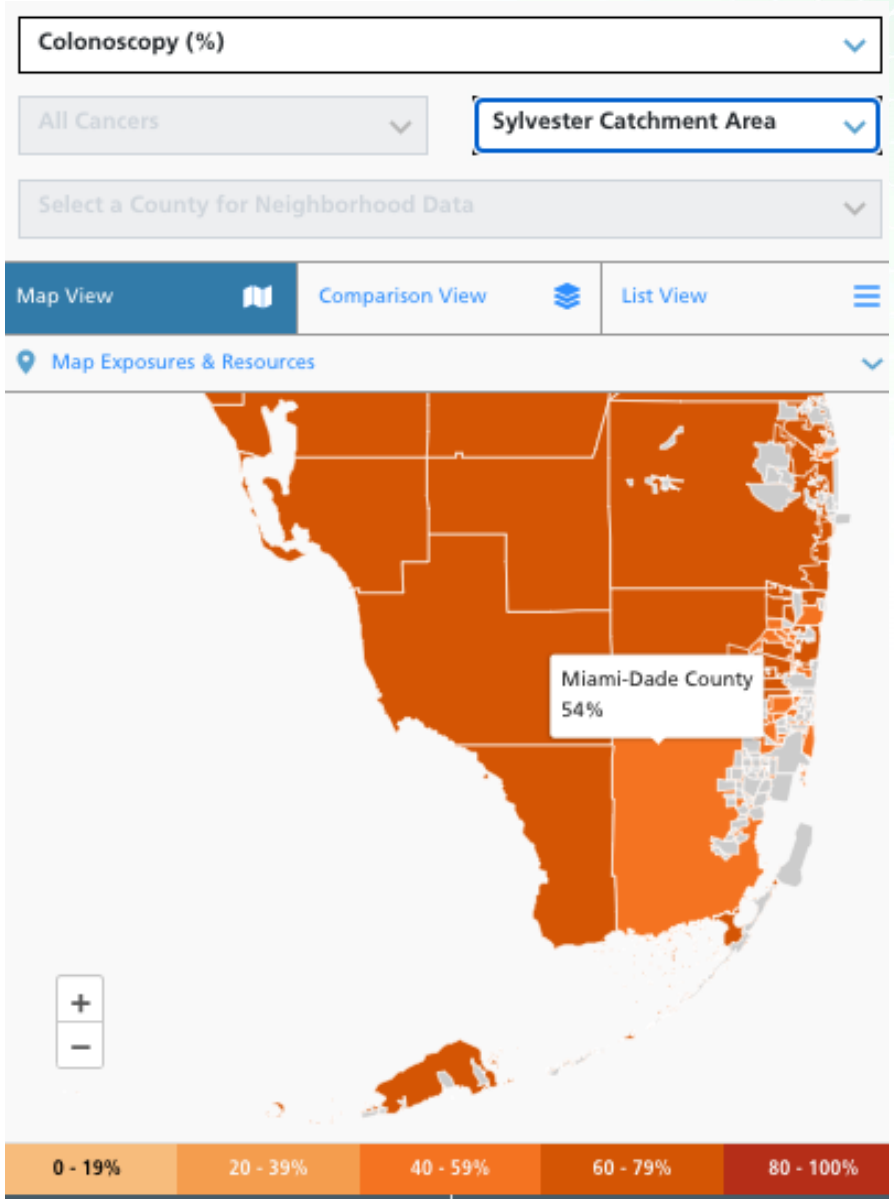
Screening

Homestead

The Healthy People:

(2020; https://www.healthypeople.gov/2020/data-search/)

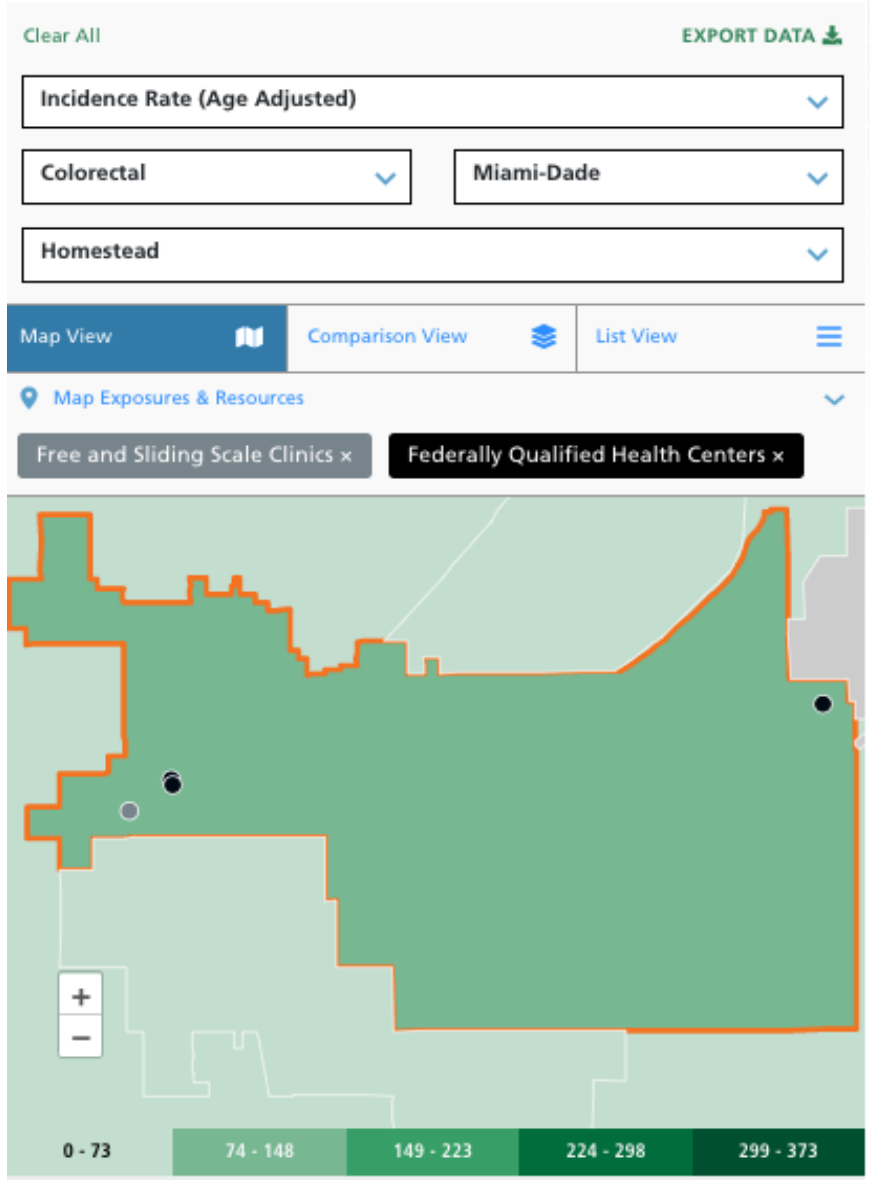
- Baseline colonoscopy screening rate target of 70.5%
- Miami-Dade: 54%



Access to Care

Homestead

- Identify gaps in accessible care
- Highlight underserved areas



Game Changer Vehicles

- Address the cancer burden in our South Florida community
- **Sylvester Game Changer Vehicle**
  - The following services are provided for **FREE**:
    - Cervical cancer screening
    - Colorectal cancer screening
    - Prostate cancer screening
    - Hepatitis C viral exposure screening
    - HIV testing
    - Sexually transmitted infections (STI) screening
- In-person counseling and/or referrals for common health concerns
- Cancer health education rooted on prevention & early detection

SCAN360 Updates
Rate Calculations

Scan360 package

- Provides functions and population datasets to calculate disease incidence and mortality rates
- Modeled after SEER*Stat Software for age-adjusted rate calculations

SEER population data

- Separate county & tract population dataset files
- Standard population for age adjustments
- Stratification by sex, age, race, ethnicity

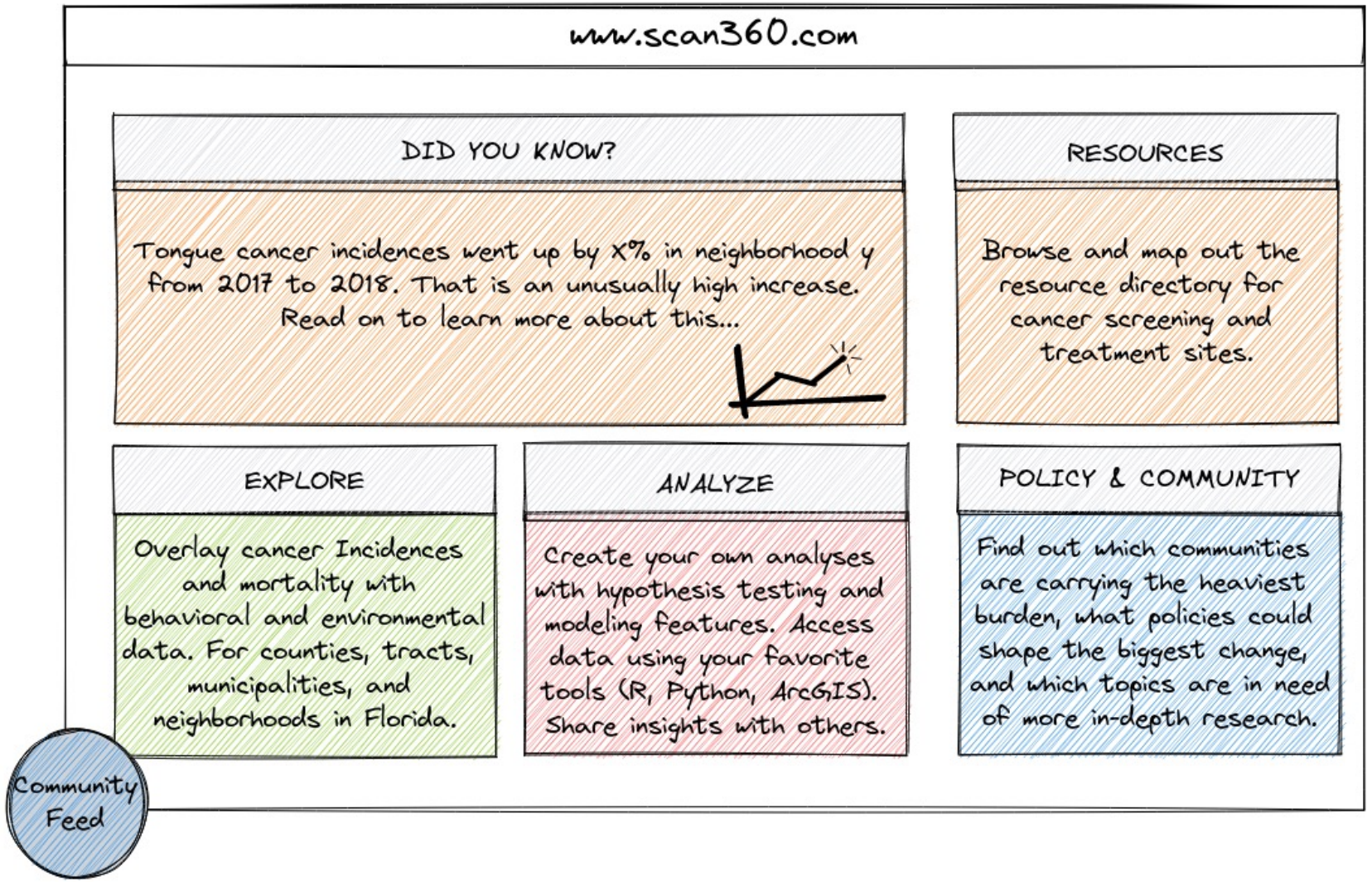
✓ SCAN360 rates are now comparable to rates published by NCI/SEER

✓ Increased accuracy; SEER Population datasets provide yearly population estimates

SCAN360 Updates
Aims for Users

Aims/User Groups	General Public	Policy Makers	Researchers	Community Leaders	Practitioners
Modernized UI	✔	✔	✔	✔	✔
Up-to-date data	✔	✔	✔	✔	✔
Historic data		✔	✔	✔	✔
Community Features	✔	✔	✔	✔	
Self-serve data access			✔	(✔)	✔
Analytics platform			✔	(✔)	
Integration with EPIC					✔

SCAN360 Updates
Modern Web UI



SCAN360 Updates

Example: Fact-sheet

Cancer Statistics

Increased Incidence compared to United States

*Incidence/mortality data source: statecancerprofiles.cancer.gov

		Catchment	US	Ratio
OVERALL	Leukemia	17.8	14.2	1.3
	Cervix	8.9	7.7	1.2
	Oral Cavity & Pharynx	13.7	11.9	1.2
	Non-Hodgkin Lymphoma	21.7	19.1	1.1
BLACK	Cervix	12.0	8.7	1.4
	Leukemia	12.6	10.7	1.2
	Melanoma of the Skin	1.2	1.0	1.2
	Non-Hodgkin Lymphoma	16.5	14.2	1.2
	Uterus	31.5	27.6	1.1
HISPANIC	Bladder	14.9	10.8	1.4
	Thyroid	18.4	13.7	1.4
	Oral Cavity & Pharynx	9.4	7.2	1.3
	Melanoma of the Skin	6.0	4.7	1.3
	Leukemia	14.6	11.4	1.3

Note: Mortality-rate-ratios and incidence-rate-ratios are comparison measures calculated by dividing the incidence or mortality rate of the SCCC catchment area by the reference population rate (in this case, the reference populations are FL or the US). When an incidence-rate or mortality-rate ratio is greater than 1, this indicates that the catchment area's rate exceeds that of the reference population.

Cancer Statistics

Increased Mortality compared to United States

*Incidence/mortality data source: statecancerprofiles.cancer.gov

		Catchment	US	Ratio
OVERALL	Cervix	2.5	2.2	1.1
	Stomach	3.1	2.9	1.1
BLACK	Non-Hodgkin Lymphoma	4.9	3.9	1.3
	Cervix	3.8	3.2	1.2
	Ovary	6.4	5.7	1.1
	Stomach	5.3	5.0	1.1
	Uterus	9.3	8.8	1.1
HISPANIC	Melanoma of the Skin	0.8	0.6	1.3
	Brains & ONs	3.8	3.1	1.2
	Lung & Bronchus	18.4	16.2	1.1
	Bladder	2.6	2.4	1.1
	Leukemia	4.8	4.4	1.1

Note: Mortality-rate-ratios and incidence-rate-ratios are comparison measures calculated by dividing the incidence or mortality rate of the SCCC catchment area by the reference population rate (in this case, the reference populations are FL or the US). When an incidence-rate or mortality-rate ratio is greater than 1, this indicates that the catchment area's rate exceeds that of the reference population.

SCAN360 Updates

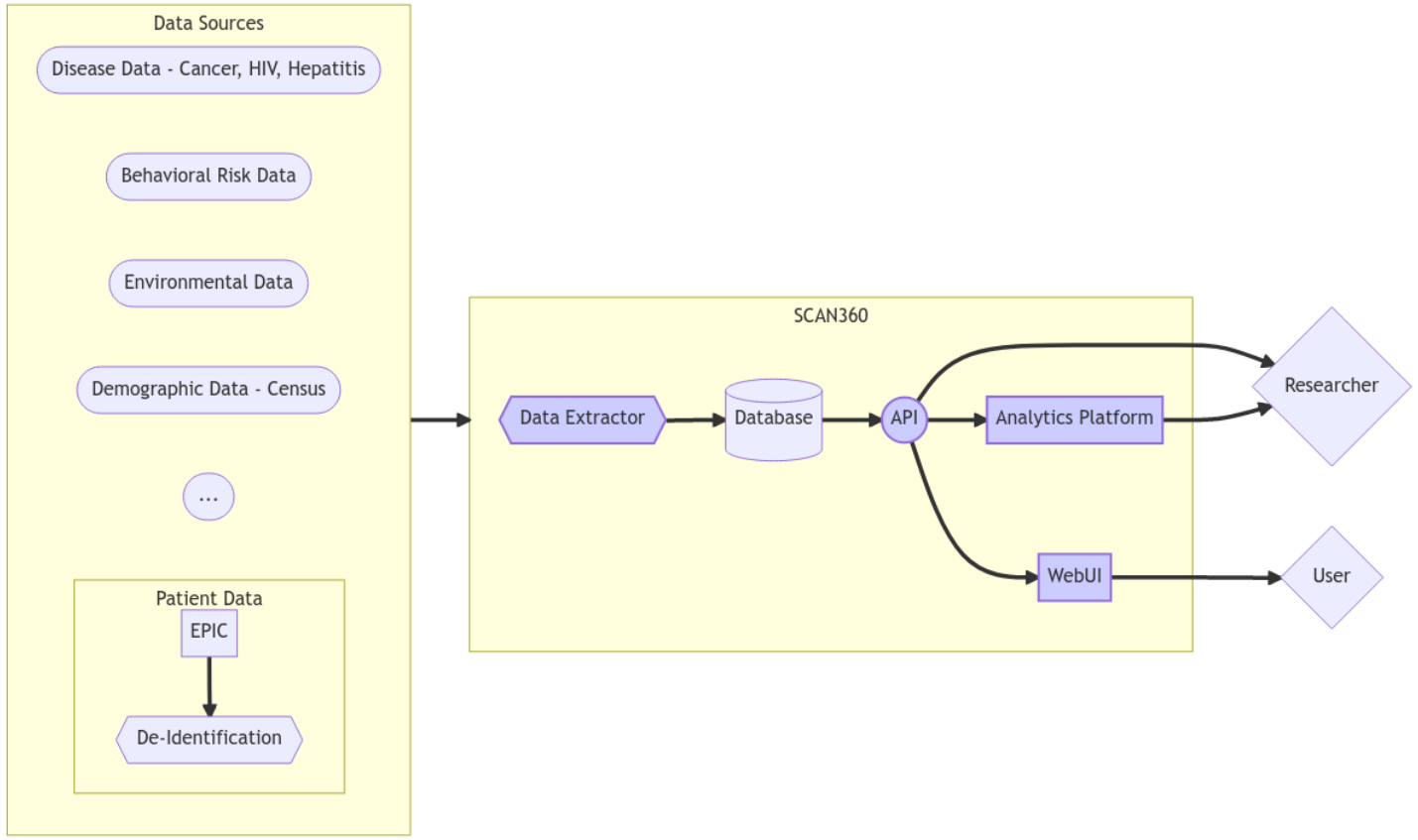
Technology Stack & Data Model

Backend Modules

- Rate Calculations
- Coverage Metrics
- Download Manager

Frontend

- Mobile friendly
- Barrier-free
- Cancer data stories / factsheets
- Neighborhood & SDG profiles
  - ✓ Dynamic comparison tables



Thank You

SYLVESTER COMPREHENSIVE CANCER CENTER
UNIVERSITY OF MIAMI HEALTH SYSTEM

NCI Cancer Center
A Cancer Center Designated by the National Cancer Institute