

An Objectively Determined Catchment Area

OSU Cancer Center Catchment Areas Workshop
February 24, 2017

Norma Kanarek, PhD, MPH

Department of Environmental Health Sciences
Johns Hopkins Bloomberg School of Public Health

Department of Oncology
Sidney Kimmel Comprehensive Cancer Center
Johns Hopkins School of Medicine

Goal: Objective Determination of the Cancer Center Catchment Area

Two Components

Intensity of service: percentage of those served in a geographic area

Market share: proportion of total seen at the cancer center



- Built a cluster of adjacent areas of high intensity
- Ideally catchment area/cluster includes 2/3 to 3/4 of patients

Service Intensity and Market Share Based on State Statistics

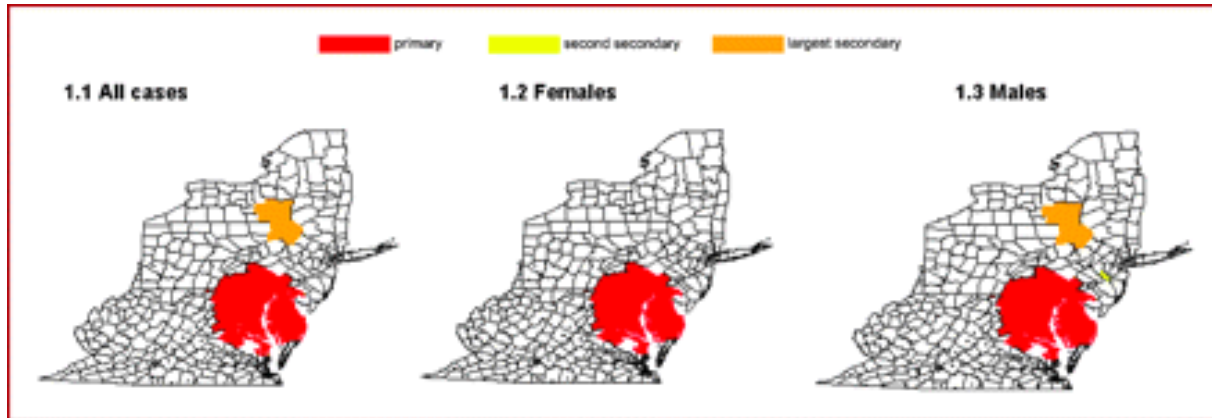
In our SatScan analysis,
counties were aggregated
one at a time

	INTENSITY			MARKET SHARE		
	SKCCC Patients All 2010	% In MD		SKCCC Patients _{MD} 2010	MD Cancer Cases _{MD} 2010	Proportion
Breast	606	69%		419	4,376	9.6%
Prostate	1264	43%		548	4,068	13.5%
Lung & bronchus	396	72%		285	3,464	8.2%
CRC	301	67%		202	2,282	8.9%
Hematological Malignancies	662	66%		438	2,404	18.2%
Pancreas	388	34%		133	759	17.5%
Liver & Int.Bile	149	60%		90	387	23.3%
Oral & Pharynx	182	58%		106	666	15.9%
Brain & Nervous System	219	57%		125	365	34.2%
All	6,224	58%		3,632	27,625	13.1%

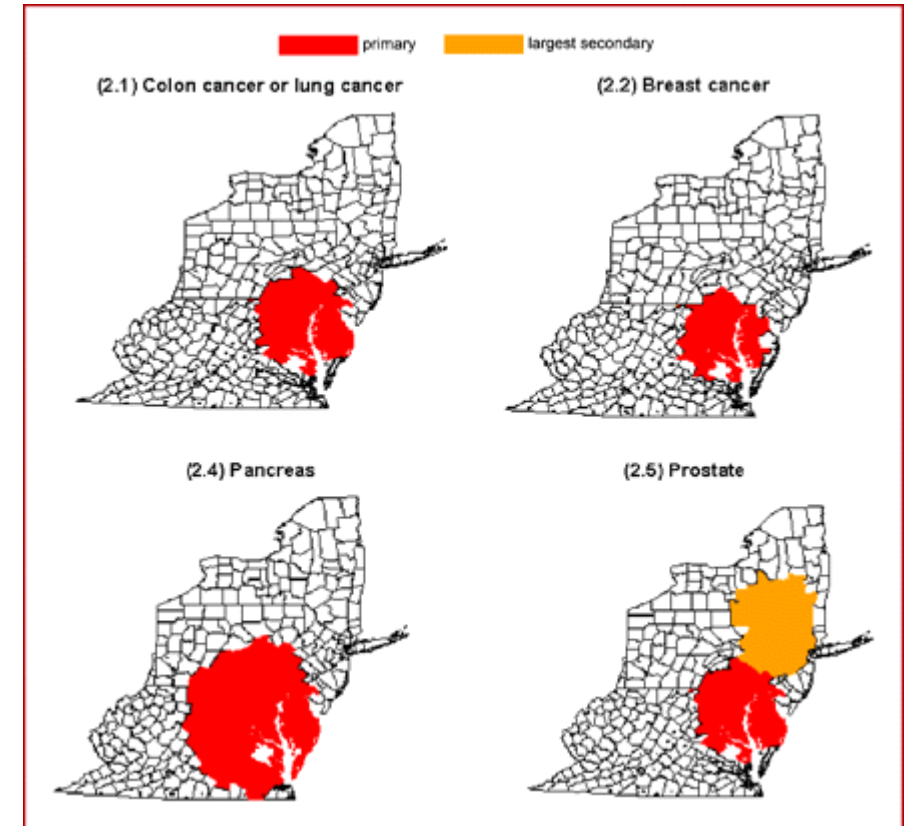
Newly Diagnosed Cases SKCCC at JH

The Statistical Catchment Area by SatScan

- 58 counties – MD, VA, DC, WV, PA, DE



- 75% of SKCCC, continental US patients reside in these counties
- 21/24 local Maryland jurisdictions



[Su, Kanarek, Fox, Guseynova, Crow, Piantadosi, 2010](#)

<http://clincancerres.aacrjournals.org/content/16/3/1065/T1.expansion.html>

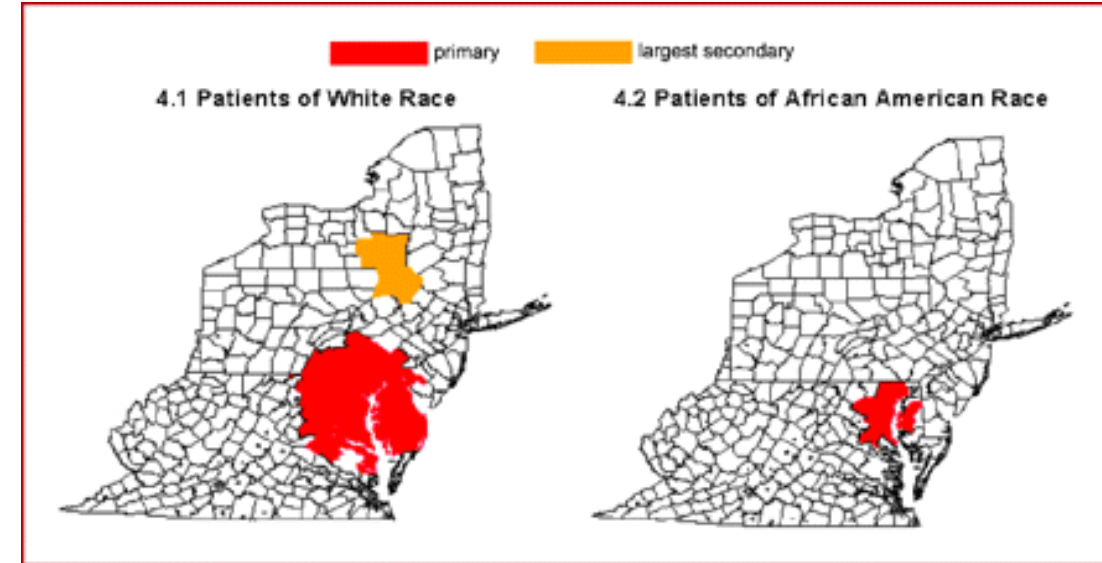
The Statistical Catchment Area by SatScan

Catchment Area

- 79% Caucasian
- 18% African American

NonCatchment Area

- 94% Caucasian
- 4% African American



58 counties

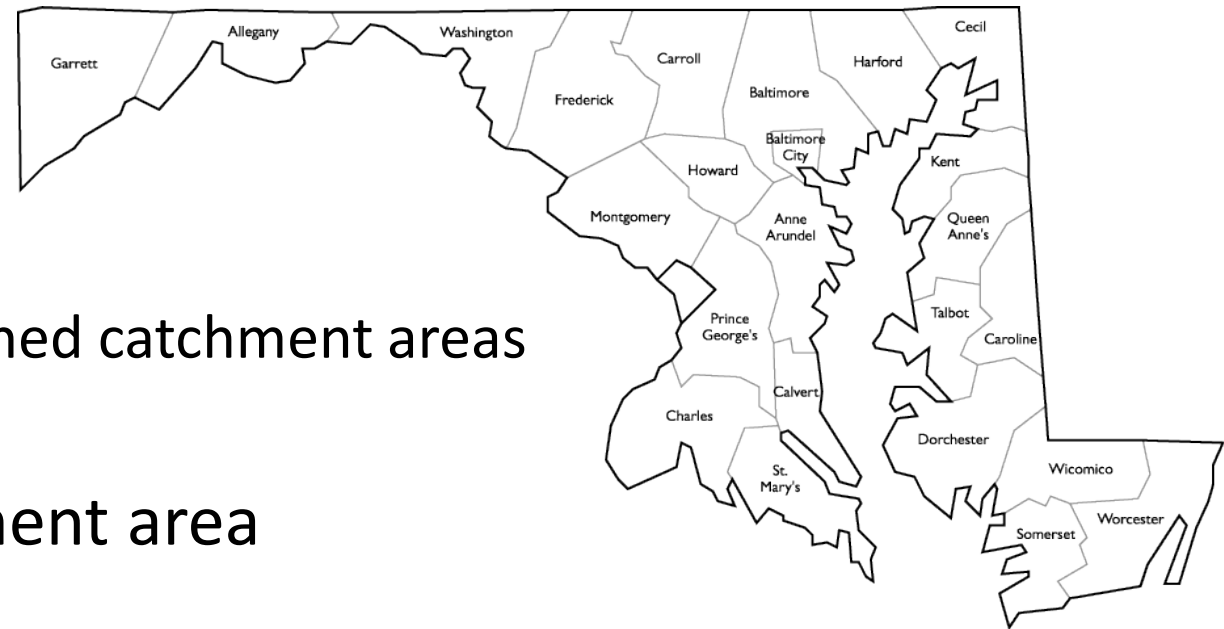
15 counties

[Su, Kanarek, Fox, Guseynova, Crow, Piantadosi, 2010](http://clincancerres.aacrjournals.org/content/16/3/1065/T1.expansion.html)
[2001http://clincancerres.aacrjournals.org/content/16/3/1065/T1.expansion.html](http://clincancerres.aacrjournals.org/content/16/3/1065/T1.expansion.html)

And our Catchment area is...

- Objectively determined catchment area assumed contiguity centered on the SKCCC with high intensity market share (compared to surrounding areas) that serves 75% of our continental US patients

- Reviewers (2011):
 - Recommended political boundaries
 - Accustomed to subjectively determined catchment areas
- SKCCC named Maryland its catchment area

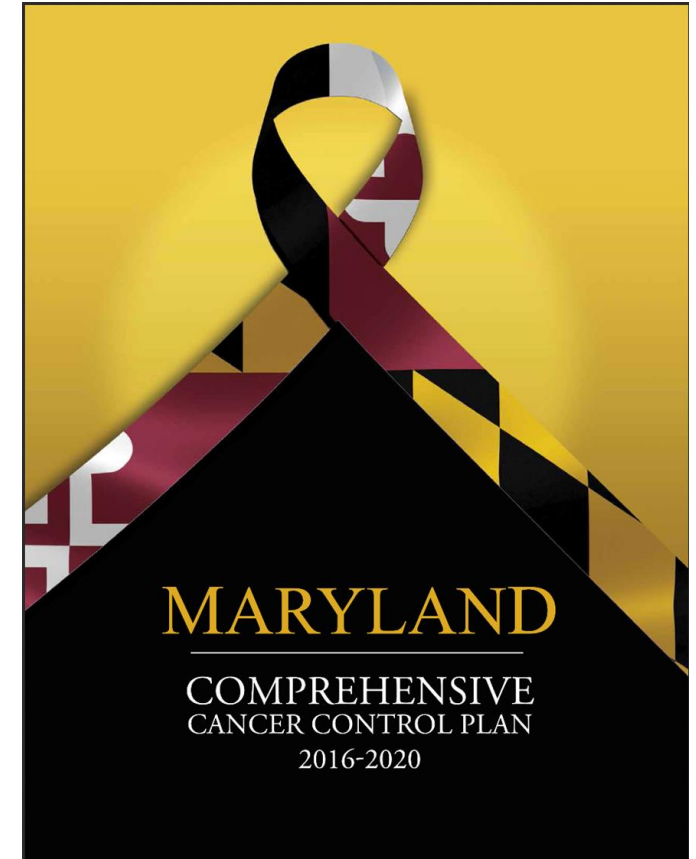
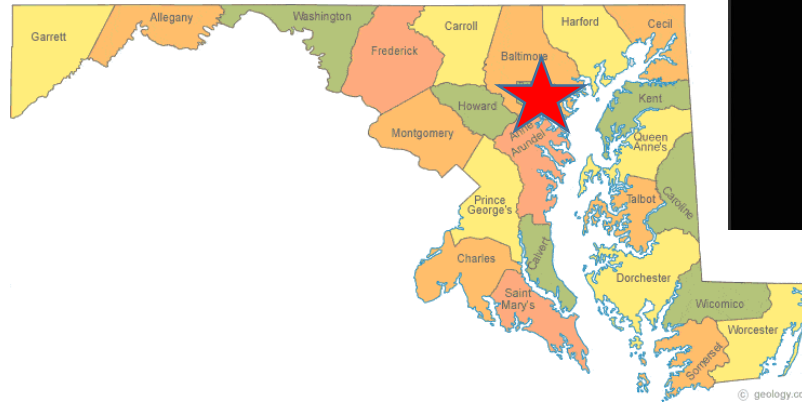


Maryland = Catchment Area

SKCCC faculty and staff were partners in writing and implementing the Maryland Cancer Plan

Special interest in

★ ***Baltimore City***
where the SKCCC is
located



Thank you!

Norma Kanarek

615 North Wolfe Street, E7541

410-955-3758

norma@jhu.edu