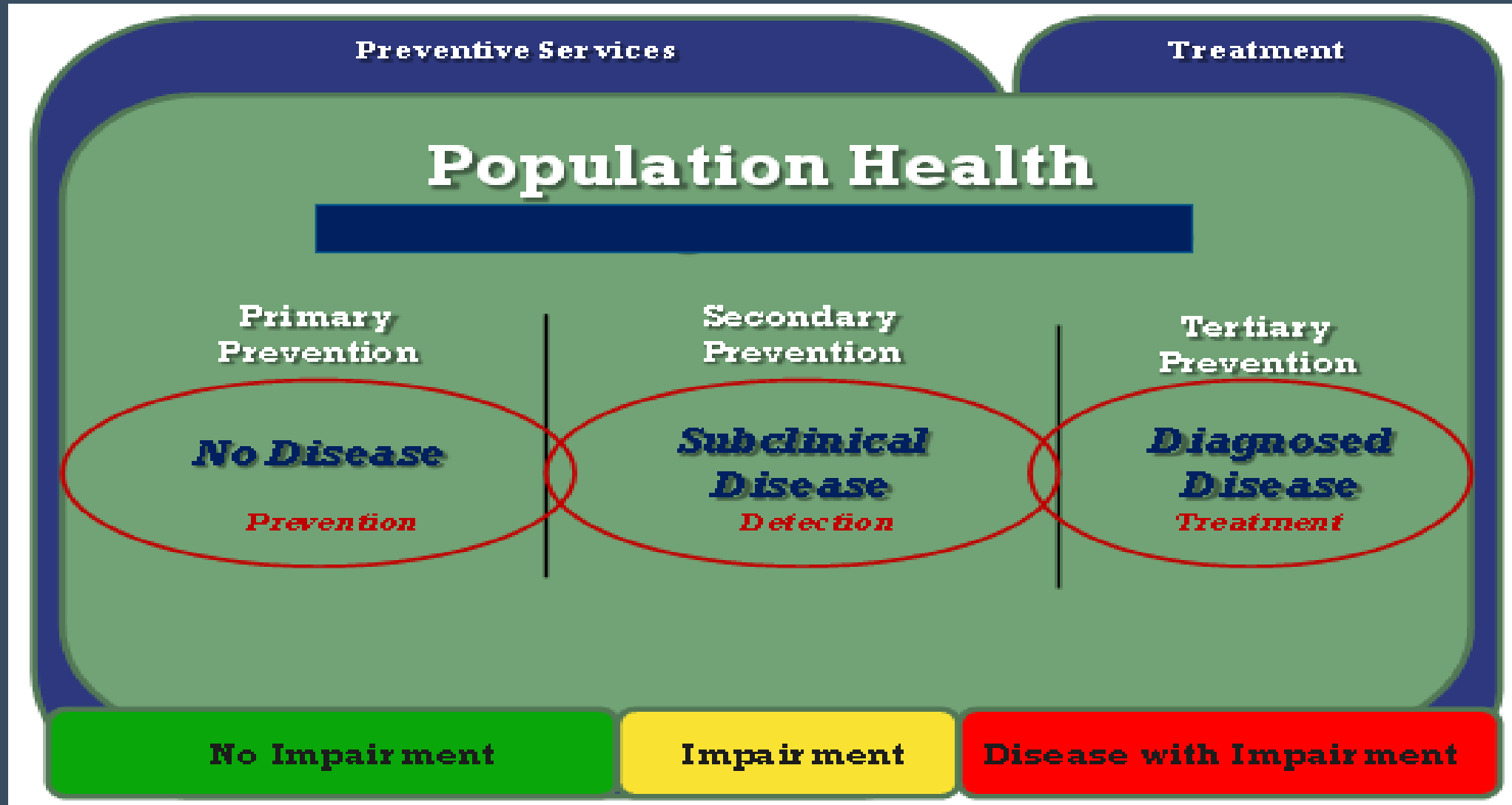


Lead Poisoning Prevention: Physician As Advocate

Roopa Thakur, MD



Prevention



Cleveland's Lead Crisis

- Ohio has the 3rd highest percentage of children <6 years with elevated blood levels of lead (EBLL)
- 41% of Ohio kids with EBLL in Cuyahoga County
- 1218 confirmed cases of Cleveland children under age 6 exposed to lead in 2018



Lead Safe Cleveland Coalition



Lead Safe Cleveland

- Coalition announced January 2019
- No child with blood levels of lead > 5 ug/dL by 2028
- 6 working committees
 - Lead Safe Certificate system
 - Lead safe workforce
 - Public awareness campaign
 - State and federal policy
 - Lead Safe Home Fund
 - Lead Safe Resource Center and Home Loans and Grants



Housing Issue

- 80% of Ohio's lead poisoning cases result from lead-contaminated dust created by deteriorating lead-based paint in houses built before 1978
- Nearly 90% of Cleveland housing stock built before 1978



Lead Safe Home Fund

LEAD SAFE
Loans & Grants
APPLICATIONS
ARE NOW OPEN!

Find out if you're eligible for financial assistance and apply today.

chnhousingpartners.org/lead



- Lead Safe Grants
 - Property Owners
 - Childcare Centers
- Lead Safe Resource Center
 - Workforce Development
 - Operational Hub
- Program Administration and Evaluation



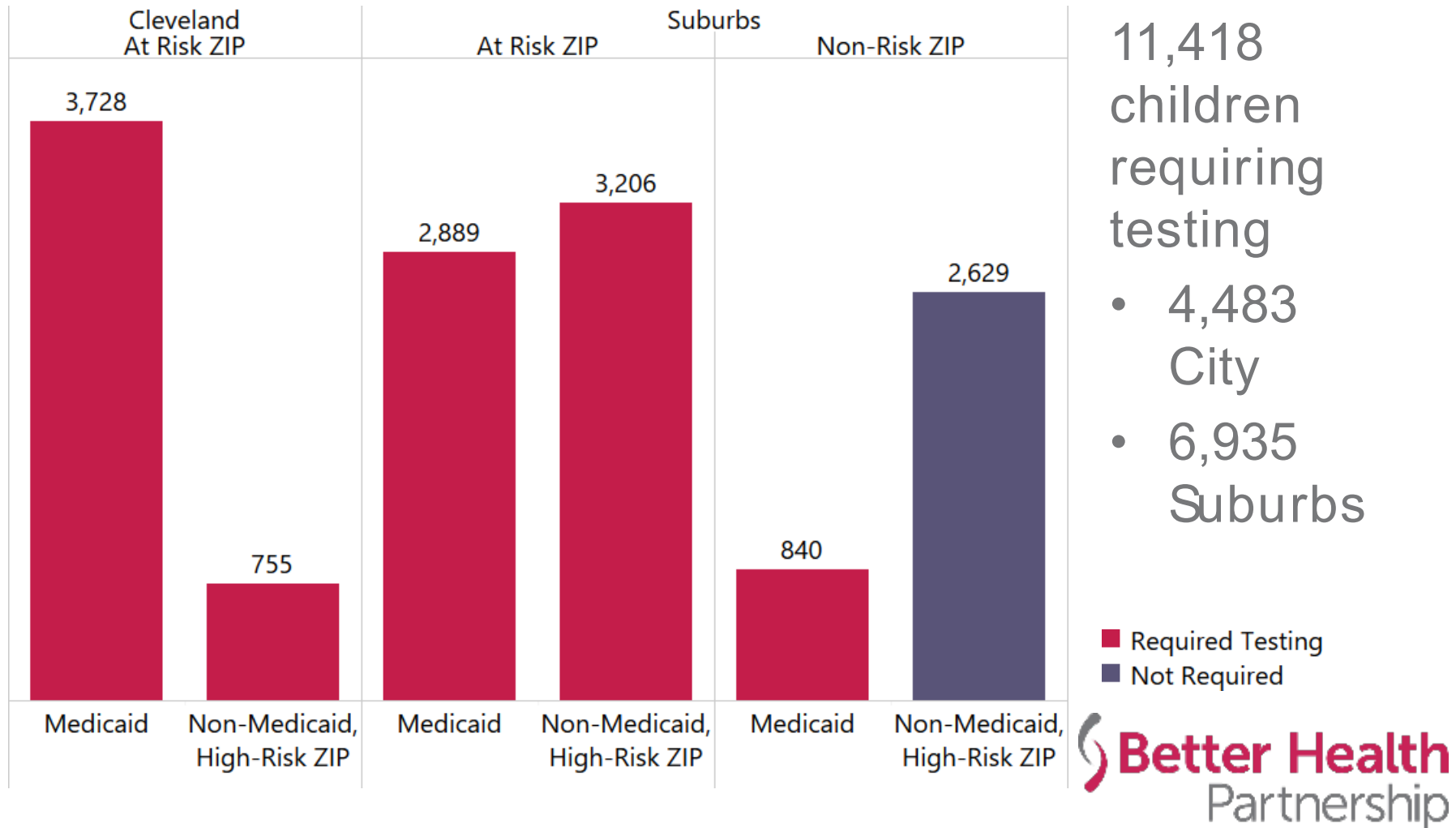
Where do we fit in?

- Ohio Department of Health estimates that only 50-60% of at risk children are being tested.
- Medicaid mandated testing
 - 50% age 1
 - 34% age 2
- CWRU's recent study suggests that Cuyahoga County's stats are lower.



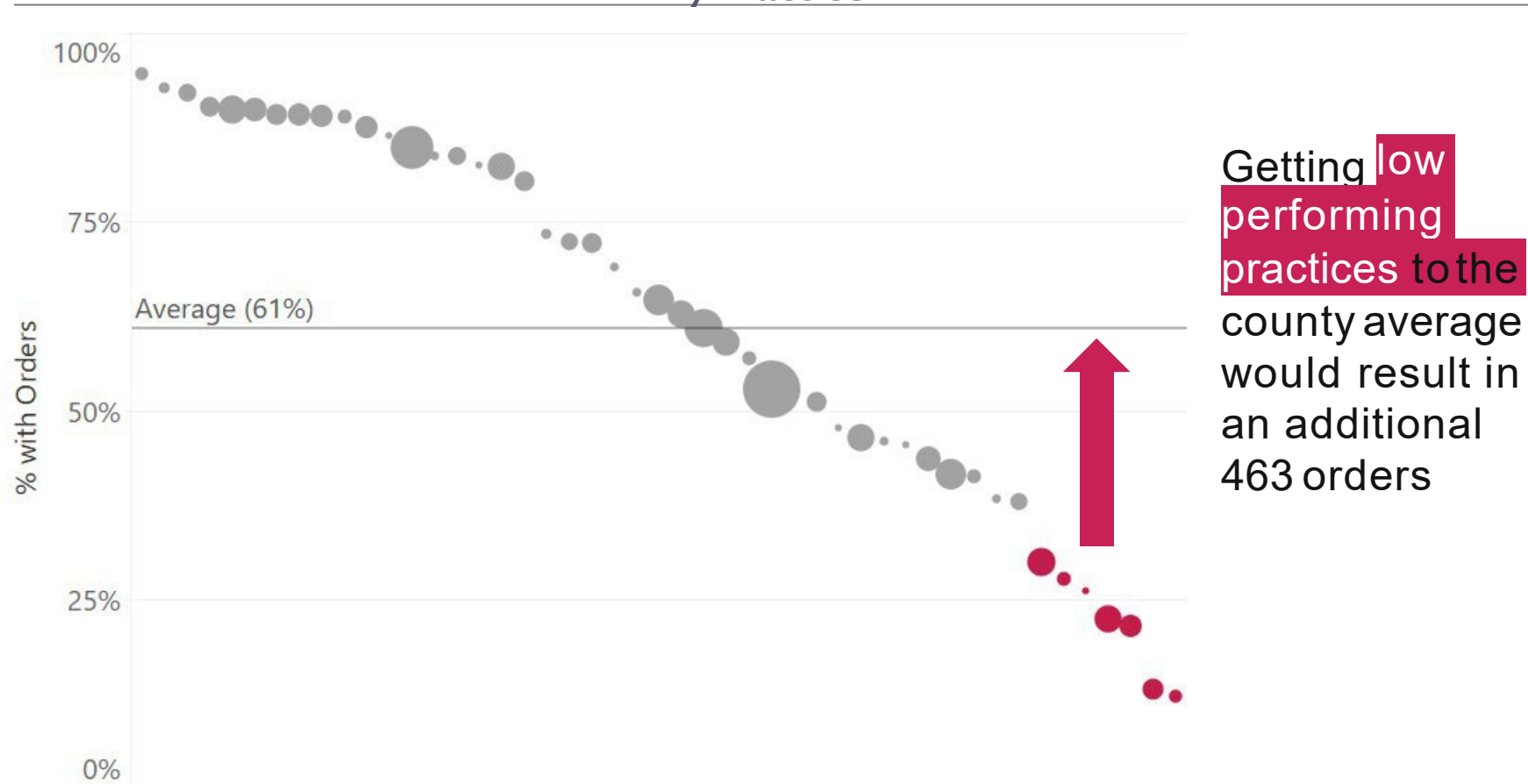
Required Testing

Children (12-29 mos.) By Testing Requirement



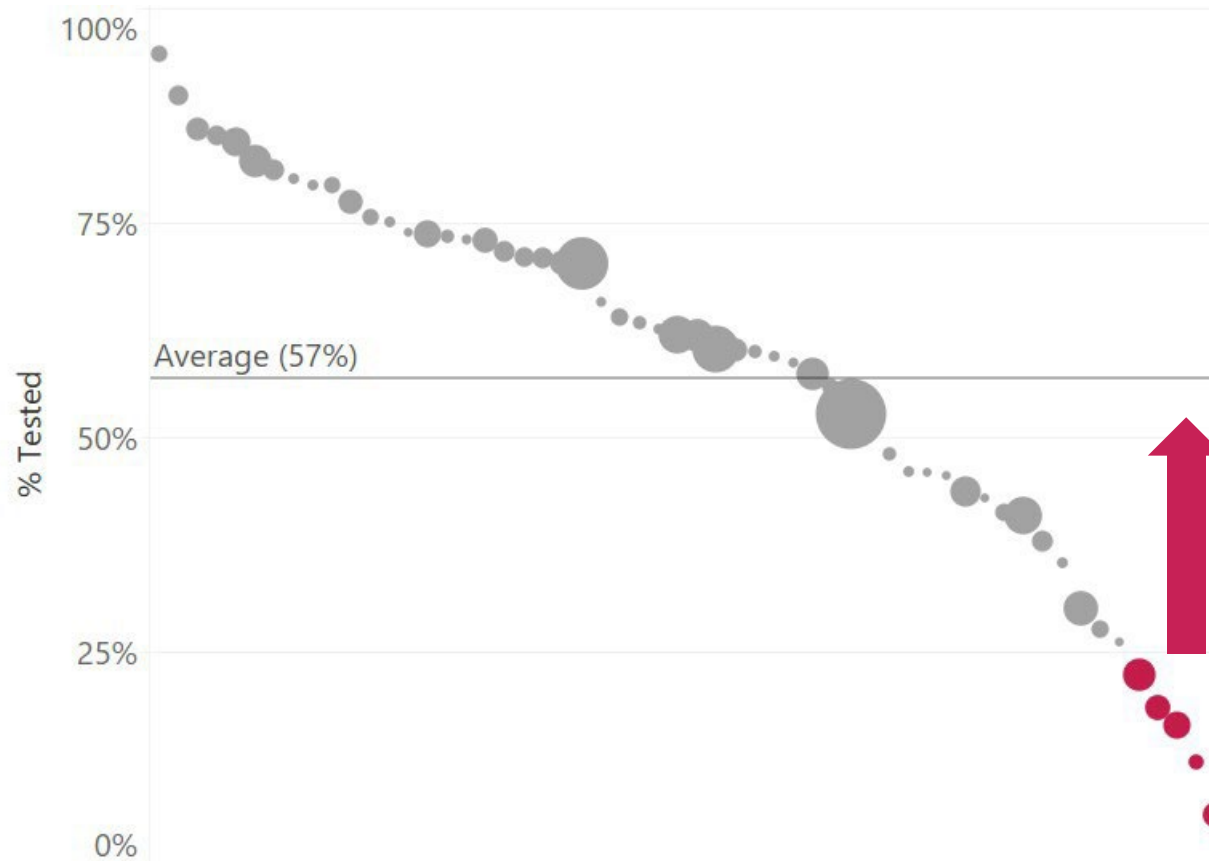
Lead Orders

% of Children (12-29 mos.) with Well-Care Visits & Requiring Testing
with a Lead Test Lab Order
By Practice



Lead Tested

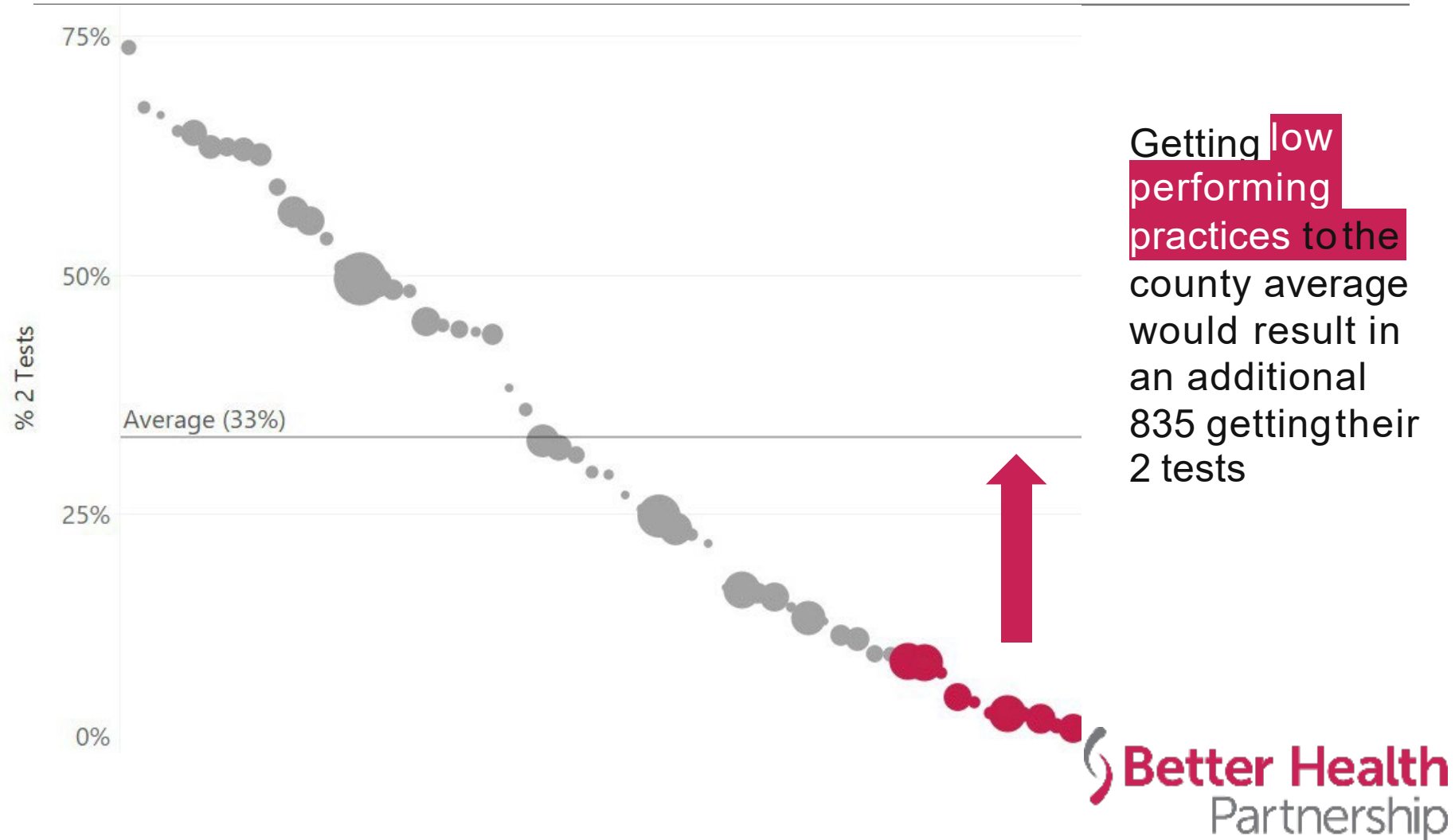
% of Children (12-29 mos.) with Well-Care Visits & Requiring Testing
with a Lead Test
By Practice



Getting low performing practices to the county average would result in an additional 390 tests

Two Lead Tests

% of Children (24-59 mos.) with a Well Visit with Two Lead Tests (Required Only)
By Practice

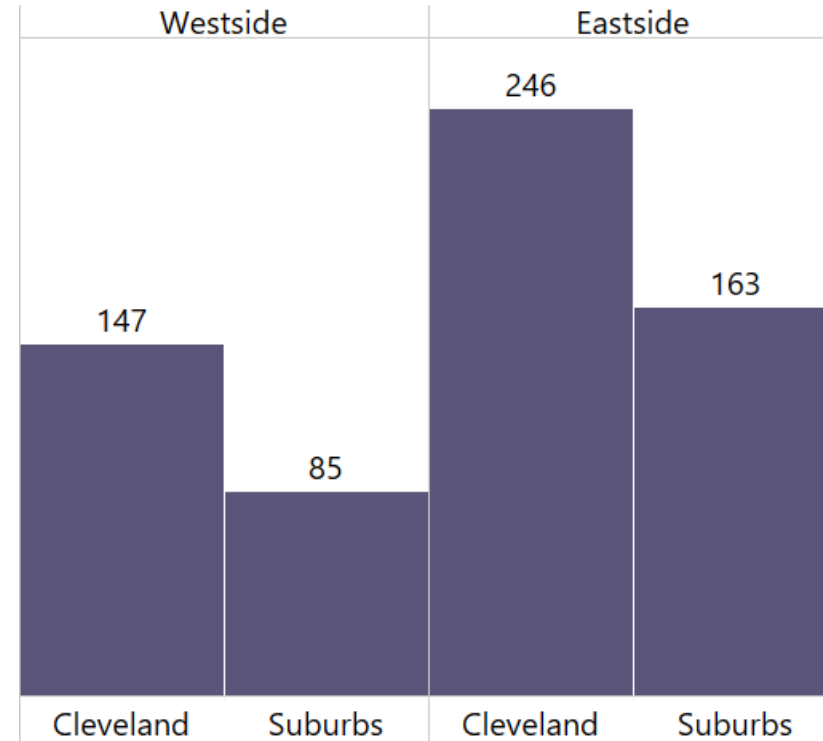


Estimated Missing EBLL

Number of Children (1-5) Not Being Tested
and Estimated to Have EBLL (+5ug/dl)

Neighborhoods with 15+ Missing EBLL

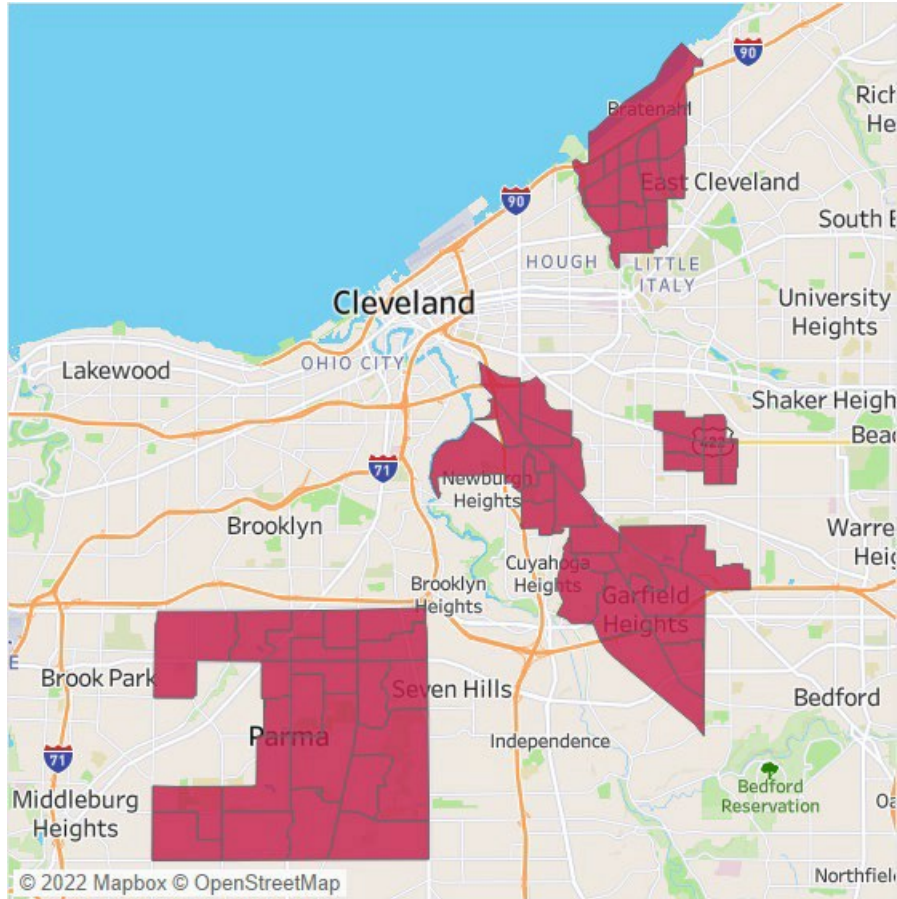
Cleveland	Westside	Old Brooklyn	22
		West Boulevard	19
		Cudell	16
		Clark-Fulton	16
	Eastside	Broadway - Slavic Village	37
		Glenville	34
		Mount Pleasant	26
		Union-Miles Park	24
Suburbs	Westside	Collinwood-Nottingham	20
		Parma	23
	Eastside	Lakewood	18
		Garfield Heights	28
		Cleveland Heights	23
		Shaker Heights	19
		Euclid	18



641 children (1-5) in Cleveland are (a) not being tested, and estimated from EBLL rates (b) likely have elevated lead levels

Estimated Missing EBLL

Number of Children (1-5) Not Being Tested
and Estimated to Have EBLL (+5ug/dl)

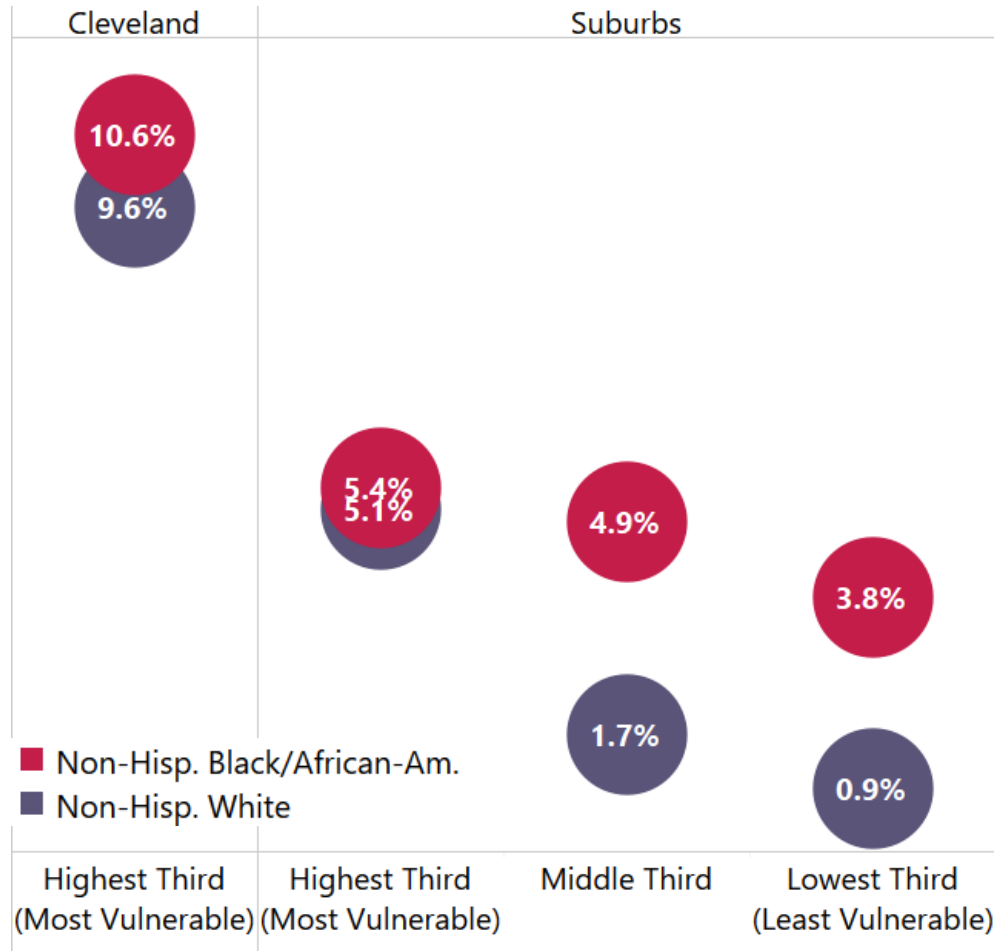


Broadway - Slavic Village			37
Cleveland	Eastside	Glenville	34
Mount Pleasant			26
Suburbs	Westside	Parma	23
	Eastside	Garfield Heights	28

Nearly 1 in 4 “Missing EBLL”
children live in these 5
neighborhoods

EBLL (5+ ug/dl)

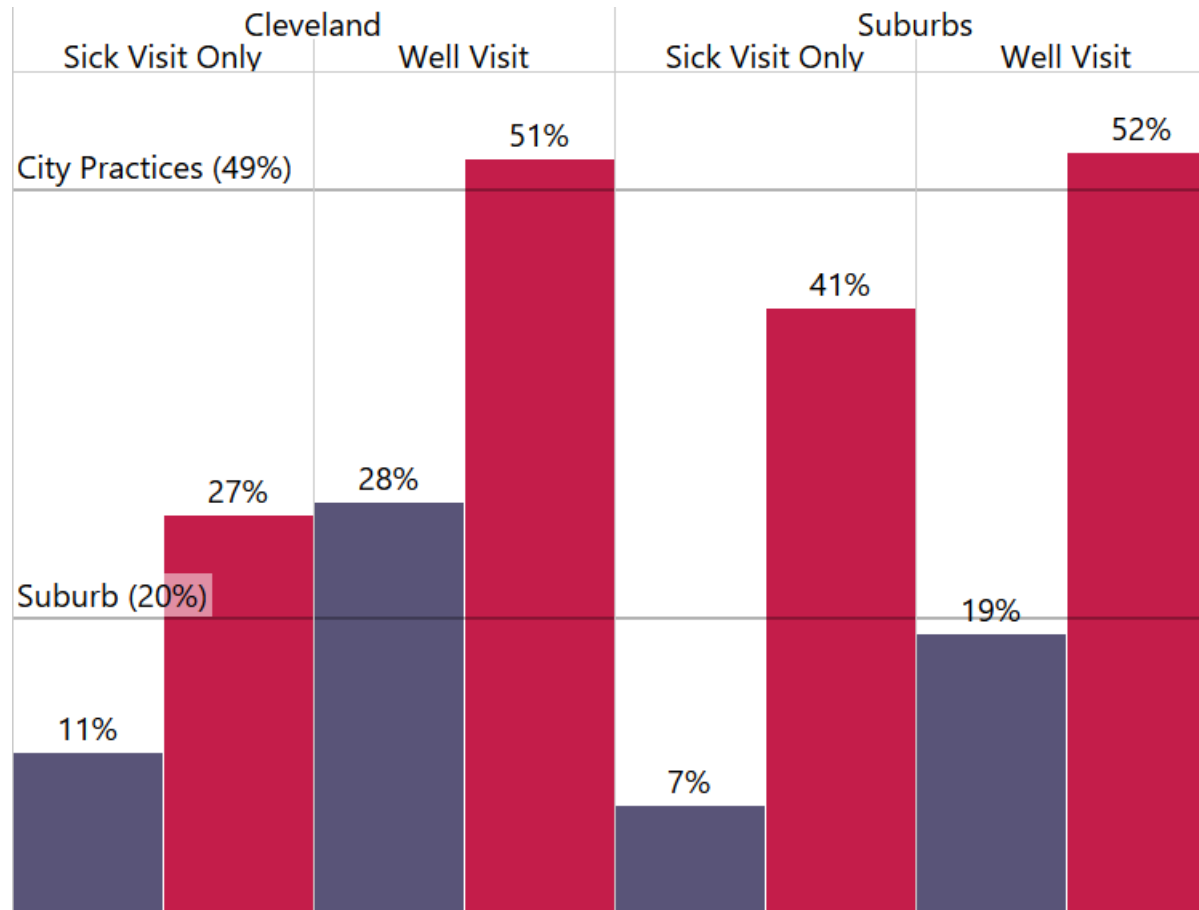
% of Children (1-5 yrs.) with Lead Levels 5ug/dl+ on any test
By Race and Social Vulnerability Index (SVI) Categories



EBLL% Blacks compared to Whites
1.10x higher in the City
1.06x higher in high SVI suburbs
2.88x higher in med. SVI suburbs
4.22x higher in low SVI suburbs

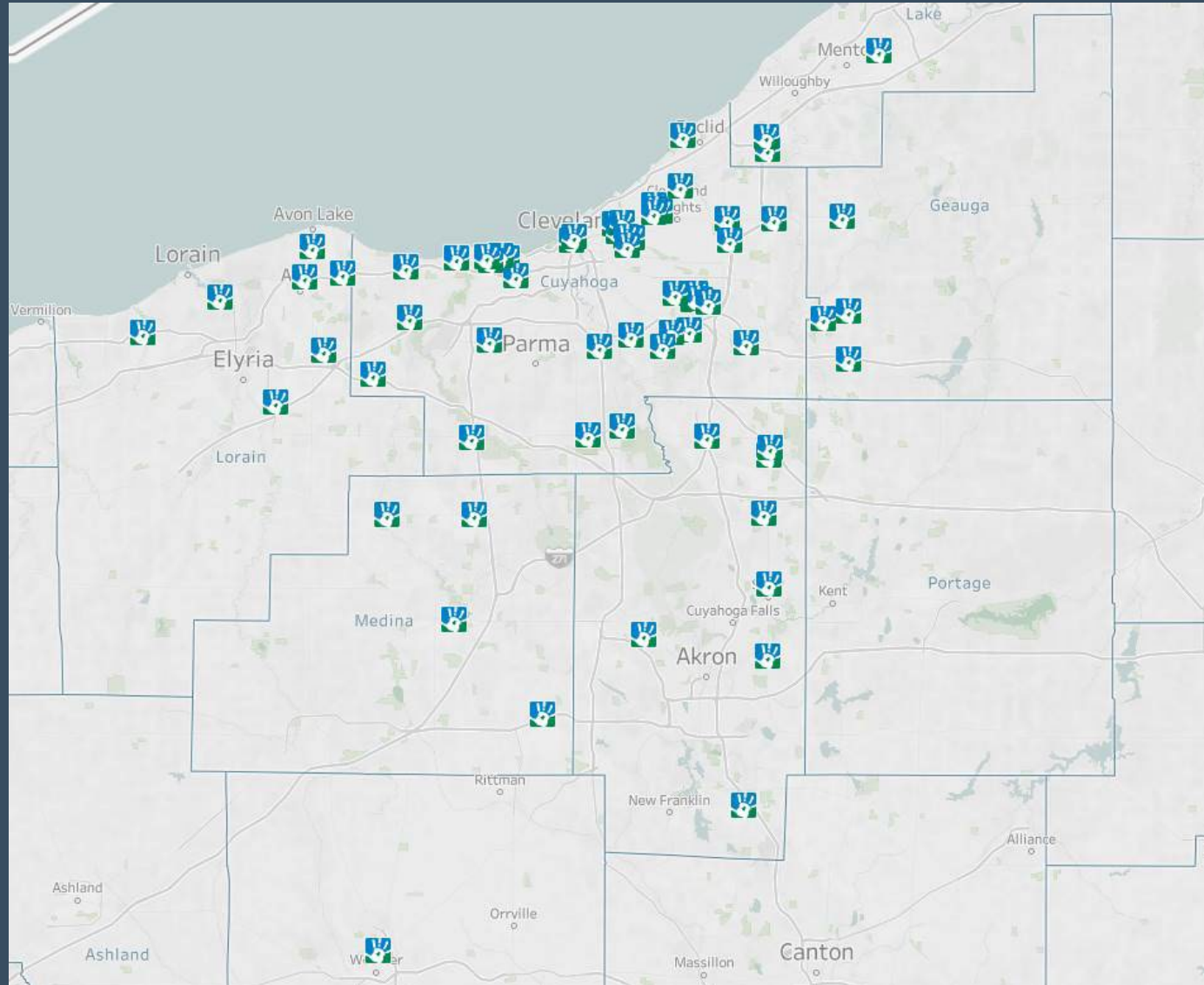
Two Lead Tests

% of Children (24-59 mos.) with Two Lead Test (Required Only)
By Child's Residence, Well-Care Status, and Location of Practice



Suburban practices are 58% less likely to get a lead test compared to practices located in Cleveland

Cleveland Clinic Pediatric Access



Missed Opportunities

1. Provider did not educate re: primary prevention
2. Provider did not order the test when indicated
3. Provider ordered the test but patient did not get blood drawn
4. Provider ordered test and capillary sample was elevated, patient was lost to follow up for venous confirmation
5. Provider ordered test and venous sample was elevated, patient was lost to follow up for management of elevated lead



2023 Lead Initiatives

Primary Prevention
Lead Safe Housing

Lead Safe Home
Fund

Lead Safe
Cleveland
Implementation

Legislative
Advocacy

Secondary Prevention
Screening/Testing

Data Collection
& Reporting

Better Health
Partnerships

Healthy Planet

Sample
Collection

Capillary

School-Based
Health

Tertiary Prevention
Wraparound Care

Lead Monitoring
Program

Medical Legal
Partnership

School-Based Health

- Partnership with Step Forward's Head Start and Early Head Start programs
- Targeting children birth – 5 years of age



Lead Monitoring Program

- Customized cadence based on clinical needs
- Home/environmental assessment
- Counseling
- Navigation to resources – Unite Us!



Physician as Advocate

- Patient/family education
- Court testimony
- Hospital system
 - Quality improvement
 - Resource allocation
- Community Partnerships
- Philanthropy
- Legislative advocacy
 - Community coalitions
 - Testimony
- Media education campaign





Cleveland Clinic Children's