

# Alternative Indicators of “Economic Disadvantage” for Compensatory Education Funding in Maryland

Presentation to the Maryland Commission on Innovation and  
Excellence in Education

Jennifer King Rice  
University of Maryland  
October 31, 2018

Based on Croninger, R. G., Rice, J.K. & Checovich, L. (2015). *Evaluation of the Use of Free and Reduced-Price Meal Eligibility as a Proxy for Identifying Economically Disadvantaged Students. Alternative Measures and Recommendations*. Denver, CO: Augenblick, Palaich & Associates.



COLLEGE OF  
EDUCATION

# Compensatory Aid

- Acknowledges that students from low-income families often require additional or more intensive services to be successful in school
- Such services can be costly (e.g., smaller class sizes, specialized and supplemental instructional)
- To “compensate” for the presumed additional cost, many school funding formulas allocate additional funding to school districts with higher low-income enrollments
- In MD, the count of students eligible for free and reduced-price meals (FRPM) is the current proxy for compensatory aid



# “Low-income” vs “Achievement”

- Income/poverty (and SES more broadly) is a strong predictor of academic achievement
- Low academic performance is a strong predictor of future success
- Risks of basing comp ed funding on achievement
  - Could incentive low performance
  - Reduction of resources with improvement
- Proposed comprehensive funding system addresses these trade-offs
  - Comp education funding based on poverty
  - Supplemental instruction funds for low performance



# School Funding Formulas

- 42 states plus District of Columbia provide some form of compensatory aid to school districts as part of their school funding formula
- Most use data from the National School Lunch and Breakfast Programs to identify students as low-income
  - 24 states use the number of eligible students for free and reduced-price meals
  - 5 states use the number of eligible students for free meals only
  - 8 states plus the District of Columbia use direct certification of student eligibility



# National Free Lunch Program

- National School Lunch Program
  - Free=135%
  - Reduced=135-185%
- For a family of 4:
  - 100% of federal poverty is \$24,858
  - 135% of federal poverty is \$31,980
  - 185% of federal poverty is \$45,510



# Direct Certification

- Homeless
- Foster Care
- Migrant children
- SNAP
  - gross income <130% federal poverty
  - net income <100% federal poverty
- TANF
  - Monthly income minus certain deductions
- Head Start, Early Head Start, and Even Start
  - <100% federal poverty



# Evaluation of Alternative Measures of “Economic Disadvantage” for Maryland Compensatory Education Program

- Examined impact of Community Eligibility Provision (CEP) of the Healthy, Hunger-Free Kids Act on school funding formulas driven by FRPM counts
- Identified how states are responding to the CEP provisions, including alternative indicators being used by state formulas
- Simulated use of alternative indicators in Maryland



# Alternatives and Simulations

## Base Model

- Continued use of form for reporting family income in CEP schools (like traditional FRPM)

## Hybrid Models

- Federal eligibility form used in non-CEP schools; CEP schools use a multiplier of direct certification counts -- four hybrid models (Hybrid-All, Hybrid-1.6, Hybrid-1.8 & Hybrid-1.4)

## Alternative Indicators

- Use non FRPM-based indicator of economic disadvantage
  - Direct certification count
  - Title I count
  - US Census Poverty Estimate





# Assessment Criteria

## Accessibility of Data

- How easily can the data for a model be obtained? Does the model impose additional burdens for data collection?

## Predictive Validity

- Does the model predict U.S. Census Bureau estimates of children ages five through 17 living in poverty in the school district?

## Face Validity

- Is the model likely to have credibility with the public and policy makers?

## Distributional Effects

- Does the model change a school districts share of the number of low-income students in the state compared to its shares using FRPM.

## Other Considerations

- Does the data provide student level measures?
- Are there regular updates?



# Recommendations

- Alternative form for family income– “status quo”
- Direct certification
  - More direct count
  - Need to improve matching
  - Requires a multiplier
  - Add Medicaid
- Medicaid enrollment as a new option



# Advantages of Medicaid Data

- Meets all criteria
  - Accessible
  - Predictive validity – .994 correlation with FARMS
  - Face validity – transparent measure of poverty
  - Distributional effects – more accurate measure
  - Other considerations
    - Student level
    - Early October snapshot with annual updates
- No need for a multiplier like direct certification
  - Eligibility similar to FRPM
- Other states



# Preliminary Medicaid Data

County	Actual FRPM Count	% Total	Medicaid	% Total	Count Diff	% Difference
Allegany	4,473	1.2%	5,252	1.3%	779	0.1%
Anne Arundel	24,705	6.7%	26,592	6.8%	1,887	0.0%
Baltimore City	64,831	17.6%	67,846	17.2%	3,015	-0.4%
Baltimore	47,897	13.0%	56,216	14.3%	8,319	1.3%
Calvert	2,943	0.8%	3,725	0.9%	782	0.1%
Caroline	2,823	0.8%	3,570	0.9%	747	0.1%
Carroll	4,698	1.3%	5,951	1.5%	1,253	0.2%
Cecil	6,191	1.7%	7,582	1.9%	1,391	0.2%
Charles	9,133	2.5%	8,884	2.3%	-249	-0.2%
Dorchester	3,002	0.8%	3,582	0.9%	580	0.1%
Frederick	10,394	2.8%	11,657	3.0%	1,263	0.1%
Garrett	1,626	0.4%	2,075	0.5%	449	0.1%
Harford	10,959	3.0%	12,404	3.1%	1,445	0.2%
Howard	11,645	3.2%	12,859	3.3%	1,214	0.1%
Kent	986	0.3%	1,346	0.3%	360	0.1%
Montgomery	51,646	14.0%	54,306	13.8%	2,660	-0.2%
Prince George's	77,325	21.0%	70,204	17.8%	-7,121	-3.2%
Queen Anne's	1,848	0.5%	2,326	0.6%	478	0.1%
St. Mary's	5,361	1.5%	6,345	1.6%	984	0.2%
Somerset	1,960	0.5%	2,478	0.6%	518	0.1%
Talbot	1,954	0.5%	2,334	0.6%	380	0.1%
Washington	10,610	2.9%	12,526	3.2%	1,916	0.3%
Wicomico	8,259	2.2%	10,180	2.6%	1,921	0.3%
Worcester	2,647	0.7%	3,580	0.9%	933	0.2%
	<b>367,916</b>	<b>100.0%</b>	<b>393,820</b>	<b>100.0%</b>	<b>25,904</b>	<b>0.0%</b>

October 2017 below 189% of Federal Poverty Level, Ages 5 - 18



# Issues to Address

- Medicaid calculations are 7% higher than FRPM counts
- FRPM may have undercounted in some counties
- Unevenness with undocumented immigrants
- Non-publics are included
  - 10.2% of students are enrolled in a non-public school

