

OHIO MEDICAID ASSESSMENT SURVEY

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Taking the pulse of health in Ohio

POVERTY AND HEALTH COST DIFFICULTIES AMONG OHIO'S NON-SENIOR ADULT POPULATIONS IN 2012

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1. INTRODUCTION

Poverty influences morbidity, mortality, and general health status (Starfield, 1992; Fiscella & Franks, 1997; Cockerham, 2007; Adler & Rehkopf, 2008). Poverty is positively associated with higher rates of cardiovascular disease (Link & Phelan, 1995; Lynch, 1996; Clark, DesMeules et al., 2009), pulmonary disease (Johannessen et al., 2010; Gershon et al., 2012), cancer (Clegg et al., 2009; Yin et al., 2010), mental stress (Brunner, 1997; Baum, Garofalo, & Yali, 1999; Adler & Rehkopf, 2008; Aneshensel, Phelan, & Bierman, 2012), and fair or poor general health status (Anderson & Armstead, 1995; Marmot & Feeney, 1997; Marmot & Wilkinson, 2006; Abel, 2008).

In Ohio, 23.9% (1,676,000) of adults 19-64 years of age reported 2011 family income at or below 100% of the Federal Poverty Level (FPL) (\$18,530 for a family of three); 8.6% (601,000) reported income between 101% and 138% FPL (138% FPL is \$25,613 for a family of three). Initial findings from the 2012 Ohio Medicaid Assessment Survey (OMAS) indicate that young adults, women, minorities, the less educated, the unemployed, and those in fair or poor health were more likely to be impoverished and have difficulties paying medical bills.

The goals of this brief are to describe the prevalence of poverty as measured by FPL across demographic characteristics and to examine select health cost difficulties by FPL among Ohio adults ages 19-64 years. Adults 19-64 years are the population of interest due to their higher risk of being without insurance. Most seniors (65 years and older) have health care coverage through Medicare and are not addressed in this brief.

2. MEASURING POVERTY AND HEALTH COST DIFFICULTIES

Poverty was measured using 2011 annual family income utilizing Federal Poverty Level (FPL) guidelines. The Federal Poverty Level is defined by the US Department of Health and Human Services as the minimum annual gross income that a family needs for food, clothing, transportation, shelter and transportation – FPL income designations vary by family size. The threshold of 100% FPL is applied as an analytic category because it is the fixed federal measure used for assistance by many social service agencies; the 101-138% FPL is used as an analytic category due to 138% FPL being the income limit for potential Medicaid expansion under the Patient Protection and Affordable Care Act (ACA) of 2010, constituted as 133% FPL plus a 5% income disregard. This brief addresses family income instead of household income because Ohio social and health assistance programs use family income as program eligibility criteria, instead of household income. Besides demographic profiles of the impoverished in Ohio, this brief examines two health cost difficulties: 1) inability to fill a needed prescription because of cost in the past 12 months; and 2) problems paying for medical bills in the past 12 months.

The data source for all estimates is the 2012 Ohio Medicaid Assessment Survey. The OMAS measured the health insurance coverage, health care access, health status, and health care experiences of Ohio's Medicaid, Medicaid eligible, and non-Medicaid child and adult populations of Ohio. Analysis of Medicaid enrollment for Ohio is addressed due to Medicaid being a key public health insurance program for the impoverished.

3. OHIO ADULTS 19 THROUGH 64 YEARS

3.1 Prevalence of 100% FPL or less and 101-138% FPL by Sociodemographic Characteristics

Overall, 23.9% (1,676,074) of Ohio adults 19-64 years reported a 2011 family income less or equal to 100% FPL (\$18,530 for a family of three), and 8.6% (600,606) had family income within the range of 101-138% FPL (\$25,571 for a family of three at 138% FPL) (Table 1). Younger adults had a higher prevalence of poverty than older adults, with 34.1% of adults 19-24 years reporting income of 100% FPL or less. The older the respondent, the less likely one was to be in poverty. There was a 17.2 percentage point difference between 19-24 year olds and 55-64 year olds in the prevalence of $\leq 100\%$ FPL (16.9% versus 34.1%). At 101-138% FPL, this gap decreased to 4.7 percentage points.

At or below 100% FPL females reported higher prevalence of poverty than males, with the difference being approximately 8 percentage points. At the 101-138% FPL there is no notable difference. Considering race/ethnicity, African Americans (44.2% at $\leq 100\%$ FPL and 11.0% at 101-138% FPL) and Hispanics (49.6% and 10.7%) reported the highest prevalence of poverty, whereas whites had the highest counts of poverty due to majority population status (1,162,039 at $\leq 100\%$ FPL and 461,168 at 101-138% FPL).

Determinants of poverty literature suggest that educational attainment is a major factor associated with poverty – the combination of low educational attainment and poverty negatively impacts health status and well-being (Blane, 2000; Elstad, 2001; Murray, 2006). The highest prevalence of poverty across all demographic characteristics was associated with low educational attainment. Those without a high school degree were most likely to report income at or below 100% FPL (59.5% or 545,930).

Table 1: The Prevalence of 100% FPL or less and 101-138% FPL among adults 19-64 years by sociodemographic characteristics

	At or below 100% FPL			101-138% FPL		
	Prevalence (%)	90% CI	Estimated Total	Prevalence (%)	90% CI	Estimated Total
Age Group						
19-24 years	34.1	(31.2 - 36.9)	317,240	11.8	(9.9 – 13.9)	109,538
25-34 years	28.8	(26.7 - 30.8)	405,486	9.7	(8.4 – 11.2)	136,884
35-44 years	23.0	(21.3 - 24.7)	339,872	7.5	(6.5 – 8.6)	111,192
45-54 years	21.1	(19.8 - 22.4)	367,527	7.1	(6.3 – 8.0)	123,848
55-64 years	16.9	(15.8 - 18.1)	245,949	19.8	(7.5 – 9.0)	119,145
Gender						
Male	20.1	(19.0 - 21.2)	693,534	8.2	(7.5 – 9.0)	283,206
Female	27.6	(26.5 - 28.7)	982,540	8.9	(8.2 – 9.6)	317,400
Race/ethnicity						
White	20.2	(19.3 - 21.0)	1,162,039	8.1	(7.6 – 8.7)	461,168
African-American	44.2	(41.8 - 46.7)	368,508	11.0	(9.5 – 12.6)	90,284
Hispanic	49.6	(44.6 - 54.5)	97,165	10.7	(7.9 – 14.1)	20,856
Asian	19.8	(15.0 - 24.6)	39,905	9.1	(6.2 – 13.3)	18,052
Other	36.8	(32.7 - 41.0)	8,456	10.6	(8.1 – 13.6)	2,410
Education						
Less than high school	59.5	(56.6 - 62.4)	453,047	12.2	(10.4 – 41.3)	92,883
High school	28.1	(26.7 - 29.5)	669,571	10.4	(9.5 – 11.3)	246,512
Some college	22.1	(20.3 - 24.0)	278,487	11.4	(10.0 – 12.9)	143,197
Associate degree	16.7	(14.9 - 18.5)	151,968	7.1	(5.9 – 8.4)	64,403
4-Year college degree	8.4	(7.2 - 9.6)	86,322	3.6	(2.9 – 4.5)	37,224
Advanced degree	5.4	(4.2 - 6.6)	36,679	2.4	(1.7 – 3.4)	16,388

Having a large family, more than 4 within a household is associated with higher rates of poverty (Kato et al., 1994; Lanjouw & Ravallion, 1995; Thomas & McLanahan, 2012). Larger families experience more financial burden, less opportunities for higher paid employment, more restrictions on time, and more unforeseen health expenses (Schoen et al., 2008; DeNavas-Walt, Proctor, & Smith, 2012; Galbraith et al., 2013). In Ohio, families of 1 had the highest prevalence of both $\leq 100\%$ FPL (34.7% or 442,517) and 101-138% FPL (10.5% or 134,308) (Table 2). Families of 5 or more reported the next highest prevalence of $\leq 100\%$ FPL (28.2% or 323,258). The prevalence of poverty among families of 2 to 4 members was much lower than among single member or 5 or more member families.

Families of less than 3 children were less likely to report annual income at or below 100% FPL. The prevalence of 101-138% FPL was highest among families with 5 or more children. There was a 22.4 percentage point increase in the prevalence of living at or below 100% FPL between families with no children and families with 5 or more children and there was a 5.7 percentage point increase between similar families in the 101-138% FPL category. These findings are consistent with poverty literature which indicates that families with many children experience higher rates of poverty (Thomas & McLanahan, 2012).

Work status is the major determinant of poverty, particularly a lack of employment, part-time employment, and underemployment (underemployment is not addressed in the OMAS) (Citro & Michael, 1995; Allison et al., 2005). Table 2 shows that full-time workers reported less poverty (9.6% or 334,217 at $\leq 100\%$ FPL and 5.9% or 111,951 at 101-138% FPL) than either part-time workers (26.3% and 10.4%) or those not working (43.4% and 7.0%). The total amount of adults not working was more than double the other work status categories.

Table 2: The prevalence of 100% FPL or less and 101-138% FPL among adults 19-64 years by family size and work status

	At or below 100% FPL			101-138% FPL		
	Prevalence (%)	90% CI	Estimated Total	Prevalence (%)	90% CI	Estimated Total
Family Size						
1 member	34.7	(32.8 - 36.7)	442,517	10.5	(9.4 – 11.8)	134,308
2 members	18.0	(16.7 - 19.2)	337,648	7.2	(6.4 – 8.1)	135,346
3 members	21.5	(19.8 - 23.2)	289,674	8.7	(7.6 – 10.0)	117,465
4 members	20.7	(18.9 - 22.5)	282,977	7.6	(6.6 – 8.9)	104,494
5 or more members	28.2	(26.1 - 30.4)	323,258	9.5	(8.2 – 11.1)	108,994
Children in Household						
0 children	22.4	(21.4 – 23.5)	799,365	7.9	(7.3 – 8.6)	282,592
1 child	23.2	(21.5 – 25.1)	322,640	10.4	(9.1 – 11.8)	144,486
2 children	22.5	(20.7 – 24.5)	272,216	7.2	(6.2 – 8.5)	87,289
3 children	30.3	(27.2 – 33.5)	159,802	9.6	(7.8 – 11.9)	50,741
4 children	34.0	(29.1 – 39.3)	66,477	9.5	(6.8 – 13.3)	18,636
5 or more children	44.8	(37.8 – 52.0)	55,574	13.6	(9.2 – 19.7)	16,862
Working Status						
Full-time (≥ 35 hours/week)	9.6	(8.8 - 10.4)	334,217	5.9	(5.3 – 6.6)	111,951
Part-time (< 35 hours/week)	26.3	(24.2 - 28.4)	284,463	10.4	(9.0 – 11.9)	204,873
Not currently working	43.4	(41.9 - 44.8)	1,043,134	7.0	(6.4 – 7.6)	279,116

4. OHIO ADULTS 19-64 YEARS WITH INCOMES AT OR BELOW 100% FPL AND 101-138% FPL

4.1 Health Insurance Categories

Medicaid was the largest insurance source of adults 19-64 years reporting income up to 100% FPL (40.8% or 684,145). Total Medicaid enrollment (inclusive of Medicaid only and dual eligible Medicaid/Medicare) for the $\leq 100\%$ FPL was 40.8% (684,145) and 19.9% (119,404) for the 101-138% FPL. These statistics compare to 3.4% (161,686) total Medicaid enrollment for those reporting annual income higher than 138% FPL (data not shown).

Being uninsured was the second most prevalent insurance status for the impoverished, with 32.1% (537,616) of $\leq 100\%$ FPL and 33.2% (199,455) of 101-138% FPL individuals reporting being uninsured. Only 10.1% (477,160) of adults reporting annual income higher than 138% FPL were uninsured (data not shown).

There was a substantial difference in employer-sponsored health insurance (ESI) enrollment between the impoverished and those in higher income brackets. Specifically, 11.5% (192,142) of adults at or below 100% FPL and 25.0% between 101-138% FPL reported ESI coverage. These statistics compare to 73.3% (3,475,318) for those reporting income higher than 138% FPL. These ESI estimates excluded those adults who reported having Medicaid or Medicare coverage in addition to ESI.

Table 3: The distribution of health insurance type among adults 19-64 years at or below 100% FPL and 101-138% FPL

	At or below 100% FPL			101-138% FPL		
	Percent	90% CI	Estimated Total	Percent	90% CI	Estimated Total
Any Medicaid coverage	40.8	(39.0 - 42.7)	684,145	19.9	(17.6 – 22.4)	119,404
Medicaid and Medicare	8.5	(7.6 - 9.4)	141,889	4.2	(3.2 – 5.3)	24,931
Medicaid, no Medicare	32.4	(30.6 - 34.1)	542,256	15.7	(13.7 – 18.1)	94,473
Medicare, no Medicaid	5.0	(4.3 - 5.8)	84,567	7.9	(6.6 – 9.4)	47,399
Employer-Sponsored	11.5	(10.3 - 12.7)	192,142	25.0	(22.4 – 27.8)	150,262
Privately purchased	3.5	(2.8 - 4.3)	59,250	5.8	(4.5 – 7.5)	34,672
Other	2.5	(1.9 - 3.1)	42,107	3.4	(2.4 – 4.8)	20,437
Insurance type unknown	4.5	(3.7 - 5.4)	76,246	4.8	(3.5 – 6.5)	28,977
Uninsured	32.1	(30.2 - 33.9)	537,616	33.2	(30.2 – 36.1)	199,455

4.2 Health Status Indicators

Health status is strongly influenced by poverty (Brunner, 1997; Adler & Rehkopf, 2008). Considering general health status, measured as a self-rating of general health as excellent, very good, good, fair, or poor, 39.2% (657,094) of adults with annual family income at or below 100% FPL and 28.6% (171,983) at 101-138% FPL rated their general health as fair or poor. This compares to 12.1% (572,521) of those reporting income above 138% FPL (data not shown).

Fair or poor dental health, which impacts nutrition, learning, work absenteeism, and routine functioning, is considered a health risk for the impoverished (Allukian, 2008; Grembowski, Spiekerman, & Milogrom, 2012). In 2012, 43.4% (726,183) of those reporting income at or below 100% FPL and 34.7% (208,268) at 101-138% FPL reported their dental health as fair or poor. This compares to 15.7% of those reporting income above 138% FPL (data not shown).

Poor or fair vision health is associated with poverty (Ulldemolins et al., 2012). The OMAS question addressing vision health measured self-reported vision health, including when wearing glasses. Fair or poor vision health was reported by 28.0% (469,658) of adults at or below 100% FPL and 21.5% (128,806) at 101-138% FPL. This compares to 9.9% of those reporting income above 138% FPL (data not shown).

Adults were classified as having a special health care need if they had a medical, behavioral, or other health condition that made it difficult to do day-to-day activities or required special therapy and that had lasted or was expected to last at least one year. Adults who needed or received treatment or counseling for any kind of mental health, substance abuse or emotional problem that had lasted or was expected to last for at least 12 months were also classified as having a special health care need. Those with incomes at or below 100% FPL and 101-138% FPL were more likely to report having special health care needs than higher income respondents, 32.4 (542,820) and 25.3% (152,154), respectively. Comparatively, 11.3% of those with income above 138% FPL reported having special health care needs (data not shown).

Adults who reported having 14 or more days in the past 30 days when a mental health condition or emotional problem kept them from doing with work or other usual activities were identified as having mental health-related impairment. Ohioans reporting incomes at or below 100% FPL and 101-138% FPL were also more likely to report functional impairment due to mental or emotional stress, 16.7% (279,263) and 10.5% (62,335), respectively. Comparatively, 3.3% of adults reporting income above 138% FPL reported functional impairment (data not shown).

Table 4: Health status indicators of adults 19-64 years at or below 100% FPL and 101-138% FPL

	At or below 100% FPL			101-138% FPL or less		
	Percent	90% CI	Estimated Total	Percent	90% CI	Estimated Total
Fair/poor general health	39.2	(37.4 - 41.0)	657,094	28.6	(26.0 – 31.4)	171,983
Fair/poor dental health	43.4	(41.5 - 45.2)	726,183	34.7	(31.9 – 37.7)	208,268
Fair/poor vision/eyesight	28.0	(26.4 - 29.7)	469,658	21.5	(19.2 – 23.9)	128,806
Special health care needs	32.4	(30.6 - 34.1)	542,820	25.3	(22.8 – 28.0)	152,154
Mental health-related impairment	16.7	(15.3 - 18.0)	279,263	10.5	(8.8 – 12.5)	62,335

4.3 Health cost difficulties

Prescription drug access is often influenced by one's poverty status – poverty often precludes the securing of needed prescriptions (Anglin & White, 1999; Ohler & Smith, 2011; Driscoll & Bernstein, 2012). Adults at or below 100% FPL were almost three times as likely not to fill a needed prescription due to cost than those with incomes 401% FPL or greater, 28.7% (479,377) versus 10.2% (216,764) (Table 5). The OMAS data show that as annual income increases, the prevalence of not filling prescription scripts decreases.

Poverty also impacts health care access by curtailing the ability to pay medical expenses (Callahan & Pincus, 1999; Ahmed et al., 2001; May & Cunningham, 2004; Driscoll & Bernstein, 2012). It is estimated that 720,025 (43.1%) adults with income at or below 100% FPL had difficulties paying medical bills – adults with income ≤100% FPL were almost 3 times as likely to have problems paying medical bills than those reporting income above 400% FPL. Considering all Ohio adults, regardless of income status, 33.4% (2,342,489) reported having difficulties paying their medical bills.

Table 5: Health cost difficulties by income as a percent of the federal poverty level (FPL) among adults 19-64 years.

	Didn't fill a prescription because of cost			Problems paying medical bills		
	Percent	90% CI	Estimated Total #	Percent	90% CI	Estimated Total #
≤100% FPL	28.7	(26.9 - 30.4)	479,377	43.1	(41.2 - 44.9)	720,025
101-138% FPL	26.9	(24.2 - 29.6)	161,432	50.1	(47.0 - 53.3)	300,645
139-400% FPL	21.3	(20.1 - 22.4)	556,106	38.1	(36.7 - 39.6)	997,620
401% FPL or more	10.2	(9.3 - 11.2)	216,764	15.3	(14.2 - 16.4)	324,198

Having health insurance increased one's ability to secure prescription drugs and pay medical bills. Overall, those at or below 100% FPL and 101-138% FPL who were enrolled in Medicaid were less likely to have had problems paying medical bills than those within these income categories who were either uninsured or who had other types of health insurance. The uninsured reported substantially more difficulty fulfilling prescriptions and paying medical bills than the Medicaid or other insurance enrolled.

Table 6: Health cost difficulties among adults 19-64 years at or below 100% FPL and 101-138% FPL by health insurance type.

	Didn't fill a prescription because of cost			Problems paying medical bills		
	Percent	90% CI	Estimated Total #	Percent	90% CI	Estimated Total #
At or below 100% FPL						
Any Medicaid coverage	21.2	(18.9 - 23.6)	145,173	28.5	(26.0 - 31.1)	195,050
Coverage other than Medicaid	20.4	(17.5 - 23.3)	92,383	39.1	(35.6 - 42.7)	176,882
Uninsured	45.0	(41.5 - 48.6)	241,820	64.8	(61.4 - 68.2)	348,093
101-138% FPL						
Any Medicaid coverage	20.7	(16.1 - 26.1)	24,602	35.5	(29.6 - 41.9)	42,266
Coverage other than Medicaid	27.0	(23.2 - 31.1)	75,985	48.2	(43.7 - 52.7)	135,455
Uninsured	30.5	(25.7 - 35.8)	60,847	61.7	(55.8 - 67.2)	122,924

For those reporting annual family income at or below 100% FPL, there were slight variations in not being able to secure prescriptions due to the cost by county types (Table 7). The lowest percentage was among adults living in suburban counties (24.3%), and the highest percentage was among adults in rural non-Appalachian counties (33.7%). There was less variation in the percentage of adults who had difficulty paying medical bills across the county types. Among the Medicaid service regions, there was little difference in the percentage of those at or below 100% FPL or at 101-138% FPL who reported not filling a prescription due to cost or in having difficulty paying for medical care.

Concerning race/ethnicity, African Americans at 100% FPL reported the most difficulty filling a needed prescription due to cost (33.6% or 123,757), with Asians having the least difficulty (11.5% or 4,591). The percentage of adults who had difficulty paying medical bills was highest among those in the other race category (49.1%) and smallest among Asians (25.8%). These trends were similar for those reporting 101-138% FPL (Table 7).

Table 7: Health cost difficulties among adults 19-64 years at or below 100% FPL and 101-138% FPL by county type, Medicaid service region, and race/ethnicity.

	Didn't fill a prescription because of cost			Problems paying medical bills		
	Percent	90% CI	Estimated Total #	Percent	90% CI	Estimated Total #
At or below 100% FPL						
County Type						
Appalachian	25.9	(22.2 - 29.6)	75,770	43.6	(39.3 - 47.8)	127,380
Metropolitan	29.3	(27.1 - 31.6)	296,100	44.1	(41.6 - 46.5)	444,615
Rural (Non-Appalachian)	33.7	(28.2 - 39.3)	62,148	41.3	(35.7 - 47.0)	76,113
Suburban	24.3	(19.2 - 29.4)	45,359	38.5	(32.7 - 44.2)	71,918
Medicaid Service Region						
Northwest	27.2	(22.0 - 32.4)	49,068	39.3	(33.7 - 44.9)	70,888
Northeast	25.0	(20.8 - 29.2)	66,853	40.8	(36.0 - 45.5)	109,019
Northeast Central	20.7	(15.3 - 26.2)	20,345	40.3	(33.3 - 47.4)	39,577
East Central	31.1	(26.4 - 35.9)	67,665	47.5	(42.4 - 52.6)	103,226
Central	31.1	(26.9 - 35.3)	101,114	46.0	(41.5 - 50.5)	149,642
West Central	32.1	(26.6 - 37.7)	58,801	45.7	(39.9 - 51.5)	83,627
Southwest	29.1	(24.7 - 33.5)	83,243	41.6	(37.0 - 46.3)	119,100
Southeast	28.2	(22.6 - 33.9)	32,288	39.3	(33.2 - 45.4)	44,947
Race/Ethnicity						
White	28.0	(25.9 - 30.1)	325,403	43.2	(40.9 - 45.5)	501,878
African American	33.6	(29.9 - 37.2)	123,757	45.1	(41.3 - 48.9)	166,159
Hispanic	25.0	(18.3 - 31.7)	24,291	40.5	(33.1 - 48.0)	39,399
Asian	11.5	(3.2 - 19.8)	4,591	25.8	(13.9 - 37.6)	10,282
Other	26.6	(18.7 - 34.5)	1,335	49.1	(39.9 - 58.3)	2,308
101-138% FPL						
County Type						
Appalachian	33.6	(28.5 - 39.0)	15,609	52.2	(46.7 - 57.6)	70,938
Metropolitan	30.0	(20.2 - 26.0)	100,490	44.6	(41.2 - 48.1)	195,094
Rural (Non-Appalachian)	20.9	(15.9 - 26.9)	21,915	44.1	(37.2 - 51.1)	46,282
Suburban	20.6	(15.4 - 26.9)	22,632	36.9	(30.3 - 44.0)	40,566
Medicaid Service Region						
Northwest	19.5	(1.8 - 25.4)	20,122	40.9	(34.3 - 47.8)	42,131
Northeast	19.9	(15.5 - 25.2)	25,953	40.3	(34.3 - 46.6)	52,582
Northeast Central	29.4	(22.1 - 38.0)	12,395	47.8	(39.2 - 56.6)	20,155
East Central	25.5	(20.1 - 31.7)	25,705	44.0	(37.5 - 50.7)	44,353
Central	26.4	(21.3 - 32.3)	41,957	52.3	(46.0 - 58.5)	83,099
West Central	25.4	(19.2 - 32.8)	21,383	41.1	(33.8 - 47.7)	34,528
Southwest	22.5	(17.4 - 28.5)	25,183	42.7	(36.1 - 49.6)	47,912
Southeast	31.7	(24.8 - 40.0)	17,949	49.7	(41.6 - 57.8)	28,120
Race/Ethnicity						
White	23.9	(21.6 - 26.5)	149,109	43.8	(41.0 - 46.7)	272,999
African American	25.3	(20.2 - 31.2)	28,392	51.0	(44.7 - 57.3)	57,256
Hispanic	21.2	(12.4 - 33.8)	4,821	48.2	(34.5 - 62.2)	10,943
Asian	21.4	(9.3 - 42.1)	3,956	33.0	(18.5 - 51.7)	6,095
Other	39.6	(25.8 - 55.4)	727	45.7	(30.7 - 61.6)	808

5. DISCUSSION

Prior research from the OMAS Research Team and others has found that poverty is strongly influenced by stressful life situations such as unemployment. The OMAS data shows that impoverished 19-64 year-old adults in Ohio were disproportionately younger, female, minorities, less than full-time employed, less educated, and more likely to have had difficulty securing needed prescription drugs and to have had problems paying medical bills. These data show that those reporting living in poverty were more likely to report fair or poor general health, dental health, and vision health statuses and were more likely to experience functional mental distress and have special health care needs.

Many of these sociodemographic and health-related findings are associated – low educational attainment, unemployment or part-time work status, and being a minority significantly co-influence one's chances for being impoverished, which raises the probability for poor health. Social determinants of health literature emphasizes that these factors are more influential to poor health status in societies that lack a health safety net for those who cannot afford health care access (Bartley, 2004), indicating that a strengthening of Ohio's health care system and health care safety net may alleviate poverty-associated health risks.

6. KEY CONSIDERATIONS

1. Given the findings of this brief, implementation of the Patient Protection and Affordable Care Act's incentives for health insurance participation and the potential for Medicaid reform would offer impoverished Ohioans a greater chance to secure insurance as a mechanism to better health. As insurance protects against determinants of poor health, expansion of insurance to the poor and uninsured would partially address the general health risks of Ohio's impoverished population as detailed in this brief.

2. Measurements of health status rated poorer for Ohio's impoverished versus non-impooverished. Insurance expansion to Ohio's impoverished populations which would enable Ohio's providers to more fully participate in the State's patient-centered medical home initiatives would also provide a network of providers to address general health status and wellness. Such an initiative would offer prevention as a strategy for decreasing the societal and health risks to Ohio's poor.

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APPENDIX

Table 8: Health status indicators of adults 19-64 years by percent of FPL

	Percent	90% CI	Estimated Total
Poor/Fair general health			
100% FPL or below	39.2	(37.4 - 41.0)	657,094
101% - 138% FPL	28.6	(26.0 - 31.3)	171,983
139% -400% FPL	15.9	(14.8 - 16.9)	415,263
401% FPL and above	7.4	(6.6 - 8.2)	157,257
Poor/Fair dental health			
100% FPL or below	43.4	(41.5 - 45.2)	726,183
101% - 138% FPL	34.7	(31.8 - 37.6)	208,268
139% -400% FPL	21.4	(20.2 - 22.6)	559,772
401% FPL and above	8.7	(7.9 - 9.6)	185,393
Poor/Fair vision/eyesight			
100% FPL or below	28.0	(26.4 - 29.7)	469,658
101% - 138% FPL	21.5	(19.1 - 23.8)	128,806
139% -400% FPL	13.0	(12.0 - 13.9)	339,343
401% FPL and above	6.1	(5.4 - 6.8)	129,928
Special health care needs			
100% FPL or below	32.4	(30.6 - 34.1)	542,820
101% - 138% FPL	25.3	(22.8 - 27.9)	152,153
139% -400% FPL	14.0	(13.0 - 14.9)	365,844
401% FPL and above	8.0	(7.2 - 8.8)	169,578
Functional impairment due to mental or emotional distress			
100% FPL or below	16.7	(15.3 - 18.0)	279,263
101% - 138% FPL	10.9	(9.0 - 12.8)	65,486
139% -400% FPL	4.9	(4.3 - 5.5)	128,009
401% FPL and above	1.8	(1.4 - 2.2)	37,717

Table 9: Health cost difficulties among adults 19-64 years by percent of FPL and health insurance type.

	Percent	90% CI	Estimated Total
<i>100% FPL or below</i>			
Didn't fill a prescription because of cost			
Any Medicaid Coverage	21.2	(18.9 - 23.6)	145,173
Other Coverage	20.4	(17.5 - 23.3)	92,383
Uninsured	45.0	(41.5 - 48.6)	241,820
Problems paying medical bills			
Any Medicaid Coverage	28.5	(26.0 - 31.1)	195,050
Other Coverage	39.1	(35.6 - 42.7)	176,882
Uninsured	64.8	(61.4 - 68.2)	348,093
<i>101% - 138% FPL</i>			
Didn't fill a prescription because of cost			
Any Medicaid Coverage	20.7	(15.7 - 25.7)	24,602
Other Coverage	27.0	(23.1 - 31.0)	75,985
Uninsured	30.5	(25.4 - 35.6)	60,846
Problems paying medical bills			
Any Medicaid Coverage	35.5	(29.3 - 41.7)	42,266
Other Coverage	48.2	(43.6 - 52.7)	135,455
Uninsured	61.7	(56.0 - 67.3)	122,924
<i>139% -400% FPL</i>			
Didn't fill a prescription because of cost			
Any Medicaid Coverage	20.9	(15.9 - 25.9)	28,071
Other Coverage	19.4	(18.1 - 20.6)	404,118
Uninsured	31.5	(27.8 - 35.1)	123,917
Problems paying medical bills			
Any Medicaid Coverage	36.8	(30.7 - 42.9)	49,485
Other Coverage	34.1	(32.6 - 35.6)	712,175
Uninsured	59.9	(56.0 - 63.8)	235,959
<i>401% FPL and above</i>			
Didn't fill a prescription because of cost			
Other Coverage	9.6	(8.7 - 10.5)	193,062
Uninsured	26.1	(18.3 - 33.9)	21,498
Problems paying medical bills			
Other Coverage	14.3	(13.2 - 15.4)	286,944
Uninsured	40.4	(31.7 - 49.0)	33,298

Table 10: Health cost difficulties among adults 19-64 years by percent of FPL and county type

	Percent	90% CI	Estimated Total
<i>100% FPL or below</i>			
Didn't fill a prescription because of cost			
Appalachian	25.9	(22.2 - 29.6)	75,770
Metropolitan	29.3	(27.1 - 31.6)	296,100
Rural (Non-Appalachian)	33.7	(28.2 - 39.3)	62,148
Suburban	24.3	(19.2 - 29.4)	45,359
Problems paying medical bills			
Appalachian	43.6	(39.3 - 47.8)	127,380
Metropolitan	44.1	(41.6 - 46.5)	444,615
Rural (Non-Appalachian)	41.3	(35.7 - 47.0)	76,113
Suburban	38.5	(32.7 - 44.2)	71,918
<i>101% - 138% FPL</i>			
Didn't fill a prescription because of cost			
Appalachian	37.3	(30.7 - 43.9)	39,330
Metropolitan	25.8	(22.2 - 29.5)	85,080
Rural (Non-Appalachian)	23.1	(16.1 - 30.0)	18,344
Suburban	21.9	(14.8 - 29.0)	18,679
Problems paying medical bills			
Appalachian	58.9	(52.2 - 65.7)	62,171
Metropolitan	49.5	(45.2 - 53.8)	162,994
Rural (Non-Appalachian)	50.3	(41.6 - 59.1)	40,000
Suburban	41.6	(33.0 - 50.1)	35,480
<i>139% -400% FPL</i>			
Didn't fill a prescription because of cost			
Appalachian	23.3	(20.6 - 26.1)	106,389
Metropolitan	21.8	(20.1 - 23.5)	288,706
Rural (Non-Appalachia)	17.9	(15.1 - 20.8)	72,413
Suburban	20.4	(17.4 - 23.4)	88,598
Problems paying medical bills			
Appalachian	38.6	(35.4 - 41.7)	175,680
Metropolitan	39.8	(37.7 - 41.8)	526,099
Rural (Non-Appalachian)	34.1	(30.6 - 37.6)	137,747
Suburban	36.4	(32.8 - 40.0)	158,093
<i>401% FPL and above</i>			
Didn't fill a prescription because of cost			
Appalachian	9.6	(7.3 - 12.0)	24,757
Metropolitan	10.9	(9.6 - 12.2)	128,388
Rural (Non-Appalachian)	6.5	(4.6 - 8.5)	16,357
Suburban	11.0	(8.8 - 13.2)	47,262
Problems paying medical bills			
Appalachian	16.8	(13.5 - 20.0)	43,018
Metropolitan	15.0	(13.5 - 16.4)	176,363
Rural (Non-Appalachian)	15.4	(12.2 - 18.6)	38,581
Suburban	15.4	(12.8 - 17.9)	66,236

Table 11: Health cost difficulties among adults 19-64 years by percent of FPL and race-ethnicity

	Percent	90% CI	Estimated Total
<i>100% FPL or below</i>			
Didn't fill a prescription because of cost			
White	28.0	(25.9 - 30.1)	325,403
African-American	33.6	(29.9 - 37.2)	123,757
Hispanic	25.0	(18.3 - 31.7)	24,291
Asian	11.5	(3.2 - 19.8)	4,591
Other	26.6	(18.7 - 34.5)	1,335
Problems paying medical bills			
White	43.2	(40.9 - 45.5)	501,878
African-American	45.1	(41.3 - 48.9)	166,159
Hispanic	40.5	(33.1 - 48.0)	39,399
Asian	25.8	(13.9 - 37.6)	10,282
Other	49.1	(39.9 - 58.3)	2,308
<i>101% - 138% FPL</i>			
Didn't fill a prescription because of cost			
White	27.5	(24.3 - 30.6)	128,705
African-American	26.2	(19.8 - 32.7)	23,793
Hispanic	20.5	(9.1 - 31.9)	4,279
Asian	21.9	(5.0 - 38.8)	3,956
Other	--	--	--
Problems paying medical bills			
White	50.1	(46.5 - 53.7)	234,802
African-American	54.2	(46.8 - 61.6)	49,184
Hispanic	48.6	(33.3 - 63.9)	10,137
Asian	32.0	(14.6 - 49.3)	5,773
Other	--	--	--
<i>139% -400% FPL</i>			
Didn't fill a prescription because of cost			
White	21.1	(19.8 - 22.4)	473,404
African-American	25.7	(22.0 - 29.4)	66,118
Hispanic	19.1	(12.4 - 25.8)	9,180
Asian	11.1	(4.9 - 17.2)	6,516
Other	--	--	--
Problems paying medical bills			
White	37.9	(36.4 - 39.5)	852,567
African-American	45.3	(41.0 - 49.6)	116,540
Hispanic	37.4	(28.7 - 46.1)	17,971
Asian	14.9	(7.7 - 22.2)	8,798
Other	46.7	(36.3 - 57.1)	1,743

Table 11 (continued): Health cost difficulties among adults 19-64 years by percent of FPL and race-ethnicity

<i>401% FPL and above</i>			
Didn't fill a prescription because of cost			
White	9.9	(8.9 - 10.9)	186,064
African-American	18.9	(14.3 - 23.5)	22,040
Hispanic	11.9	(3.8 - 20.0)	3,568
Asian	5.4	(1.9 - 9.0)	4,610
Other	--	--	--
Problems paying medical bills			
White	14.7	(13.5 - 15.9)	277,057
African-American	31.9	(26.5 - 37.4)	37,251
Hispanic	18.9	(11.2 - 26.7)	5,672
Asian	4.4	(1.1 - 7.7)	3,739
Other	18.7	(10.3 - 27.2)	480