healthpolicybrief

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Medicaid enrollment trends and impact analysis

The state Controlling Board voted in October 2013 to authorize Ohio Medicaid's spending of federal funds to expand Medicaid eligibility for more Ohioans. This approved appropriation authority is in effect through June 30, 2015. As Ohio's policymakers begin a new biennium, the Medicaid program will be a key topic of discussion, with decisions related to the purpose, size and scope of the program at the forefront of state budget and other policy discussions.

To assist with the decision-making process, the Health Policy Institute of Ohio compiled this analysis for consideration by policymakers. The analysis uses secondary data (such as Medicaid enrollment and caseload reports and Census data), predictive modeling, literature review and stakeholder interviews to:

- Examine the early impacts of Medicaid expansion on enrollment trends
- Compare these enrollment trends to estimated projections made as a part of the 2013 Ohio Medicaid Expansion Study
- Present additional estimates using actual enrollment as the base
- Analyze literature relevant to the impact of Medicaid on the health and well-being of Ohioans
- Explore the impact of Medicaid eligibility changes from the perspective of key stakeholders

Background

In his 2014-2015 budget proposal to the Ohio General Assembly in early 2013, Governor Kasich included language to expand Medicaid eligibility to 138 percent of the Federal Poverty Level (FPL) (Figure 1) as permitted in the ACA. During budget deliberations, the Ohio House eliminated provisions expanding Medicaid and added language prohibiting an expansion of Medicaid eligibility; the Ohio Senate never publicly debated the issue. On June 30, 2013, Governor Kasich signed the final biennial budget bill, using a line-item veto to remove the House language that would have prevented Medicaid expansion.

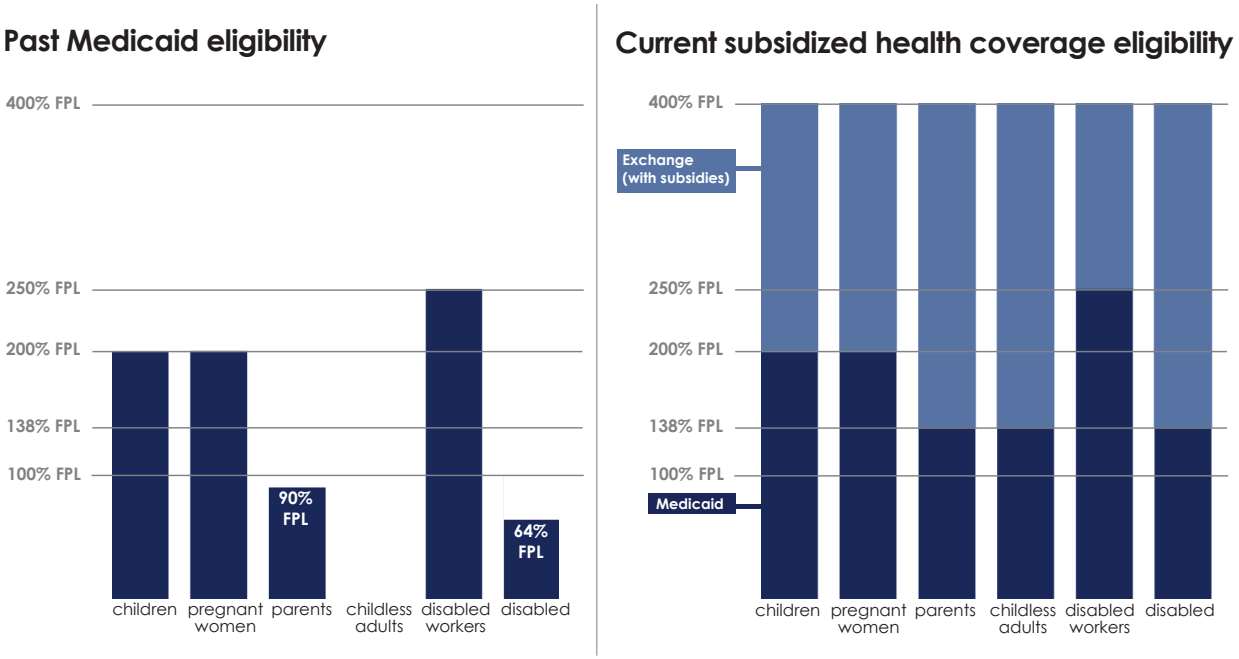
In September 2013, Ohio's Medicaid Director submitted a State Plan Amendment (SPA) to the federal government requesting extension of Medicaid coverage as provided for under the ACA. The Centers for Medicare and Medicaid Services (CMS) approved Ohio's plan the next month and, as a result, federal funds were available to Ohio for an expansion

Figure 1. **2014 Federal Poverty Levels**

household size	64%	90%	100%	138%	200%	250%	400%
1	$7,469	$10,503	$11,670	$16,105	$23,340	$29,175	$46,680
2	$10,067	$14,157	$15,730	$21,707	$31,460	$39,325	$62,920
3	$12,666	$17,811	$19,790	$27,310	$39,580	$49,475	$79,160
4	$15,264	$21,465	$23,850	$32,913	$47,700	$59,625	$95,400

Source: *Federal Register*, January 22, 2014
Note: Annual guidelines for all states except Alaska, Hawaii and DC. For each additional person, add $4,060

Figure 2. **Medicaid eligibility in Ohio**



of Medicaid coverage for all Ohioans with incomes below 138 percent of FPL beginning in January 2014 (see Figure 2). Under Ohio law, the state General Assembly or Controlling Board needs to authorize the spending of those funds. After lengthy debate among policymakers, the Controlling Board voted in October 2013 to authorize Ohio Medicaid's spending of federal funds for newly eligible Ohioans. The approved appropriation authority is in effect through June 30, 2015.

Leading up to the Medicaid expansion deliberations in 2013, HPIO partnered with The Ohio State University (OSU), the Urban Institute (UI) and Regional Economic Modeling Inc. (REMI) to provide state policymakers with an analysis of the potential impact of Medicaid expansion on the state budget, Ohio's economic growth and jobs, and the number of uninsured. Preliminary results from the Ohio Medicaid Expansion Study were released in January 2013, with the full study released in March 2013; county enrollment estimates were released two months later. Both OSU and UI produced enrollment projections for this study (Figure 3). The study was supported through funding from Interact for Health (formerly the Health Foundation of Greater Cincinnati), the Mt. Sinai Health Care Foundation, the George Gund Foundation and The HealthPath Foundation of Ohio.

Upcoming policy decisions and analysis description

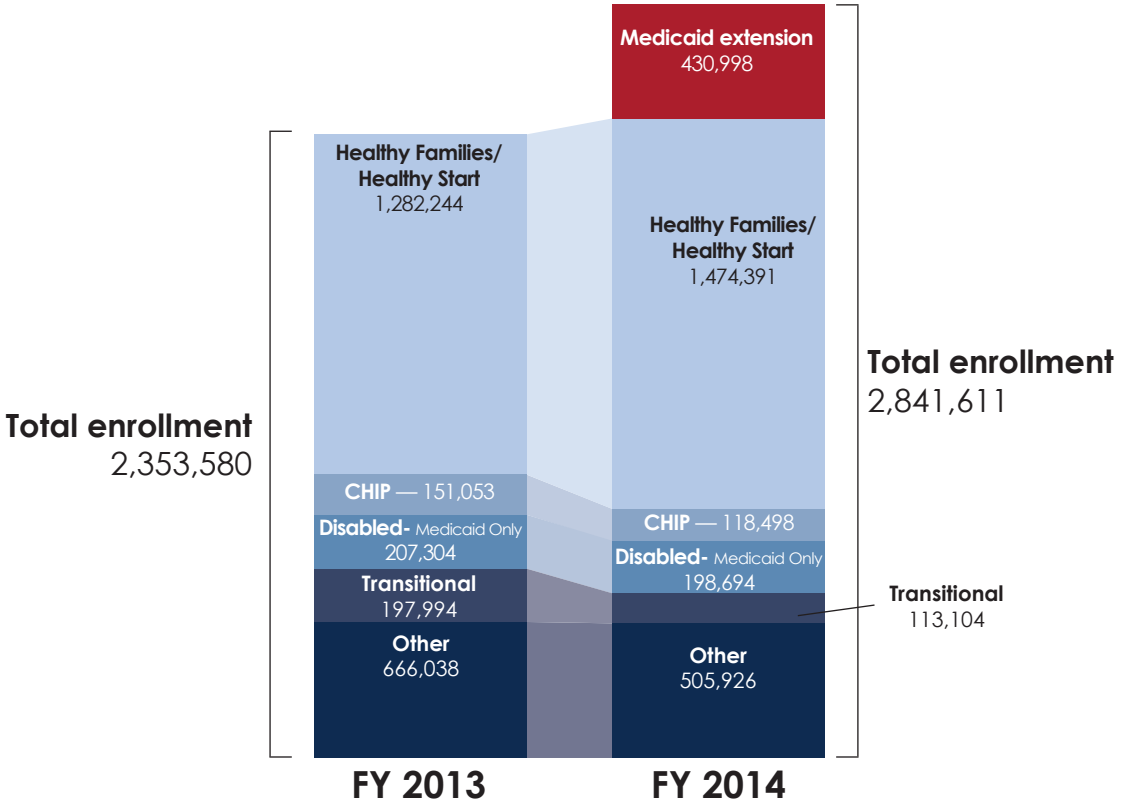
Future appropriations to maintain current Medicaid eligibility levels will be considered as a part of Ohio's biennial budget deliberations slated to begin in early 2015. Given the substantial cost and impacts of the Medicaid

Figure 3. **Original Medicaid Expansion Study enrollment projections, OSU and UI models**

Medicaid enrollment increases as a result of expansion				
Fiscal year	Previously eligible people not enrolled in Medicaid pre-ACA		Newly eligible adults	
	UI	OSU	UI	OSU
2014*	11,551	17,011	153,959	260,360
2015	27,036	37,084	380,313	550,050
2016	33,271	43,270	497,799	609,264
2017	36,100	46,624	570,399	642,354
2018	37,150	47,090	603,111	648,777
2019	38,121	47,561	612,562	655,265
2020	38,932	48,036	621,051	661,817
2021	39,782	48,516	629,540	668,436
2022	40,571	49,003	638,244	675,120

* January through June, 2014

Figure 4. **Actual Medicaid enrollment by category, October 2013 and October 2014**



Source: Ohio Department of Medicaid Expenditures and Eligibles report

program, Ohio's policymakers face key decisions related to how to manage the program in an efficient and effective manner.

HPIO, in partnership with OSU, with funding support from AARP Ohio, the Mt. Sinai Health Care Foundation, Interact for Health, the George Gund Foundation and The HealthPath Foundation of Ohio, compiled this new analysis as a starting place for examining the early impacts of new Medicaid eligibility levels. While it is too early to determine all of the health, employment and fiscal impacts of this policy change, nearly a year of actual enrollment experience provides an opportunity to:

- Examine the impact of Medicaid expansion on enrollment
- Consider the impact on enrollment of simplified enrollment procedures, outreach efforts and streamlined eligibility
- Revise state and county enrollment projections created for the 2013 Ohio Medicaid Expansion Study by updating the projections based on actual trend through October 2014
- Review the literature to glean potential implications of increased Medicaid enrollment on the health and well-being of Ohioans
- Explore the impact of Medicaid eligibility changes from the perspective of care providers, Medicaid managed care plans, and consumer advocates

The terms expansion and extension both are used in this analysis. Generally, the term extension is used when referring to Ohio Department of Medicaid reports that use the term to label the newly eligibility category.

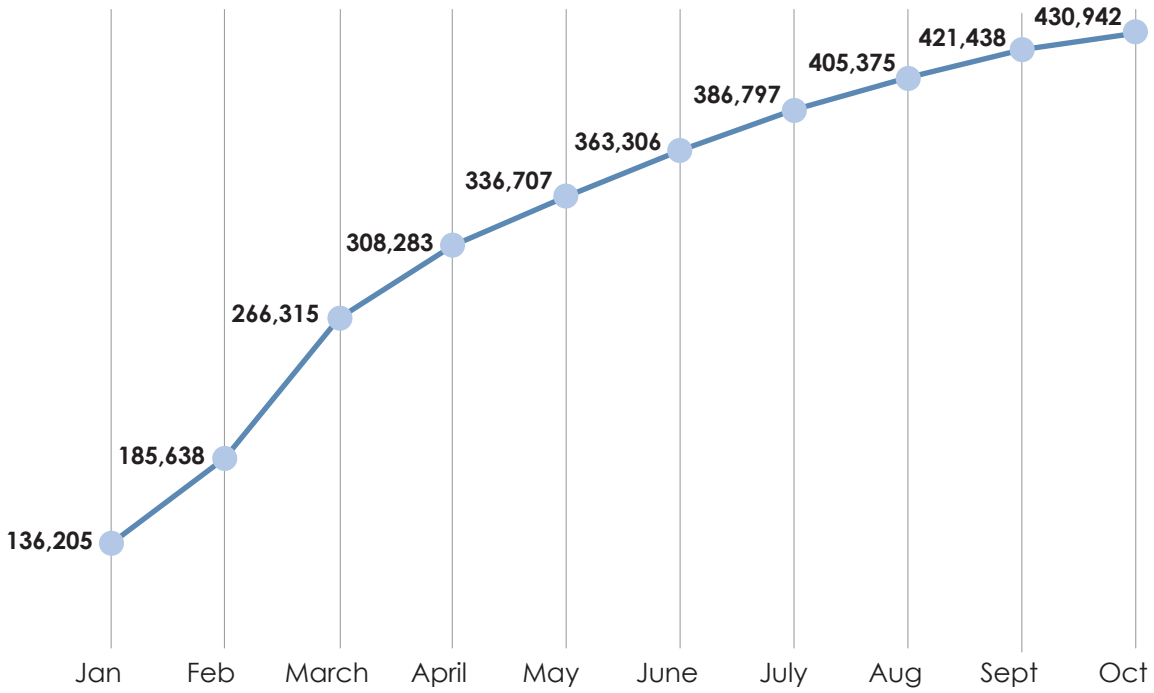
Medicaid expansion and enrollment trends in 2014[2]

Total enrollment growth through 2014

Based on data available from the Ohio Department of Medicaid (ODM), total Medicaid enrollment increased by 507,982 from January through October 2014, with 430,998 people enrolling through the new "Medicaid Extension" category (people between the ages of 19-64 with incomes below 138 percent FPL) (Figure 4) and an additional 177,455 enrolling through Healthy Families/Healthy Start and CHIP. As of October 2014, 6.1 percent of Ohioans between the ages of 19 and 64 receive their health coverage through the new Medicaid Extension category.

The increase in Healthy Families/Healthy Start enrollment likely reflects, at least in part, the

Figure 5. **Monthly Medicaid extension eligibility category enrollment, 2014**



Source: Ohio Department of Medicaid monthly caseload report

anticipated "woodwork effect," meaning people who were previously eligible, but not enrolled in the program who are now enrolled. Current reports also reflect a decline in enrollment for the categories of Disabled Only Medicaid (-8,266), transitional Medicaid (-86,173) and family planning Waiver Medicaid (-74,072). It is likely that some of the people who previously enrolled through these eligibility options are now enrolled through the new Medicaid Extension eligibility category.

For example, people who had previously gained Medicaid coverage through "spend-down"[3] or through a disability determination process, might have chosen instead to apply for coverage made available to people with incomes below 138 percent FPL. Similarly, those with transitional Medicaid or with limited coverage through the Breast and Cervical Cancer option or the family planning waiver[4] might have chosen in 2014 to obtain coverage through the new eligibility category.

Figure 5 shows the growth in the number of Ohioans receiving coverage through Medicaid Extension during 2014. Note that these figures, taken from the ODM Monthly Medicaid Caseload report, reflect adjustments made each month to account for delays in processing applications and retroactive eligibility.[5]

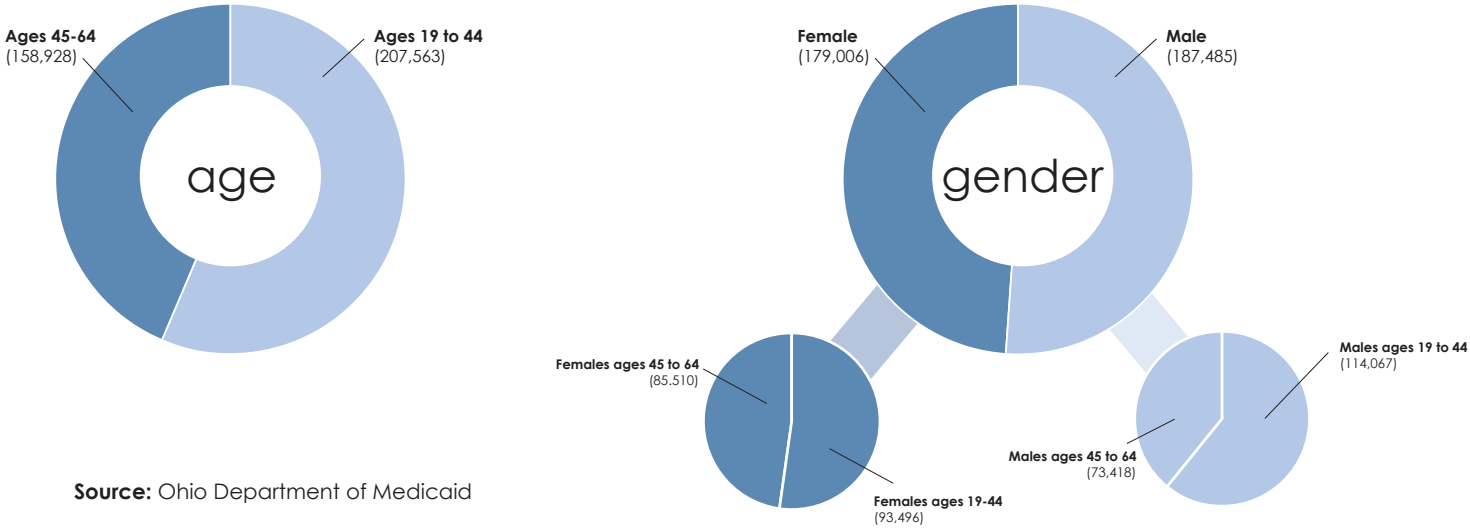
Demographics of newly eligible Medicaid enrollees

Figure 6 illustrates that of this population, more than half (56.6 percent) are between the ages of 19 and 44 and slightly more than half (51.2 percent) are male. Men make up a higher percentage of the 19-44 age group (55.0 percent) than the 45-64 age group (46.2 percent), likely because previous eligibility criteria offered limited coverage to pregnant women and some parents with children on Medicaid.[6]

Monthly enrollment variability

Figure 7 shows the rate of growth in Medicaid Extension enrollment by month from January through October 2014. Because these figures do not reflect adjustments for delays in processing or retroactive applications, this particular chart should be considered a point-in-time snapshot of monthly enrollment activity. This method is particularly useful when making new projections of enrollment trends (Figure 10).

Figure 6. **Medicaid extension enrollment by age and gender, through August 2014**



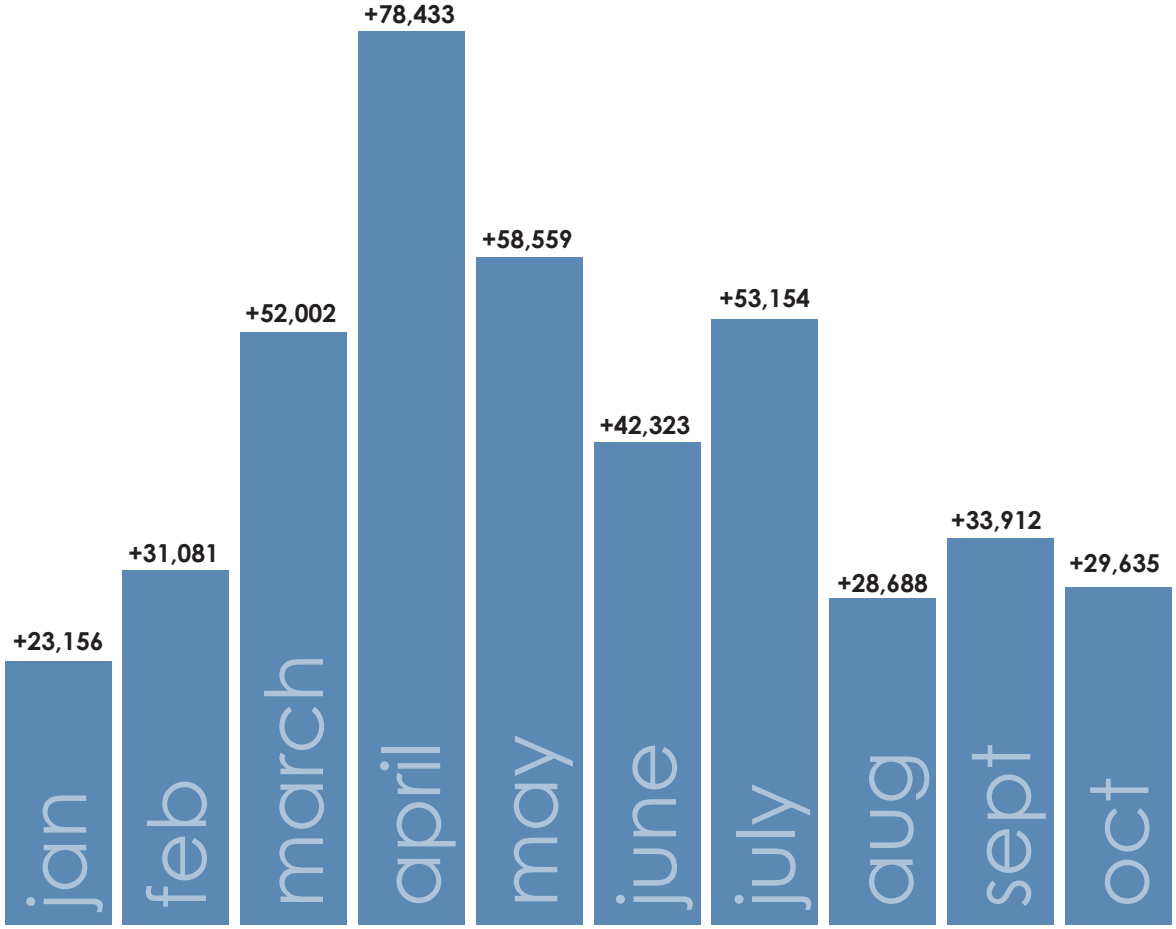
Source: Ohio Department of Medicaid

Enrollment procedures, eligibility determinations, and outreach efforts

In addition to changing Medicaid eligibility levels, other policy changes have impacted enrollment, including simplified enrollment procedures, streamlined eligibility determinations, and increased outreach efforts. Overall, the state's efforts to simplify enrollment procedures and streamline eligibility determinations have made applying for Medicaid more accessible for many Ohioans.

As a Federally-Facilitated Marketplace (FFM) state, the federal government operates the Ohio health insurance marketplace and determines eligibility for marketplace coverage, cost-sharing subsidies and premium assistance. The state maintains responsibility for plan management and determining Medicaid

Figure 7. **Monthly increase in total Medicaid enrollment due to Medicaid extension, 2014**



Source: Ohio Department of Medicaid monthly caseload report

eligibility, including for applications received through the marketplace.

The ACA required state Medicaid programs to provide online, real-time, web-based eligibility applications, verifications and determinations. With funding from the federal government, Ohio designed and built a new integrated eligibility system for all of the state's health and human services programs. A key component of the system, the Ohio Benefits website (**benefits.ohio.gov**) went live in October 2013 and is an online citizen self-service portal that allows Ohio residents to check eligibility and apply for benefits.

The ACA also required that Medicaid and marketplace eligibility systems align. Both systems are required to use a single common enrollment application. This provision is intended to provide seamless "no wrong door" access to coverage options for consumers. This means that no matter how an individual submits an application, or whether that application is received by the marketplace or by Medicaid, the individual will receive an eligibility determination without the need to submit information to multiple programs. Applications of Ohioans who apply through the state's portal (benefits.ohio.gov) and are not eligible for Medicaid are transferred to the federal marketplace (healthcare.gov). Similarly, applications of Ohioans who apply for health insurance through the federal portal but are deemed eligible for Medicaid are transferred to the state. Both systems use the same federal data services hub to verify information.

Among the technical problems with HealthCare.gov was the inability to automatically transfer Medicaid applications to states. Instead, batch files were sent from the federal government beginning in February 2014. The backlog of eligibility determination processing continued in some counties through summer 2014. According to the federal Center for Medicaid and CHIP Services (CMCS), this process has been improved with file transfers from the FFM to the Ohio Department of Medicaid occurring twice a week.

The ACA prompted increased outreach and enrollment efforts to help connect eligible people to coverage. Throughout 2014, there was significant outreach to encourage individuals to apply for coverage and an array of assistance available to help individuals enroll. While many of these efforts initially focused on the marketplace, they also raised awareness about new Medicaid eligibility levels and facilitated the enrollment of many Ohioans. Additionally, because Medicaid enrollment is not limited to an open enrollment period, outreach and enrollment efforts are ongoing.

The consumer assistance framework in Ohio includes navigators and certified application counselors (CACs). As an FFM state, the federal government funds and administers Ohio's navigator program. Federal code establishes requirements for navigators, and their responsibilities include helping consumers prepare applications for coverage through the marketplace and determining if they are eligible for Medicaid. Navigators also provide outreach and education to raise awareness about the marketplace, and refer consumers to other programs when appropriate.

Certified application counselors perform many of the same roles as navigators, but do not receive federal funding. However, during the first two open enrollment periods, the Health Resources Services Administration (HRSA) provided funding to community health centers to support efforts to raise awareness of insurance options and provide eligibility and enrollment assistance.

This increased presence of in-person assistance as a result of the ACA likely contributed to increased enrollment in Medicaid.

Re-based projection of statewide Medicaid extension enrollment through SFY 2017

Projections from the original Ohio Medicaid Expansion Study versus actual

For the original Ohio Medicaid Expansion Study, OSU and UI projected new eligible enrollment through SFY 2022. The OSU model used take-up rates from Ohio Medicaid's initial estimate report created by Milliman in 2011. These estimates assumed that it would take three years to reach full enrollment, with most enrollment taking place during the first year. The Milliman estimates also assumed that enrollment of newly eligible people would increase by 1 percent a year after the initial three years, reflecting the average growth in Ohio's population. The OSU model applied these take-up rates to population estimates

and other more recent data from the 2012 Ohio Medicaid Assessment Survey to generate projections.

Figure 8 compares the enrollment projection for SFY 2014 to the actual SFY 2014 enrollment as of June 2014, per the October Caseload Report. **For state fiscal year 2014, the OSU and UI projections were less than actual results. For calendar year 2014, it appears that the OSU estimate will be slightly above actual (106 percent of actual), while the UI estimates will be below actual.**

Figure 8. **Original OSU and UI models projections of newly eligibles compared to actual data for SFY 2014 (January – June 2014)**

	Actual	OSU model	UI Model
SFY 2014 (Jan-June 2014)	363,306*	260,360 (72% of actual)	153,959 (42% of actual)
CY 2014 (Jan-Dec 2014**)	492,432**	520,720 (106% of actual)	307,918 (63% of actual)

*Actual is from October Medicaid Caseload Report for June 2014
**Actual data reports the October Medicaid Caseload Report from the end of December 2013 through October 2014 with additional projected enrollment for November and December 2014

OSU and UI both estimated the "woodwork effect" — the number of people who were previously eligible for Medicaid but not enrolled who would now enroll due to heightened awareness and/or ACA enrollment efforts. Determining who was previously eligible is challenging because some, such as pregnant women and newborns or people with reduced income, came onto the program because of changed life circumstances.

The methodology described in the notes to Figure 9 uses the Healthy Families/Healthy Start category as a proxy to estimate the woodwork effect, assuming that all adults and some children were previously eligible. This methodology still likely overestimates the number of actual people who were previously eligible but unenrolled who have now enrolled.

The original model's results predicted that 51 percent of those who were previously eligible would be children and 49 percent would be parents. Using these proportions and the actual increased enrollment of adults onto Healthy Start/Healthy Families in 2014, it is possible to estimate how many adult and child enrollees should count as woodwork. The calculations used to create these estimates are described in the notes to Figure 9. These calculations still likely overestimate the number of woodwork enrollees because, as noted above, not every new adult was previously eligible but not enrolled.

Figure 9. **Previously eligible but not enrolled estimate comparison of OSU model to SFY 2014 data**

	Actual	OSU model	UI Model
SFY 2014 (Jan-June 2014)	69,476*	97,203 (140% of actual)	67,177 (97% of actual)
CY 2014 (Jan-Dec 2014**)	169,526**	194,386 (115% of actual)	134,354 (79% of actual)

*Total calculated by using actual data from the October Medicaid Caseload Report of new Healthy Start/Healthy Family adults from December 2013 through June 2014 (34,043) divided by .49 (estimation of the proportion of adults that comprise total woodwork population) to determine the total approximation of those who were previously eligible but not enrolled (69,476). The total number of previously eligible children is estimated to be 35,433.
** Total calculated by using actual data from October Medicaid Caseload Report of new Healthy Start/Healthy Family adults from December 2013 through October 2014 with addition of projected adult enrollment for November and December 2014 (83,068 adults). This total was then divided by 0.49 (estimation of proportion of adults that comprise total woodwork population) to determine the total approximation of those who were previously eligible but not enrolled (169,526). The total number of previously eligible children is estimated to be 86,458.

Re-based Medicaid extension enrollment projections

The OSU model appears to have estimated projected enrollment for CY 2014 very closely to actual results, with estimated results at 106 percent of actual enrollment (Figure 8). However, when projecting SFY 2014 enrollment, OSU's basic model distributed annual enrollment equally across the months and did not account for the initial surge in enrollment at the beginning of the program.

While it is unlikely that the level of surge experienced in the initial open enrollment period will occur during every future open

enrollment, it is logical to assume that there will be a higher rate of uptake of Medicaid coverage when outreach and enrollment activities are at peak levels. While it is useful to recalculate projections based on actual trend, re-basing the original projections is challenging for a number of reasons, including:

- **Lack of data.** Just ten months of Ohio enrollment data exists for 2014 and there are no comparable trend rates available from other states, making it unclear how soon or how fast reduction in new enrollment growth trend will occur.
- **Lack of knowledge about impact of future open enrollment periods.** A new enrollment surge will likely occur during the open enrollment period that runs from November 15, 2014 through February 15, 2015 and then another surge during future open enrollment periods, anticipated to take place in November and December in 2015.
- **Uncertainty about how much "churn" will occur.** Starting in calendar year 2015, all who enrolled via the new Medicaid Extension category will be subject to eligibility redetermination. If some of these enrollees fail to follow through with re-enrollment or are found to be ineligible, enrollment growth will be reduced.
- **Eligibility shifts still occurring.** People enrolled in other Medicaid eligibility categories may continue to shift to the Medicaid Extension category. For example, as of September 2014, there remain 69,294 individuals on the family planning waiver, some of whom may have income below 138 percent FPL, and 114,635 on Transitional Medicaid, some of whom will likely transition to Medicaid Extension at the end of their transitional Medicaid eligibility.
- **2014 applications still in process.** There continues to be processing of Medicaid Extension applications filed earlier in 2014 which will increase total overall enrollment once processed.

Since the initial enrollment surge has passed, it is reasonable to expect a slowing rate of enrollment growth. As shown in Figure 7, the number of new enrollees in each of the last three months is lower than in the prior months, but enrollment growth has been stable from August through October.

Keeping actual enrollment and the considerations above in mind, OSU created a re-based projection to account for these possible effects.

The re-based projection assumes a consistent enrollment growth through February 2015 equal to the average enrollment growth of the last three months (August through October 2014), equaling 30,745 new enrollees per month. This projection assumes that open enrollment will counter any further downward enrollment trend. The re-based projection assumes an average enrollment increase of 2 percent for March and April (11,078 new enrollees per month) followed by an average enrollment increase of 1.5 percent for May and June (8,641 new enrollees per month). This trend reflects the expectation that there will continue to be processing of applications from earlier months through June.

Starting in July 2015 the re-based projection assumes that monthly enrollment will slow to an average of 1 percent a month (or 5,934 new enrollees per month) through the end of calendar year 2016. This increase comes to an annual increase of 12 percent. Starting in calendar year 2017 the increase equals 583 individuals a month, an increase of only .083 percent per month thereafter (or an annual increase of 1 percent).

The re-based projections are compared to the original projections to provide a new range of potential enrollment growth (Figure 10). The analysis shows a Medicaid extension enrollment range between 642,357 and 703,667 by the end of SFY 2017.

As a point of reference, there were 1,511,028 Ohioans between 18 and 64 with incomes below 138 percent FPL in 2012.[7]

Figure 10. **OSU original Medicaid newly eligible enrollment projection compared to re-based projections**

	Original OSU Projection	Re-based OSU Projection
SFY 2015	550,050	593,361
SFY 2016	609,269	664,565
SFY 2017	642,357	703,667
CY 2014	520,720	492,432
CY 2015	579,380	628,963
CY 2016	639,158	664,565

Re-based projection of county-level Medicaid extension enrollment

In March 2013, HPIO released a report containing OSU projections of Medicaid extension enrollment by county. OSU estimated county-level enrollment by assuming that the Medicaid extension enrollment would distribute across the counties in a similar ratio to that of the Healthy Families/Healthy Start adult population.

Using the most recent county enrollment data from the October Medicaid Expenditures and Eligibles Report, OSU compared actual county-level enrollment data to a distribution of the actual total using the original model methodology (see Appendix A). Appendix A also shows the difference in distribution using model methodology compared to actual enrollment, as well as the percent of actual enrollment compared to the distribution using the model methodology. Last, Appendix A compares the actual Medicaid Extension enrollment to the estimated adult population in each county to estimate the percentage of each county's adult population receiving coverage through Medicaid Extension.

Figure 11 shows the ten counties with the highest and lowest percent of their 18-64 year old population covered through Medicaid Extension. Variations among counties may reflect the impact of the prevalence of poverty, differences in county outreach and enrollment efforts and level of stigma related to Medicaid.

OSU also re-based the county level projections to correlate with the re-based state estimates for SFY 2015-2017 (see Appendix B).

Figure 11. **Medicaid extension as a percent of county population — Top 10 highest and lowest county rates**

Highest percent of population covered	Lowest percent of population covered
Meigs — 9.3%	Delaware — 2.0%
Fayette — 9.2%	Geauga — 2.1%
Muskingum — 9.2%	Holmes — 2.5%
Pike — 9.2%	Warren — 2.7%
Cuyahoga — 9.0%	Medina — 3.0%
Morgan — 9.0%	Mercer — 3.0%
Adams — 8.8%	Putnam — 3.0%
Scioto — 8.2%	Wood — 3.0%
Vinton — 8.2%	Union — 3.0%
4 Counties at 8.1%*	Auglaize — 3.3%

* Jackson, Jefferson, Marion and Perry

Source: 2013 U.S. Census Bureau data and Ohio Department of Medicaid

Variations among counties may reflect the impact of the prevalence of poverty, differences in county outreach and enrollment efforts and level of stigma related to Medicaid.

Fiscal impacts

The original Ohio Medicaid Expansion Study projected state fiscal impacts in addition to enrollment impacts. Although Ohio begins to incur some costs for the newly eligible Medicaid population beginning in CY 2017, the original analysis showed Medicaid expansion to be net positive in state general revenues even after the federal match rate dropped to 95 percent in CY 2017 and to 90 percent in CY 2020. The original analysis used conservative estimates for program savings, not counting any savings from a decrease in transitional Medicaid enrollment or family planning waiver enrollment and estimated new revenue that could result from Medicaid expansion.

Medicaid costs will be impacted favorably by fewer people who were previously eligible but not enrolled coming onto the program. Even if total enrollment of newly eligible individuals comes in above OSU's initial estimates and closer to the re-based estimates, the fiscal

The MetroHealth System/State of Ohio Early Medicaid Expansion Waiver
In February 2013 the State of Ohio received a demonstration waiver from the federal government that enabled an early expansion of Medicaid eligibility to a targeted population of patients affiliated with The MetroHealth System in Cuyahoga County. This waiver had an enrollment cap of 30,000 and a budget neutrality requirement. MetroHealth Care Plus members were offered primary care medical homes through The MetroHealth System and two Federally Qualified Health Centers (Care Alliance and Neighborhood Family Practice). The waiver approval was scheduled to end in December 2013, but was extended through April 2014 to allow for a transition period to the state's Medicaid program. Preliminary outcomes showed "significant improvements in diabetes, hypertension, access to behavioral health, and preventative care." The program was also "28 percent below the budget neutrality cap." The Ohio Department of Medicaid will submit a final evaluative report to the federal government.

impact of the newly eligible Medicaid category will be net positive for state revenues in SFY 2016 and 2017 because of the higher match rate. Program savings from other state budget categories (i.e. adults with spend-down, the breast and cervical cancer program, retroactive and backdated eligibility and in-patient medical costs for state prisoners, and mental health and substance abuse treatment) have not yet been released by the administration. Additional savings may result from shifts in the family planning waiver and transitional Medicaid categories. Revenue may be impacted by any policy changes needed as a result of the federal government's recent guidance on health care related taxes.[8]

Implications of increased Medicaid enrollment on the health and well-being of Ohioans

State-specific data on the impact of increased Medicaid enrollment on the health and well-being of Ohioans is not yet available. The following questions are critical for understanding the full impact of this policy change:

- What is the health status of the newly eligible Medicaid population?
- How has increased Medicaid enrollment impacted access to care?
- What is the effect of Medicaid coverage on health outcomes?
- What is the effect of Medicaid expansion on the labor market (and/or employers/ wages)?

A review of the following literature provides some early answers to these questions, but additional analysis is needed to fully describe impacts for Ohio.

Health status of the newly eligible Medicaid population

Several recent national studies have found that newly eligible adults report better-than-average health than current Medicaid beneficiaries.[9,10,11,12] The degree to which the new population is healthier varied across studies. Potentially eligible adults were found to be significantly less likely to be obese or have depression.[13] Also, chronic conditions tended to be less prevalent among newly eligible and previously eligible but not enrolled adults than among Medicaid enrollees pre-expansion.[14] If the unenrolled had these chronic conditions, however, they were less likely to be diagnosed and less likely to have the conditions controlled.[15]

Because many uninsured adults have not seen a physician in the past year and have lacked access to routine health care, they are more likely to need care upon first enrolling in Medicaid. Adding to this, the higher proportion of newly eligible adults reporting tobacco use and moderate to heavy drinking may further exacerbate the need for initial primary care. These three factors add to the potential early shock in healthcare needs of new Medicaid enrollees. These factors also highlight the need for preventive care and patient engagement to support healhy behaviors related to tobacco and alcohol use.

Medicaid expansion's impact on access to care

When the ACA passed, there was some concern that the influx of newly-insured individuals would result in inadequate access to health care providers. To mitigate these concerns, the ACA contained a number of provisions to ensure continued access to care, including a temporary two-year increase in Medicaid payment rates for primary care providers and additional funding for community health centers. Unfortunately, due to limited data, it is difficult to characterize or quantify with certainty the impact that Medicaid expansion has had on access to care among Ohio enrollees at this time.

One recent study by Yale researchers found that Medicaid expansion in 10 states had no negative effect on access to care for Medicaid recipients already enrolled in the program. In fact, in states that expanded Medicaid, the percentage of Medicaid enrollees reporting poor access to care declined from 8.5 percent before the expansion to 7.3 percent after the expansion. In states that did not expand Medicaid, the percentage of Medicaid enrollees reporting poor access to care remained steady at 5.3 percent. In both Medicaid expansion and non-expansion states, Medicaid enrollees reported slight decreases (about 1 percent) in emergency department use.[16]

In another report issued in September 2014 by the Office of Inspector General for the U.S. Department of Health and Human Services, Medicaid enrollees across the nation continue to report difficulty accessing care. Despite having a Medicaid card, enrollees report having to wait months or travel great distances to obtain both primary and specialty care. According to the report, much of the provider access problem arises from weak or unenforced federal and state adequate access to care standards. Under federal rules, Medicaid managed care organizations must offer "adequate access to all services covered." Within this broad directive, however, states are responsible for defining and enforcing their own set of standards for "adequate" access to care, resulting in wide variation in standards across Medicaid programs. Most commonly, state standards of care include limits on wait times for appointments, maximum travel distances/times for care, and minimum numbers of network providers per enrollee.

Ohio Medicaid standards of care

- **Travel distance:** Beneficiaries should not have to travel more than 30 miles to receive medically-necessary care from a primary care provider or specialist. If they do have to travel farther, the managed care organization must provide transportation.
- **Number of providers:** There are no requirements regarding the number of providers in the managed care plan's network.
- **Wait times:** Beneficiaries should not have to wait more than 42 days to get an appointment with a primary care physician; there are no requirements regarding how long a beneficiary may have to wait to see a specialist.
- **Access-related performance measures[17]:** At least 83 percent of a managed care plan's enrollees between 1 and 19 years of age must have had a primary care visit within the previous year.[18]

In general, the Ohio Medicaid's requirements related to access are lower than those in other states. For example, while 20 states require a minimum number of providers per enrollee, Ohio has no requirements governing the number of network providers. Among the 31 states with limits on the number of days a recipient must wait to get an appointment with a primary care provider, Ohio has the second longest allowable wait time at 42 days. Interestingly, however, Ohio is perhaps the most vigilant when it comes to enforcing standard of care; Ohio accounted for the highest percentage (32 percent) of reported violations nationwide between 2008 and 2013.

The findings of the inspector general are echoed by comments made by new Medicaid enrollees in a series of focus groups conducted on behalf of the Medicaid and CHIP Payment and Access Commission. Medicaid enrollees from Chicago, Portland (Ore.) and Denver (all located in Medicaid

expansion states) reported mixed experiences accessing care. While some participants had no problems accessing care, others reported having great difficulty finding a primary care provider, often calling five or more practices to find a doctor accepting new Medicaid patients. Others reported difficulty accessing specialty care and filling prescriptions.[19]

More data and research is necessary to determine Medicaid expansion's impact on access to care. One step in that direction is a nationwide survey of adult Medicaid enrollees launched by CMS in the fall of 2014. Using a modified version of the Adult Consumer Assessment of Healthcare Providers and Systems (CAHPS), CMS hopes to obtain further insight into access to care and experience of care issues among adult Medicaid enrollees.

When completed at the end of 2014, the survey will provide state policymakers with uniform national and state-specific data on measures of access, barriers to care, satisfaction with providers, and customer service ratings among adult Medicaid recipients.[20]

Effect of Medicaid coverage on health outcomes

A key issue in the debate surrounding Medicaid is the relationship between Medicaid coverage and health outcomes.

In general, health insurance coverage is linked to increased access to care and improved health outcomes. As a result of a comprehensive review of research on the effects of health insurance for adults in the United States, the Institute of Medicine concluded "Health insurance coverage is associated with better health outcomes for adults. It is also associated with having a regular source of care and with greater and more appropriate use of health services. These factors, in turn, improve the likelihood of disease screening and early detection, the management of chronic illness, and effective treatment of acute conditions such as traumatic brain injury and heart attacks. The ultimate result is improved health outcomes."[21] Looking more closely at the impact of Medicaid coverage on health, it can be challenging to compare outcomes between program beneficiaries and other populations. In particular, adults with Medicaid tend to be both poorer and sicker than low-income adults with private health insurance. An analysis of Medicaid Expenditure Panel data by the Kaiser Commission on Medicaid and the Uninsured revealed higher rates of poverty, chronic illness, and disability in the Medicaid population.[22] Additionally, among all adults who are eligible for Medicaid coverage, those who actually enroll are more likely to have already had an encounter with the healthcare system, such as being disabled or having another condition associated with significant health care expenses.[23]

The Oregon Health Insurance Experiment provided a unique research opportunity to assess the effect of Medicaid coverage on health outcomes. In 2008 the state permitted a limited number of low-income, uninsured adults to enroll in Medicaid through a lottery drawing. By comparing individuals who won the lottery to individuals who did not, it was possible to better isolate the effects of Medicaid coverage. Data was collected from both groups, the lottery winners and those not selected, including in-person interviews, detailed questionnaires and medical examinations. The results revealed that Medicaid coverage "increased overall healthcare utilization, improved self-reported health, and reduced financial strain."[24] Notably, results showed a stronger improvement in mental health as compared to physical health.

Researchers found that Medicaid enrollees were more likely to indicate good, very good, or excellent health (versus fair or poor health) and less likely to screen positive for depression.[25] No statistically significant reductions were found in cholesterol levels, blood sugar levels among persons diagnosed with diabetes and blood pressure. However, subsequent research suggests that improved health effects may be more noticeable over time. For example, the significant increased use of preventive services may improve health over the long term.[26]

Another study conducted by the Department of Health Policy and Management at the Harvard School of Public Health specifically examined the effects of Medicaid expansions on mortality and other health-related measures. Results revealed that Medicaid expansions were associated with a significant reduction in mortality and increased rates of

self-reported positive health status, in addition to improved coverage and access to care.[27] It remains challenging to evaluate the effects of Medicaid coverage on health outcomes. In particular, the poorer health status of beneficiaries and other underlying population differences makes comparisons between the Medicaid and privately insured populations difficult. Some studies have suggested that people with Medicaid coverage have worse health outcomes. However, research shows that health insurance in general is associated with improved health outcomes and several studies hold this to be true for Medicaid beneficiaries as well as those with other types of coverage.

Effect of Medicaid expansion on the labor market

During debate about extending Medicaid, there was some concern that expanded eligibility levels might reduce labor force activity or incentives to work, particularly among low-wage workers who previously were not eligible for the program. The fear was that such workers might choose not to work or simply choose to work fewer hours. Others argued that the ACA expansion of Medicaid might actually provide an incentive for workers to increase the number of hours worked. Previously, Medicaid recipients wishing to increase work hours faced loss of coverage by earning too much to maintain Medicaid eligibility, but working too few hours to qualify for and/or afford employer-sponsored coverage. With Medicaid expansion in place, participants earning above Medicaid eligibility thresholds now qualify for premium tax credits and cost-sharing subsidies to purchase private insurance.

Unfortunately, it is difficult to isolate the effects of Medicaid expansion on the labor market from the effects of other ACA provisions. A February 2014 report by the Congressional Budget Office estimated that, taken together, all ACA-related provisions would reduce the total number of hours worked, on net, by about 1.5 to 2.0 percent from 2017 to 2024, due almost entirely to workers choosing to supply less labor. The CBO noted, however, that Medicaid expansion alone would have, "a relatively modest influence on total labor supply, however, because the expansion of eligibility for Medicaid primarily affects a relatively small segment of the total population."[28]

Effect of employment trends on Medicaid enrollment

Many of those enrolling in Medicaid coverage under the new eligibility criteria likely were previously uninsured. According to Kaiser State Health Facts analysis of Census data, in 2013, 70 percent of uninsured Ohioans lived in a family with at least 1 full-time worker and 13 percent lived in a family with part-time workers.[29] While 55 percent of firms offer health insurance benefits, just 24 percent of those offer health benefits to part-time workers. Firms with a higher percentage of low wage workers are less likely to offer health insurance benefits than those with a higher percentage of higher-wage workers.[30] According to recent analysis by the Ohio Housing Finance Agency, "employment in Ohio….is disproportionately concentrated in low-wage occupations."[31] These employees are less likely to receive an offer of health benefits and more likely to seek Medicaid coverage. Previously insured people who enroll in Medicaid coverage may have found private health insurance to be more expensive than Medicaid, with less covered services.

Perspectives on Medicaid eligibility changes: Interviews with key health stakeholders

HPIO contracted with Sprout Insight, LLC, an Ohio-based independent research organization, to explore the perspectives and experiences of key professional stakeholders who serve or represent Ohio residents receiving health coverage through Medicaid. These key informant interviews are intended to provide a snapshot of implications of increased Medicaid enrollment due to broader eligibility criteria.

Sprout Insight interviewed 27 stakeholders in October 2014. Representatives from hospitals, Medicaid managed care plans, free clinics, community health centers and mental health and addiction providers, as well as physicians, consumer advocates and a pharmacist, were interviewed. These stakeholders included

representatives of organizations serving both urban and rural areas of Ohio.

Qualitative findings that emerged from the in-depth interviews were thematically analyzed to highlight key findings and trends. These qualitative observations point to opportunities for further analysis of quantitative data. The full report is posted at: **http://bit.ly/1yfqy3d**. Excerpts are described below.

Utilization

In terms of overall trends, both hospitals and community health centers reported a reduction in the number of patients who are categorized as self-pay/uninsured and a corresponding increase in the number of patients with Medicaid. A behavioral health provider said that the "Medicaid penetration rate pre-expansion was about 59 percent and now it is about 74 percent."

Stakeholders did not report consistent trends in healthcare usage. While some stakeholders said that usage had not changed, others explained that the increases in usage were reflective of pent-up demand for healthcare services from patients who had been delaying care and were getting their health needs addressed for the first time now that they had coverage. The types of services that patients were seeking not only included primary care issues, but also dental, vision and behavioral health care. As a result of patients having health coverage, healthcare providers could also address other needs, such as lab work, without being as concerned with cost.

Stakeholders consistently stated that patients who have most benefited from gaining coverage included:

- Older single and married adults
- Men
- Individuals with mental health issues
- Homeless individuals
- The working poor

Medicaid managed care plans said that many newly eligible enrollees are older than expected, with one remarking that "about 50 percent are over 40 years of age."

Health status

Several stakeholders shared that patients who sought healthcare services as a result of gaining Medicaid coverage presented with acute health conditions. Stakeholders did not anticipate this poor state of health among patients. A consumer advocate stated that "the overall health acuity of the members is higher than originally anticipated. The patient population is older than what was originally anticipated," and a Medicaid managed care plan reflected that they "are finding that the acuity [of overall health status] of people is worse than expected because people were not attending to their needs all along."

Access to care

Stakeholders who reported experiencing increases in patient healthcare usage often represented specific sectors, such as free clinics. According to stakeholders from these sectors, patients appeared to be experiencing challenges with finding providers who accepted Medicaid. As a result, patients were opting to go to free clinics where they could have a shorter wait time for appointments. Stakeholders reported that many patients did not use the coverage that they had for healthcare services, primarily because they were not accustomed to engaging in preventive healthcare or they were experiencing barriers to getting an appointment.

Stakeholders believed that access to care was at acceptable levels in major metropolitan areas, but not for individuals living in rural areas of the state where few providers were offering appointments for Medicaid patients. To address the increased service demand and help increase access, some community health centers reported that they had hired new staff and provided services to fill the need, with one stating the need for "recruitment and retention of qualified and passionate people to work in community health centers."

Emergency room utilization

Stakeholders reported that Medicaid expansion did not seem to be having an impact on emergency room (ER) use. As one hospital reported: "There have been no real dramatic changes—just normal organic growth. I don't think Medicaid expansion has either encouraged or discouraged ER use." A consumer advocate indicated that "there has not been more ER usage than expected because we expected there to be a lot of ER

usage...This is where the expansion population used to access care prior to coverage."

Although stakeholders did not report significant increases in ER usage, they underscored the importance of conducting patient education and engaging in a cultural shift among patients to discourage ER use for primary care needs. Stakeholders offered the following comments:

These people are accustomed to going to the Emergency Room for care and getting good care. Why would they go elsewhere? We need education and a cultural shift to change this. Right now these people can go to one place (ED)… to get everything done that they need in one day and in one location. — Physician

For Medicaid patients, there is high ER usage. This is a symptom of having a lot of ERs in Ohio. We need to deal with how we encourage ER use by having access to other options. We need primary care providers to be available during non-normal business hours, like nights and weekends.
— Medicaid Managed Care plan representative

We [community health clinic] have implemented walk-in hours to try to help deter people from using the ER. Before, we were not open late…but now we stay open later a few days per week.
— Community Health Center representative

Several stakeholders also mentioned a subgroup of individuals who may be eligible for Medicaid but do not enroll because of mistrust of the government:

[There are] those [who] are eligible for Medicaid but won't complete the application process to become enrolled. Some people are reticent to enroll either because they have a distrust of the government and have their information "out there" or because they have an attitude that they don't want anything free from the government. — Hospital representative

There are some patients that have refused to sign up because they don't want to be connected with the government. They don't want to be in a government program. — Mental health provider

Health-insurance literacy

Stakeholders consistently and recurrently commented on the poor level of health insurance literacy among patients. Most stakeholders reported putting into place a variety of ways to help patients learn of their eligibility and enroll in Medicaid coverage as well as understand how to use their insurance. These efforts range from offering outreach educational presentations to hiring certified staff to work directly with patient enrollment.

Monitoring of changes

Stakeholders varied in their level of organizational monitoring or measurement of changes related to increased Medicaid enrollment. Some stakeholder organizations track payer mix and charges whereas others track staffing and patient clinical indicators. Other stakeholders are not currently tracking any data related to Medicaid enrollment. The stakeholders with the most sophisticated monitoring systems accessed beneficial digital tools, such as electronic health records and software, to help with tracking.

Several challenges related to Medicaid and marketplace coverage were articulated by stakeholders:

We are tracking several things. We are tracking people that we do presumptive eligibility for—did they complete the Medicaid application? We are tracking the payer mix. We are tracking bad debt. We are tracking the number of days in accounts receivable. We are also tracking the other indicators for quality like readmission to the ER. — Hospital representative

We are monitoring charges: uninsured gross charges, Medicaid charges and commercial charges. We have looked at inpatient data regarding discharges for uninsured, Medicaid, and commercially insured and on the outpatient side for visits. — Hospital representative

We monitor to see whether or not members have received a health assessment and a face-to-face visit, if needed, based on their health risk. We measure a members' satisfaction with the health plan as well as physicians and other specialists providing services to them.-Consumer Advocate
We have an electronic health records system. This allows us to run reports on people [who] haven't come back to see us [who] should have. This way we can track them down and follow up with our patients. — Community Health Center representative

We track our patients to see if they have Medicaid to verify that they can continue with treatment. We use this information to figure out staffing needs. — Mental health provider

We look back on the health center report annually on 17-18 measures, such as controlled blood pressure, entry into prenatal care, patients with low birth weight babies, screening of BMI. — Community Health Center representative

- **Affordability**
  For those qualifying for Medicaid, affordability will not be an issue. However, for those who fall outside of qualification for Medicaid and must take advantage of the exchanges, I see problems with them affording healthcare. This will cause a problem with respect to being preventive; these patients will wait longer to see a doctor. — Hospital representative

- **Patient engagement**
  The biggest challenge is to be able to get people engaged in their health care and taking responsibility and accountability for what they need to do to manage their healthcare. — Consumer Advocate

  There is 'churn' where the consumers are on and off with the insurance. It is difficult to have quality of care if the consumer is with us for 1 month and then not with us for 6 months and then back again for 2 months. — Medicaid Managed Care representative

- **Application process**
  It is hard to apply for Medicaid on the computer. These people don't have access to a computer. The system needs to be more user-friendly. For some people this is a literacy issue and they don't want to be embarrassed that they can't read. Some people feel more comfortable taking home a paper application and having someone at home help them with the application. — Free Clinic representative

- **Eligibility**
  People are starting to reduce their hours at work to become eligible for Medicaid so they don't have to get insurance with the Affordable Care Act. Employers are also cutting back on hours they provide to their employees so they don't have to provide insurance from the ACA marketplace… People can't afford to work because they will lose their medical coverage. — Free Clinic representative

  It is important that we make sure that the General Assembly doesn't add requirements to being eligible for Medicaid, such as cost-sharing and work requirements. There is this argument out there that people need some "skin in the game." Their whole bodies are in it and it is not a game. — Consumer Advocate

- **Behavioral health**
  We need to figure out how to turn on some of the Medicaid behavioral health codes. Medicaid has to be willing to turn these on in a primary care setting. In Ohio, these behavioral health codes are not turned on [for reimbursement coverage.] — Community Health Center representative

- **Prescription drugs**
  There is a new wave of high cost specialty drugs that have been made recently. These are expensive, effective medications…This will put a huge strain on taxpayers as well as the Medicaid and Medicare programs. — Consumer Advocate

Overall, stakeholders were supportive of Medicaid eligibility expansion, with many calling for renewal of the expansion next year. Stakeholders agreed that this policy change has resulted in Ohio having fewer uninsured patients overall. Several challenges, however, will need to continue to be addressed, including exploring models of payment reimbursement reform, ensuring adequate payment to healthcare providers, and increasing the number of primary care providers.

Implications for future study

As the implementation of expanded Medicaid eligibility and the rest of the ACA are ongoing, additional analysis is necessary to evaluate effects over time. Enrollment data provides a foundation for this analysis, but additional research is necessary. Access to basic demographic data, such as income level, employment status, insurance status, race/ethnicity and dependent children, would be helpful in understanding the characteristics of those coming onto the program. Data sources such as the 2015 Ohio Medicaid Assessment Survey and the Ohio Health Issues Poll will provide useful data with which to analyze trends over time.

Ohio-specific data related to access and use of care would begin to provide a fuller picture of the impact of new eligibility levels. Specific questions for future analysis related to access

and use of care include:

- Are people with Medicaid coverage, including people with mental health and/or substance use issues, able to access care? If not, what barriers do they encounter?
- Do people with Medicaid coverage utilize care appropriately?
- Do they access primary care and avoid unnecessary emergency department utilization and how do these patterns compare to those of people who are privately insured or uninsured?
- What is the impact of coverage on continuity of care?

Analysis of health behaviors and outcomes, as well as changes in population health and costs over time, will be critical to determining whether this policy change produces desirable and sustainable results.

Other considerations for future study and research include:

- Why do county enrollment levels vary? What practices lead to higher enrollment levels?
- How do local alcohol, drug and mental health boards redeploy resources as a result of Medicaid expansion? What impacts are there to local health departments?
- What types of jobs do people on Medicaid typically have? Do these jobs offer full time hours and health insurance benefits? What is the impact of Medicaid expansion on job mobility and income level?
- How do Ohioans on Medicaid rate their satisfaction with the program, as well as perceived health and financial security?
- What impact does expansion have on hospitals in terms of uncompensated care and financial stability? What impact is there on the safety net, including Federally Qualified Health Centers and free clinics?
- What is the impact of Medicaid expansion on the state budget? What other fiscal impacts happen over time?

Notes

1. The state Controlling Board provides legislative oversight over certain capital and operating expenditures by state agencies and has approval authority over various other state fiscal activities. The Board consists of seven members, including the director of Budget and Management, or designee (the President of the Board); the chair of the Finance and Appropriations Committee of the House of Representatives; the chair of the Finance Committee of the Senate; two members of the House appointed by the Speaker of the House, one from the majority party and one from the minority party; and two members of the Senate appointed by the President of the Senate, one from the majority party and one from the minority party.
2. The Ohio Department of Medicaid produces two reports with enrollment information. The monthly Medicaid Expenditures and Eligibles Report (http://medicaid.ohio.gov/RESOURCES/ReportsandResearch/MedicaidEligiblesandExpendituresReports.aspx) and the monthly Medicaid Caseload Report (http://medicaid.ohio.gov/RESOURCES/ReportsandResearch/CaseloadReports.aspx). The count in Figure 4 comes from the Expenditures and Eligibles Report. The count in Figure 5 comes from the Caseload Report.
3. Ohioans with disabilities whose income exceeds the eligibility limit for Medicaid may become eligible on a month-to-month basis through a "spend-down." The spend-down allows individuals to deduct medical expenses from their income until they meet financial eligibility guidelines.
4. Medicaid provides a limited set of benefits for men and women with incomes up to 200% FPL, to help prevent or delay pregnancy.
5. Medical bills incurred in the three months prior to the application date may be covered, if the individual is found to be eligible for the program and would have been eligible during the retroactive period.
6. Figure 6 uses data from Ohio Medicaid for January through August 2014. These were preliminary totals because retroactive and backdated enrollments were not included.
7. U.S. Census Bureau. Small Area Health Insurance Estimates (SAHIE), 2012. http://www.census.gov/did/www/sahie/data/interactive/#view=data&utilBtn=&yLB=0&stLB=0&aLB=1&sLB=0&iLB=1&rLB=0&countyCBSelected=false&insuredRBG=pu_&multiYearSelected=false&multiYearAlertFlag=false
8. http://www.medicaid.gov/Federal-Policy-Guidance/downloads/SHO-14-001.pdf
9. Chang and Davis, "Potential Adult Medicaid Beneficiaries Under the Patient Protection and Affordable Care Act Compared With Current Adult Medicaid Beneficiaries," Annals of Family Medicine, 2013
10. Health Affairs, "Adults In The Income Range For The Affordable Care Act's Medicaid Expansion Are Healthier Than Pre-ACA Enrollees"
11. Health Affairs, "Health Status, Risk Factors, and Medical Conditions Among Persons Enrolled in Medicaid vs Uninsured Low-Income Adults Potentially Eligible for Medicaid Under the Affordable Care Act"
12. The Urban Institute, The Health Status of New Medicaid Enrollees Under Health Reform
13. Chang and Davis, "Potential Adult Medicaid Beneficiaries Under the Patient Protection and Affordable Care Act Compared With Current Adult Medicaid Beneficiaries," Annals of Family Medicine, 2013
14. Health Affairs, "Adults In The Income Range For The Affordable Care Act's Medicaid Expansion Are Healthier Than Pre-ACA Enrollees"
15. Health Affairs, "Health Status, Risk Factors, and Medical Conditions Among Persons Enrolled in Medicaid vs Uninsured Low-Income Adults Potentially Eligible for Medicaid Under the Affordable Care Act"
16. Ndumele, Chima D., et.al. Effect of Expansions in State Medicaid Eligibility on Access to Care and the Use of Emergency Department Services for Adult Medicaid Enrollees, JAMA Internal Medicine. 2014; 174 (6):920-926.
17. Unique to Ohio
18. Murrin, Suzanne. State Standards for Access to Care in Medicaid Managed Care. Department of Health and Human Services, Office of Inspector General. September 2014, OEI-02-11-00320.
19. Early Experiences of New Medicaid Enrollees: Insights from Six Focus Groups with Individuals Who Enrolled in Medicaid during the Affordable Care Act's First Open Enrollment Period. PerryUndem. September 2014.
20. Mann, Cindy. CMCS Informational Bulletin: Nationwide CAHPS Survey of Adult Medicaid Enrollees. June 6, 2014
21. Institute of Medicine, Committee on the Consequences of Uninsurance. "Care Without Coverage: Too Little, Too Late." 2002. p.6.
22. Kaiser Commission on Medicaid and the Uninsured. "What Difference Does Medicaid Make?" May 2013. http://kaiserfamilyfoundation.files.wordpress.com/2013/05/8440-what-difference-does-medicaid-make2.pdf
23. Institute of Medicine, Committee on the Consequences of Uninsurance. "Care Without Coverage: Too Little, Too Late." 2002. p.101
24. The New England Journal of Medicine. "The Oregon Experiment—Effects of Medicaid on Clinical Outcomes." May 2, 2013.
25. The New England Journal of Medicine. "The Effects of Medicaid Coverage – Learning from the Oregon Experiment." August 25, 2011. http://www.nejm.org/doi/full/10.1056/NEJMp1108222
26. Milbank Memorial Fund. "Exploring Claims that Medicaid Doesn't Improve Health." July 2014.
27. The New England Journal of Medicine. "Mortality and Access to Care among Adults after State Medicaid Expansions." September 13, 2012.
28. Congressional Budget Office. The Budget and Economic Outlook: 2014 to 2024. Appendix C: Labor Market Effects of the Affordable Care Act: Updated Estimates. February 14, 2014. http://www.cbo.gov/sites/default/files/cbofiles/attachments/45010-breakout-AppendixC.pdf.
29. http://kff.org/uninsured/state-indicator/distribution-by-employment-status-2/
30. http://files.kff.org/attachment/2014-employer-health-benefits-survey-full-report, Exhibits 2.2 and 2.4
31. http://ohiohome.typepad.com/blog/2014/08/housing-needs-assessment-workforce.html

Appendix A: **Actual and projected Medicaid extension enrollment, by county**

County	Actual enrollment			OSU projections		
	County-level enrollment (as of 10/14)	18-64 year old population by county (2013 Census)	% of 18-64 population enrolled in Medicaid extension (as of 10/14)	Actual enrollment distributed using original model methodology	Difference in distribution using model methodology compared to actual enrollment	% of actual enrollment compared to distribution using model methodology
Adams	1,474	16,722	8.8%	1,806	-332	81.6%
Allen	3,159	64,232	4.9%	4,177	-1,018	75.6%
Ashland	1,220	31,826	3.8%	1,604	-384	76.1%
Ashtabula	3,559	60,286	5.9%	4,832	-1,273	73.6%
Athens	2,478	47,735	5.2%	2,586	-108	95.8%
Auglaize	883	27,047	3.3%	1,159	-276	76.2%
Belmont	2,528	43,343	5.8%	2,854	-326	88.6%
Brown	1,849	26,647	6.9%	2,069	-220	89.4%
Butler	11,299	233,159	4.8%	12,246	-947	92.3%
Carroll	957	16,824	5.7%	1,160	-203	82.5%
Champaign	1,126	23,791	4.7%	1,330	-204	84.7%
Clark	5,614	81,019	6.9%	7,046	-1,432	79.7%
Clermont	5,560	124,335	4.5%	6,252	-692	88.9%
Clinton	1,506	25,586	5.9%	2,146	-640	70.2%
Columbiana	4,107	64,701	6.3%	4,288	-181	95.8%
Coshocton	1,721	21,688	7.9%	1,744	-23	98.7%
Crawford	1,825	25,128	7.3%	2,161	-336	84.4%
Cuyahoga	70,751	784,419	9.0%	53,004	17,747	133.5%
Darke	1,167	30,011	3.9%	1,523	-356	76.6%
Defiance	1,083	23,042	4.7%	1,461	-378	74.1%
Delaware	2,234	112,837	2.0%	2,232	2	100.1%
Erie	2,874	45,477	6.3%	3,002	-128	95.7%
Fairfield	4,892	91,107	5.4%	5,329	-437	91.8%
Fayette	1,598	17,280	9.2%	1,497	101	106.7%
Franklin	41,999	796,457	5.3%	48,206	-6,207	87.1%
Fulton	1,038	25,450	4.1%	1,215	-177	85.5%
Gallia	1,313	18,403	7.1%	1,736	-423	75.7%
Geauga	1,149	54,504	2.1%	1,149	0	100.0%
Greene	3,568	104,451	3.4%	4,314	-746	82.7%
Guernsey	1,821	23,742	7.7%	2,110	-289	86.3%
Hamilton	34,772	505,239	6.9%	28,995	5,777	119.9%
Hancock	2,031	46,828	4.3%	2,364	-333	85.9%
Hardin	1,039	19,744	5.3%	1,178	-139	88.2%
Harrison	538	9,326	5.8%	674	-136	79.8%
Henry	685	16,574	4.1%	873	-188	78.4%
Highland	1,664	25,460	6.5%	2,295	-631	72.5%
Hocking	1,317	17,199	7.7%	1,472	-155	89.5%

County	Actual enrollment			OSU projections		
	Actual county-level enrollment (as of 10/14)	18-64 year old population by county (2013 Census)	% of actual Medicaid extension enrollment to base 18-64 population	Actual enrollment distributed using original model methodology	Difference in distribution using model methodology compared to actual enrollment	% of actual enrollment compared to distribution using model methodology
Holmes	603	23,671	2.5%	639	-36	94.4%
Huron	1,964	35,333	5.6%	2,433	-469	80.7%
Jackson	1,611	19,866	8.1%	1,916	-305	84.1%
Jefferson	3,342	41,429	8.1%	3,028	314	110.4%
Knox	2,100	36,912	5.7%	2,244	-144	93.6%
Lake	6,087	140,672	4.3%	5,180	907	117.5%
Lawrence	2,888	37,522	7.7%	3,180	-292	90.8%
Licking	5,274	103,214	5.1%	5,836	-562	90.4%
Logan	1,457	27,061	5.4%	2,021	-564	72.1%
Lorain	10,551	185,027	5.7%	10,196	355	103.5%
Lucas	20,629	273,182	7.6%	21,098	-469	97.8%
Madison	1,215	28,087	4.3%	1,396	-181	87.0%
Mahoning	10,097	141,491	7.1%	10,423	-326	96.9%
Marion	3,364	41,784	8.1%	3,025	339	111.2%
Medina	3,257	106,873	3.0%	3,218	39	101.2%
Meigs	1,326	14,239	9.3%	1,352	-26	98.1%
Mercer	712	23,573	3.0%	950	-238	75.0%
Miami	2,073	61,857	3.4%	2,592	-519	80.0%
Monroe	555	8,459	6.6%	638	-83	87.1%
Montgomery	23,108	329,009	7.0%	21,162	1,946	109.2%
Morgan	794	8,808	9.0%	694	100	114.4%
Morrow	1,231	21,055	5.8%	1,414	-183	87.1%
Muskingum	4,717	51,139	9.2%	4,632	85	101.8%
Noble	387	8,543	4.5%	489	-102	79.2%
Ottawa	1,026	24,280	4.2%	1,123	-97	91.4%
Paulding	544	11,418	4.8%	731	-187	74.4%
Perry	1,771	21,886	8.1%	1,953	-182	90.7%
Pickaway	2,204	35,640	6.2%	2,126	78	103.7%
Pike	1,567	17,077	9.2%	1,884	-317	83.2%
Portage	4,729	109,296	4.3%	4,385	344	107.8%
Preble	1,324	24,997	5.3%	1,520	-196	87.1%
Putnam	600	20,180	3.0%	708	-108	84.8%
Richland	4,815	73,551	6.5%	5,281	-466	91.2%
Ross	3,472	49,395	7.0%	4,198	-726	82.7%
Sandusky	1,736	36,059	4.8%	2,006	-270	86.5%
Scioto	3,937	48,142	8.2%	4,328	-391	91.0%

County	Actual enrollment			OSU projections		
	Actual county-level enrollment (as of 10/14)	18-64 year old population by county (2013 Census)	% of actual Medicaid extension enrollment to base 18-64 population	Actual enrollment distributed using original model methodology	Difference in distribution using model methodology compared to actual enrollment	% of actual enrollment compared to distribution using model methodology
Seneca	2,418	34,387	7.0%	2,297	121	105.2%
Shelby	1,128	29,220	3.9%	1,497	-369	75.3%
Stark	10,561	227,512	4.6%	14,101	-3,540	74.9%
Summit	22,017	337,556	6.5%	19,460	2,557	113.1%
Trumbull	9,309	123,865	7.5%	8,477	832	109.8%
Tuscarawas	2,683	55,047	4.9%	3,304	-621	81.2%
Union	1,009	33,583	3.0%	1,275	-266	79.2%
VanWert	767	16,705	4.6%	947	-180	81.0%
Vinton	671	8,218	8.2%	817	-146	82.1%
Warren	3,675	134,131	2.7%	3,089	586	119.0%
Washington	2,366	37,522	6.3%	2,004	362	118.1%
Wayne	3,360	68,352	4.9%	3,269	91	102.8%
Williams	1,122	22,388	5.0%	1,465	-343	76.6%
Wood	2,543	85,185	3.0%	2,625	-82	96.9%
Wyandot	502	13,199	3.8%	580	-78	86.5%
Missing*	1,402			1,703	-301	82.3%
Total	430,998			430,998		

* Records not coded to any of the 88 counties. Also, with the addition of portal-based enrollment and counties consolidating administrative offices, records may exhibit a lag in mapping.

Appendix B: **Projected ranges of new 19-64 year old enrollment due to new Medicaid eligibility levels by county (SFY 2015-2017)**

County	SFY 2015 Original Projection	SFY 2015 Rebased Projection	SFY 2016 Original Projection	SFY 2016 Rebased Projection	SFY 2017 Original Projection	SFY 2017 Rebased Projection
Adams	2,305	2,486	2,553	2,784	2,691	2,948
Allen	5,330	5,750	5,904	6,440	6,225	6,819
Ashland	2,047	2,208	2,267	2,473	2,390	2,618
Ashtabula	6,167	6,653	6,831	7,451	7,202	7,890
Athens	3,300	3,560	3,656	3,988	3,854	4,222
Auglaize	1,479	1,595	1,638	1,787	1,727	1,892
Belmont	3,642	3,929	4,034	4,400	4,253	4,659
Brown	2,640	2,848	2,925	3,190	3,084	3,378
Butler	15,629	16,859	17,311	18,883	18,251	19,994
Carroll	1,480	1,596	1,639	1,788	1,728	1,893
Champaign	1,697	1,830	1,879	2,050	1,982	2,171
Clark	8,993	9,701	9,961	10,865	10,502	11,504
Clermont	7,979	8,607	8,838	9,640	9,318	10,207
Clinton	2,739	2,954	3,034	3,309	3,198	3,504
Columbiana	5,473	5,904	6,062	6,612	6,391	7,001
Coshocton	2,226	2,401	2,465	2,689	2,599	2,847
Crawford	2,758	2,976	3,055	3,333	3,221	3,529
Cuyahoga	67,645	72,971	74,927	81,728	78,996	86,536
Darke	1,943	2,097	2,153	2,348	2,270	2,486
Defiance	1,865	2,011	2,065	2,253	2,177	2,385
Delaware	2,849	3,073	3,156	3,442	3,327	3,645
Erie	3,831	4,133	4,244	4,629	4,474	4,901
Fairfield	6,801	7,337	7,533	8,217	7,943	8,701
Fayette	1,911	2,061	2,116	2,308	2,231	2,444
Franklin	61,522	66,366	68,145	74,330	71,846	78,703
Fulton	1,550	1,672	1,717	1,873	1,810	1,983
Gallia	2,215	2,389	2,453	2,676	2,587	2,833
Geauga	1,466	1,582	1,624	1,772	1,713	1,876
Greene	5,505	5,939	6,098	6,651	6,429	7,043
Guernsey	2,693	2,905	2,982	3,253	3,144	3,444
Hamilton	37,004	39,917	40,988	44,708	43,213	47,338
Hancock	3,018	3,255	3,343	3,646	3,524	3,860
Hardin	1,503	1,622	1,665	1,816	1,755	1,923
Harrison	860	928	953	1,039	1,004	1,100
Henry	1,115	1,202	1,235	1,347	1,302	1,426
Highland	2,928	3,159	3,244	3,538	3,420	3,746
Hocking	1,878	2,026	2,080	2,269	2,193	2,403
Holmes	816	880	903	985	952	1,043
Huron	3,105	3,349	3,439	3,751	3,626	3,972

County	SFY 2015 Original Projection	SFY 2015 Rebased Projection	SFY 2016 Original Projection	SFY 2016 Rebased Projection	SFY 2017 Original Projection	SFY 2017 Rebased Projection
Jackson	2,445	2,638	2,708	2,954	2,856	3,128
Jefferson	3,865	4,169	4,281	4,669	4,513	4,944
Knox	2,864	3,089	3,172	3,460	3,344	3,663
Lake	6,611	7,131	7,323	7,987	7,720	8,457
Lawrence	4,059	4,378	4,496	4,904	4,740	5,192
Licking	7,449	8,035	8,251	8,999	8,699	9,529
Logan	2,580	2,783	2,857	3,117	3,013	3,300
Lorain	13,013	14,037	14,414	15,722	15,196	16,647
Lucas	26,925	29,045	29,824	32,531	31,444	34,445
Madison	1,782	1,922	1,974	2,153	2,081	2,279
Mahoning	13,302	14,349	14,734	16,071	15,534	17,017
Marion	3,861	4,165	4,276	4,664	4,508	4,939
Medina	4,107	4,430	4,549	4,962	4,796	5,254
Meigs	1,725	1,861	1,911	2,084	2,014	2,207
Mercer	1,212	1,307	1,343	1,464	1,415	1,551
Miami	3,308	3,568	3,664	3,996	3,863	4,231
Monroe	814	878	901	983	950	1,041
Montgomery	27,007	29,134	29,915	32,630	31,539	34,550
Morgan	886	956	981	1,071	1,035	1,133
Morrow	1,804	1,947	1,999	2,180	2,107	2,308
Muskingum	5,912	6,377	6,548	7,142	6,904	7,562
Noble	624	673	691	754	728	798
Ottawa	1,433	1,546	1,587	1,731	1,673	1,833
Paulding	933	1,007	1,034	1,127	1,090	1,194
Perry	2,492	2,688	2,761	3,011	2,910	3,188
Pickaway	2,713	2,927	3,005	3,278	3,169	3,471
Pike	2,405	2,594	2,664	2,906	2,808	3,077
Portage	5,597	6,037	6,199	6,762	6,536	7,160
Preble	1,940	2,093	2,149	2,344	2,266	2,482
Putnam	903	974	1,000	1,091	1,055	1,155
Richland	6,740	7,271	7,466	8,144	7,871	8,623
Ross	5,357	5,779	5,934	6,473	6,256	6,854
Sandusky	2,560	2,762	2,836	3,093	2,990	3,275
Scioto	5,523	5,958	6,118	6,673	6,450	7,066
Seneca	2,932	3,163	3,248	3,542	3,424	3,751
Shelby	1,911	2,061	2,116	2,308	2,231	2,444
Stark	17,997	19,414	19,934	21,743	21,017	23,023
Summit	24,836	26,791	27,510	30,006	29,004	31,772
Trumbull	10,818	11,670	11,983	13,071	12,634	13,840

County	SFY 2015 Original Projection	SFY 2015 Rebased Projection	SFY 2016 Original Projection	SFY 2016 Rebased Projection	SFY 2017 Original Projection	SFY 2017 Rebased Projection
Tuscarawas	4,217	4,549	4,671	5,095	4,924	5,394
Union	1,627	1,755	1,802	1,966	1,900	2,081
VanWert	1,209	1,304	1,339	1,461	1,412	1,547
Vinton	1,043	1,125	1,155	1,260	1,218	1,334
Warren	3,943	4,253	4,367	4,764	4,604	5,044
Washington	2,558	2,759	2,833	3,090	2,987	3,272
Wayne	4,173	4,501	4,622	5,041	4,873	5,338
Williams	1,870	2,018	2,072	2,260	2,184	2,393
Wood	3,350	3,613	3,710	4,047	3,912	4,285
Wyandot	741	799	821	895	865	948
Missing*	2,173	2,344	2,407	2,625	2,537	2,780
Total	**550,050**	**593,361**	**609,264**	**664,565**	**642,354**	**703,667**

* Records not coded to any of the 88 counties. Also, with the addition of portal-based enrollment and counties consolidating administrative offices, records may exhibit a lag in mapping.

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