Ohio Medicaid Group VIII Assessment Methodology:

A Report to the Ohio General Assembly

The Ohio Department of Medicaid

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Ohio Medicaid Group VIII Assessment Methodology

I. Introduction

The Ohio Medicaid Group VIII Assessment (Group VIII Assessment) project examined how Medicaid expansion in Ohio has affected new enrollees with respect to access and utilization of health care, physical and mental health status, financial distress/hardship, and employment.

The phrase "Group VIII" refers to the section of the Social Security Act that sets requirements for Medicaid expansion eligibility and allowed most Ohioans aged 19 through 64 with incomes at or below 138% of the federal poverty level (FPL) to become eligible for Medicaid. Prior to January 1, 2014, Medicaid eligibility for adults was limited to those with certain qualifying characteristics such as parenthood or disability, and the income limitation for most Medicaid eligibility groups was lower than 90% of the FPL.

The Ohio Medicaid Group VIII Assessment Methodology Report describes the data collection activities that were used to generate information for the Ohio Medicaid Group VIII Assessment's Statutory Report. Data collection was preceded by interviews with the Ohio Department of Medicaid (ODM), a literature review, and discussions within the research team concerning how best to conceptualize measuring the Ohio Medicaid expansion benefit. Once the conceptualization was set, background analyses using Ohio Medicaid administrative data and the Ohio Medicaid Assessment Survey were performed to refine topic selection. For question selection for the telephone survey, the research team primarily used pretested and reviewed questions, response options, and measures. Data collection started with the Group VIII Survey fielding in the spring 2016, and ended with stakeholder interviews in October 2016.

When appropriate, Group VIII enrollees were compared to those enrolled in Ohio Medicaid under pre-expansion eligibility rules ("pre-expansion enrollees"). The sample for the Ohio Medicaid Group VIII Assessment was obtained from ODM's administrative records for the coverage periods of January 2013 through March 2016 for the pre-expansion eligible, and January 2014 through March 2016 for the Group VIII enrolled. To enable analytical comparison between Group VIII enrollees and the pre-expansion comparison group, the study excluded those enrolled as dual eligible, pregnant women, and those living in institutions or with less than 11 months continual enrollment. A comprehensive list of exclusions is described later in Section 2.1 of this document. Study participants were selected using stratified random sampling techniques. Greater detail relating to participant selection is contained in Section 2 of this Methodology Report.

The Ohio Medicaid Group VIII Assessment used the following six activities to collect data:

- A detailed telephone survey of 7,508 Group VIII and pre-expansion enrollees, including questions about access to care, health system utilization, physical and mental health, financial hardship, and employment (cooperation rate of 76.1%).

- A biometric screening of 886 respondents who completed the telephone survey, including both Group VIII and pre-expansion enrollees. The biometric screenings allowed for the systematic collection of comprehensive and verifiable health-related data (screening participation rate of 68%).

- A review of the medical records of 430 Group VIII enrollees who completed the telephone survey and biometric screening. Collected records spanned the time periods before and after Medicaid enrollment and enabled an assessment of how health care utilization, health status, and medical treatments changed after enrolling in Medicaid.

- An analysis of Medicaid administrative data for all Group VIII and pre-expansion enrollees eligible for the Group VIII Assessment. The review of administrative data was used to calculate measures of health care utilization, including preventive care and evidence-based care for chronic health conditions.

- Focus groups of 27 Group VIII enrollees who participated in the telephone survey at a minimum (some participants completed other components as well). Focus groups were designed to obtain more in-depth and personalized information about survey responses.

- Interviews with 10 Ohio Medicaid service providers and other key stakeholders. These interviews allowed for input from Medicaid stakeholders on the effects of Medicaid expansion.

The number of participants in each of the study phases was based on the evaluation goals for the study. Data from the Group VIII Survey were weighted to represent the total populations of Group VIII and pre-expansion enrollees who were eligible for the study. The biometric screening data were weighted to represent the population in the sample frame for the biometric screening. No other quantitative data were weighted. Medical records data were treated as a case study and the Medicaid administrative data were analyzed as a universe (see Section 7).

Data from the Group VIII Survey, the biometric screening, and the Medicaid administrative billing activities were linked into a single master file. Data from the medical records, from the responses of participant focus groups, and from interviews with health care providers and Medicaid stakeholders were set into independent data files.

Project analyses of all Group VIII Assessment data were performed by a research team with membership from the ODM, the Ohio Colleges of Medicine Government Resource Center (GRC), The Ohio State University (OSU) College of Public Health, Ohio University, and RTI International. Analyses included descriptive and modeled statistics, open-ended question coding, thematic coding for qualitative data, and Healthcare Effectiveness Data and Information Set (HEDIS) influenced analyses of Medicaid administrative data.

Project oversight was administered by the Ohio Group VIII Executive Committee with representation from the ODM, GRC, OSU, Ohio University, and RTI International. Additional study design assistance was provided by the State Health Access Data Assistance Center (SHADAC) and by the National Center for Health Statistics (NCHS).

Many statistics, charts, and tables not included in the Ohio Medicaid Group VIII Assessment's Statutory Report are included in the Ohio Medicaid Group VIII Assessment's Methodology Report, within the body of the Methodology Report as examples and in Appendices at the end of this Methodology Report.

For additional information concerning the Ohio Medicaid Group VIII Assessment Statutory Report or the Ohio Medicaid Group VIII Methods Report, contact the Ohio Department of Medicaid at Melissa.Ayers@medicaid.ohio.gov. For additional information from the web, see http://medicaid.ohio.gov.

II.   Sampling Design

1.   Target and Sampling Populations

Group VIII enrollees were the primary target population of interest. A Group VIII enrolled person was defined as a person enrolled under Affordable Care Act (ACA)-associated Medicaid Expansion and eligible for this study. Eligibility was determined by being in one of several Medicaid enrollment aid categories associated with Group VIII. Individuals became eligible for Group VIII under one of two major criteria:

1. monthly family income ≤138% of the federal poverty level (FPL) and no child in the family; or

2. family income > 90% to 138% of FPL and a Medicaid enrolled child in the family.

The comparison population comprised pre-expansion enrollees who were enrolled in Medicaid under pre-ACA rules for a period of at least 11 out of 12 months in 2015.

Excluded from the study population were:

- those previously, but not continuously, enrolled in Medicaid prior to ACA-associated Medicaid expansion;
- those on disability assistance;
- those in a family planning program;
- pre-expansion eligible pregnant women;
- those dual-enrolled in Medicaid and Medicare;
- those with third-party liability;
- nursing home participants;
- retroactive eligibility and backdated eligibility; and
- those enrolled via waiver programs.

Based on the March 2016 Medicaid Enrollment and Eligibility Database, there were 571,350 Group VIII enrollees and 929,449 pre-expansion enrollees in total.[1] After applying the study's exclusion criteria, the eligible Group VIII enrollee population consisted of 219,342 enrollees. The pre-expansion enrollee population consisted of 477,518 enrollees. The Group VIII Assessment had three quantitative data components, which built on one another:

- Telephone survey
- Biometric screening
- Medical records abstraction

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[1] Medicaid enrollment for recent months is not static because Medicaid, unlike private insurance, allows individuals to be retroactively enrolled for prior months if certain requirements are met. Therefore, Medicaid and Group VIII enrollment for the month of May, processed at the time the sample was drawn at the end of May (665,000), was significantly lower than enrollment for the month of May processed through November (702,000). For budgeting and other planning, the Ohio Department of Medicaid estimates unreported (future) retroactive and backdated enrollment for recent months based on historical patterns of retroactive and backdated enrollment. The Group VIII enrollment totals presented in this report include the ODM retroactive and backdated estimates to give a more complete representation of program participation and to be consistent with ODM's Monthly Medicaid Caseload Report.

The telephone survey was administered to random samples of Group VIII and pre-expansion enrollees and was representative of the Ohio Medicaid population as defined by the study criteria. A random sample of telephone survey respondents were then asked to complete the biometric screening. Due to operational constraints and logistics, a subset of Ohio counties was purposefully selected for the biometric screening component, rather than including all 88 counties. Counties for the biometric subsample were selected based on their Medicaid enrollment, and to ensure that a reasonable number of counties within each targeted county type (metro, rural, and suburban) were included. **Figures 1** and **2** show the Group VIII and pre-expansion enrollment in March 2016 by zip code, respectively, and highlight the 22 counties that were selected for the biometric screening component of the study. These 22 counties account for approximately 67% of the Group VIII population and 65% of the pre-expansion Medicaid population. The 22 counties are also listed in **Table 1** by their county type. Biometric data were collected at 21 sites because respondents in Trumbull County were scheduled at the Mahoning County site.

Figure 1. Group VIII Enrollee Population Density by Zip Code with Biometric Screening Counties Highlighted
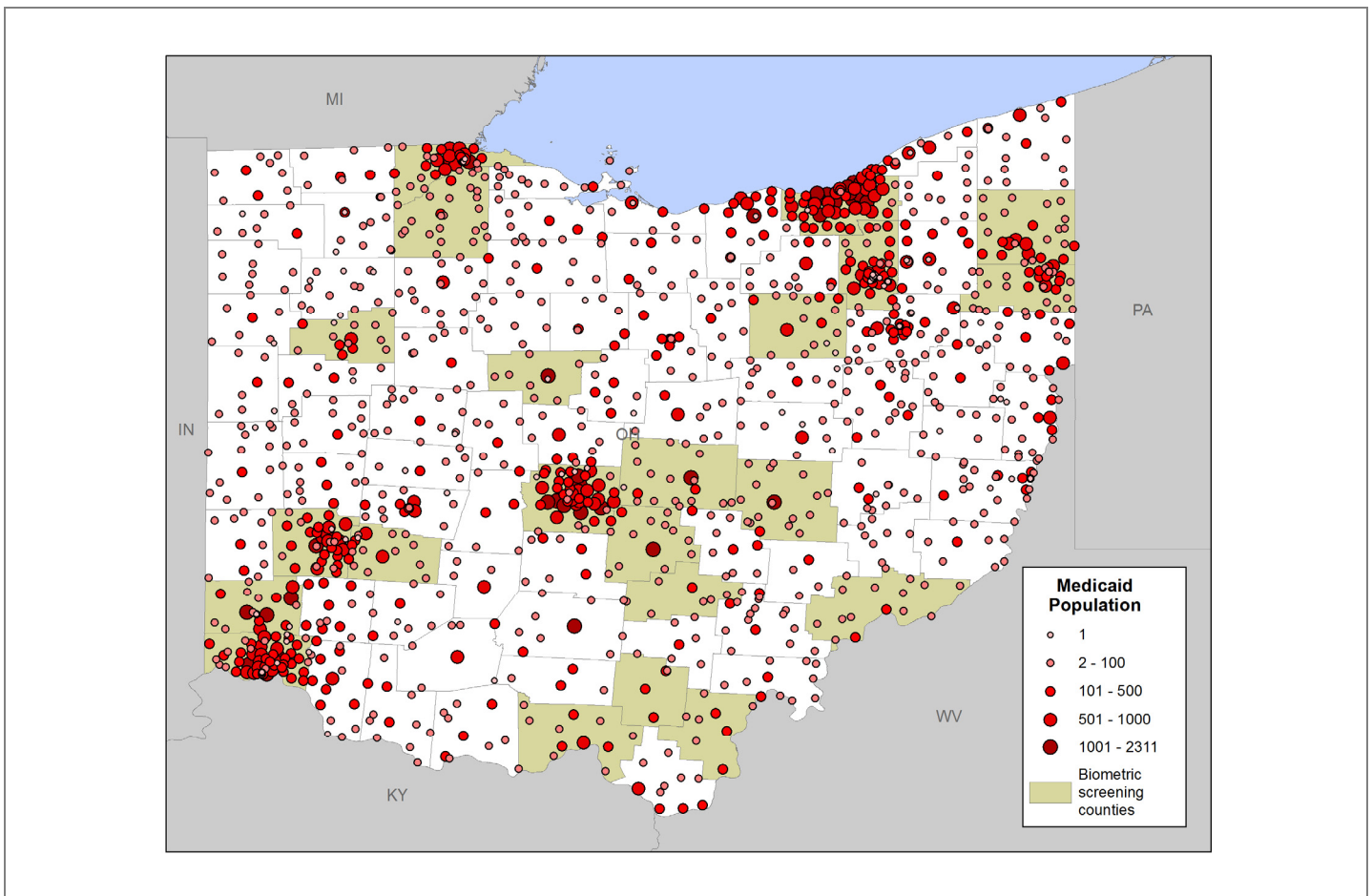
Figure 2. Pre-expansion Enrollee Population Density by Zip Code with Biometric Screening Counties Highlighted
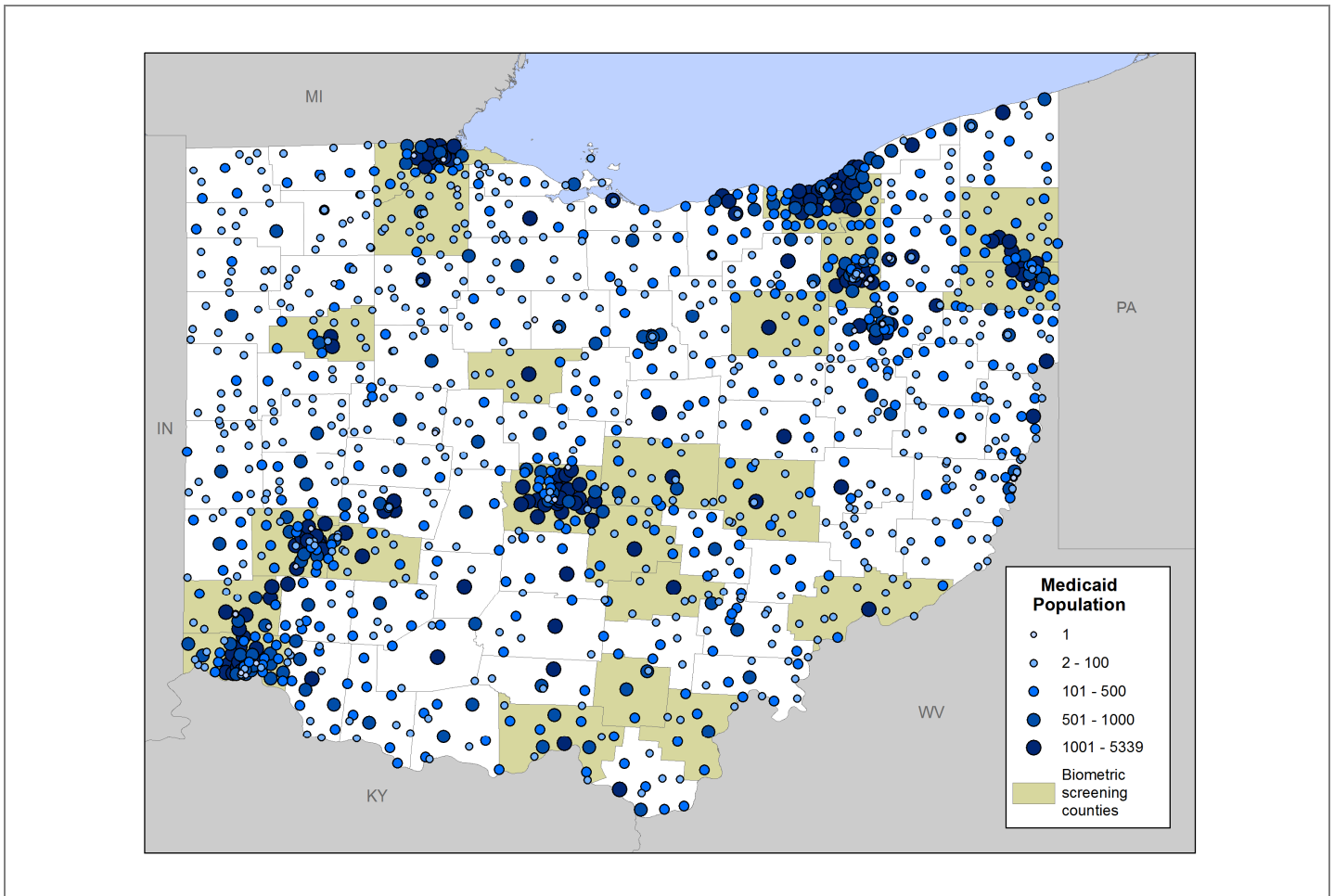
Table 1. Biometric Screening Counties by County Type

County Type	Counties
Metro	Allen, Butler, Cuyahoga, Franklin, Hamilton, Lucas, Mahoning, Montgomery, Summit
Rural (Appalachian and non-Appalachian)	Gallia, Hocking, Jackson, Marion, Muskingum, Scioto, Trumbull, Washington, Wayne
Suburban	Fairfield, Greene, Licking, Wood

All Group VIII enrollees who completed the biometric screening were asked to participate in the medical records abstraction. Medical record abstraction was not conducted with any pre-expansion enrollees. The medical records abstraction component was limited to Group VIII enrollees because its intention was to compare utilization among people prior to having Medicaid coverage (2013) and post-enrollment into Medicaid (2015 and 2016). Pre-expansion enrollees, because they could have Medicaid during the full period of 2013–2016, should not have seen much difference in their utilization. Furthermore, Medicaid administrative data were

available during both periods for the assessment of any possible changes in utilization among pre-expansion enrollees. Group VIII enrollees did not have any Medicaid administrative data in 2013.

2.   Sample Design

Telephone Survey
Sampling Frame

The sampling frame used to select eligible study members was the March 2016 Medicaid Eligibility and Enrollment File. The Enrollment File contained the following information about each Medicaid enrollee:

- First and Last Name
- Medicaid ID
- Phone number
- Street address
- City
- State

- Zip code
- County of residence
- Plan number
- Group VIII/Pre-expansion status
- Gender
- Age category (19–44, 45–64 years)

The Group VIII Assessment was also interested in gathering information about those that need/needed medical services the most (i.e., those with a chronic condition). Based on Medicaid administrative data, a person was deemed as having a chronic condition if that person had multiple billings for a single chronic condition or billings for a comorbidity due to multiple chronic conditions. The chronic condition criteria were based on the diagnosis code related to one or more of seven selected conditions. The seven chronic conditions were:

- Chronic obstructive pulmonary disease (COPD)
- Congestive heart failure (CHF)
- High cholesterol
- Diabetes

- Depression
- Substance abuse
- Hypertension

Persons enrolled in March 2016 who met the Group VIII Assessment eligibility criteria were included in the sampling frame. **Table 2** presents the distribution of eligible enrollees for the Group VIII and pre-expansion populations by enrollee characteristic. In total, there were 219,342 Group VIII enrollees and 477,518 pre-expansion enrollees eligible for the study. Furthermore, the proportion of Medicaid enrollees who had at least one chronic condition was reasonably large (46.9% for Group VIII and 56.7% for pre-expansion enrollees). The proportion of Medicaid enrollees was higher in the metro counties (63.3% and 60.9% for Group VIII and pre-expansion enrollees, respectively), with a small proportion found in suburban counties (10.6% and 10.4% for Group VIII and pre-expansion enrollees, respectively).

Table 2. Distribution of Medicaid Population Eligible for Group VIII Assessment by Enrollment Type and Stratified by Enrollee Characteristics

Characteristic	Group VIII		Pre-expansion	
	Population Count	%	Population Count	%
Total	219,342	—	477,518	—
Gender				
Female	96,893	44.2	333,387	69.8
Male	122,449	55.8	144,131	30.2
Chronic Condition				
Yes	102,972	46.9	270,566	56.7
No	116,370	53.1	206,952	43.3
Age				
19–44 years	106,717	48.7	360,156	75.4
45–64 years	112,625	51.3	117,362	24.6
County Type				
Metro	138,811	63.3	290,940	60.9
Rural	57,247	26.1	137,067	28.7
Suburban	23,284	10.6	49,511	10.4

Design

The telephone survey employed a stratified random sample design among the Group VIII and pre-expansion enrollees. Within each enrollment type, individuals were stratified by the following criteria:

- Sex (2 levels)

- Chronic condition status (2 levels: chronic condition or no chronic condition)

- Age category (2 levels: 19–44 years or 45–64 years of age)

- County type [25 levels: biometric screening counties (22), non-biometric metro (1), non-biometric suburban (1), and non-biometric rural counties (1)]

This resulted in 200 strata per Medicaid enrollment type (400 strata across the two enrollment types).

In general, stratification can be used for three purposes: (1) oversample a minority population, (2) explicitly allocate to a population to ensure representation, and (3) create homogeneous groups for analysis, which improves precision. For the Group VIII Assessment, stratification was used to achieve all three benefits. However, as **Table 2** shows, for all characteristics other than county type, the population distribution was roughly equal. Oversampling was therefore only required for county type. Although having a chronic condition was not a rare event among Medicaid enrollees, it was determined to be an important factor for stratification to ensure

adequate representation of this key subpopulation in the biometric screening and medical records abstraction and to improve the precision during analysis.

Sample Allocation

The targeted number of completed interviews was allocated such that 50% of the sample was allocated to metro counties, 25% to rural counties, and 25% to suburban counties, and then proportionally within the other strata. This scheme achieved the analytic goal of having similar respondent sample sizes in each county type while only marginally impacting estimate precision.

Starting sample size and selection of sample. Because the response rate for the telephone survey was not known, rather than approximating it, a replicate design was used to release sample. In a replicate design, a larger than needed sample is drawn and randomly split into smaller samples (i.e., replicates). Replicates were produced within each stratum. For the telephone survey, a lower bound response rate of 20% was assumed to determine the starting sample size. **Table 3** presents the starting sample size by stratification characteristics that were selected and divided into replicates. Replicates were produced within each stratum and consisted of 10 sampled persons. Replicates were released until the marginal number of respondents was achieved. **Table 3** indicates the amount of sample in each marginal stratum that was released to achieve the desired number of respondents.[2] Due to efficiencies realized in fielding, including the high cooperation rate and interviewer productivity, the total number of respondents exceeded the targeted sample sizes detailed in **Table 3**.

Table 3. Number of Respondents, Targeted Sample Size, and Released Sample Size for Telephone Survey by Medicaid Enrollment Type and Stratified by Respondent Characteristics

Characteristic	Group VIII			Pre-expansion		
	Released Sample	Target Sample Size	Respondents	Released Sample	Target Sample Size	Respondents
Total	26,150	4,899	5,111	10,180	1,848	2,397
Gender						
Male	15,350	2,710	2,502	3,640	564	762
Female	10,800	2,189	2,609	6,540	1,284	1,635
Chronic Condition						
Yes	11,780	2,309	2,548	5,210	1,043	1,351
No	14,370	2,590	2,563	4,970	805	1,046
Age						
19–44 years	14,430	2,370	1,992	7,560	1,383	1,484
45–64 years	11,720	2,529	3,119	2,620	465	913
County Type						
Metro	13,430	2,448	2,439	4,980	910	1,138
Rural	6,260	1,225	1,389	2,700	482	691
Suburban	6,460	1,226	1,283	2,500	456	568

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[2] As an evaluation study, the desired (targeted) number of respondents was based on the resources available for the study.

Because of the sensitive information contained in each sample record, the sample was selected and housed within an enhanced security network (ESN). No information containing personal identifying information (PII) about a selected person was removed from the ESN. Any sample-related information removed from the ESN was stripped of any PII prior to being taken out.

Biometric Screening
Sample Coverage and Allocation

Sample coverage. *Table 4* presents the Medicaid population and expected number of telephone survey respondents in the 22 biometric counties by Medicaid enrollment type. Given the study population of 219,342 Group VIII enrollees and 477,518 pre-expansion enrollees, the 22 selected counties covered 68% (=149,136/219,342) of Group VIII enrolled and 65% (=312,490/477,518) of pre-expansion enrolled persons. Furthermore, the 22 selected counties included 61% and 60% of Group VIII enrolled and pre-expansion telephone survey respondents, respectively.

Table 4. Eligible Medicaid Population and Telephone Respondents in Selected Biometric Screening Counties by County Type and Medicaid Enrollment Type

County Type	Group VIII				Pre-expansion			
	Population	%	Telephone Respondents	%	Population	%	Telephone Respondents	%
Biometric Counties								
Metro	125,022	83.8	2,205	70.6	256,845	82.2	975	68.3
Rural	15,950	10.7	486	15.6	37,303	11.9	268	18.8
Suburban	8,164	5.5	431	13.8	18,342	5.9	184	12.9
Total Biometric	149,136	68.0	3,122	61.1	312,490	65.4	1,427	59.5
Total Non-biometric	70,206	32.0	1,989	38.9	165,028	34.6	970	40.5
Total	219,342	—	5,111	—	477,518	—	2,397	—

Sample allocation. Moreover, as *Table 4* illustrates, the population and telephone respondent samples in the 22 biometric counties were skewed more toward the metro counties than the actual Medicaid population and desired respondent telephone respondent sample (see *Table 2*). Therefore, if a simple random sample of telephone respondents was selected in the 22 biometric counties, the biometric respondents would have heavily represented the metro areas. To reduce the skewness in the biometric screening respondent sample, the biometric screening was allocated such that 60% of respondents came from metro counties and 20% came from rural and suburban counties each. *Table 5* presents the targeted respondent allocation by county type. At the county type level, the biometric screening respondents were selected proportional to the number of telephone respondents in each county.

Table 5. Biometric Screening Respondent Allocation by County Type

County Type	Group VIII		Pre-expansion	
	Sample	%	Sample	%
Metro	435	60.0	160	60.0
Rural	145	20.0	53	20.0
Suburban	145	20.0	53	20.0

Sample Selection

Within each biometric county, telephone survey respondents had a known probability of being asked to participate in the biometric screening process. The probability of being asked to participate in the biometric screening was the same for all people in a replicate, but could vary across replicates. Because the participation or "show up" rates for individuals were unknown, for counties with a large number of expected biometric screenings (i.e., 25 or more), the screenings were split across multiple screening periods approximately 6 weeks apart. This allowed for the participant "show up" rate to be estimated for the second and subsequent screenings. Counties with a small number of expected screenings only had one screening period. For counties that had later screening dates (either large counties for their second screening or small counties scheduled later in the screening period), empirical information about the "show up" rate was used to better decide how many screenings needed to be scheduled to meet the desired number of screenings in each county.

The starting assumption for the agreement rate (i.e., the rate at which telephone survey respondents agreed to participate in the biometric screening) was 30%, and the starting assumption for the "show up" rate was 70%. Given these assumptions, all initial telephone respondents were asked to participate in the biometric screening until more empirical data were known. The actual agreement and "show up" rates were similar to these starting assumptions—the agreement rates were 27.6% and 31.5% for Group VIII and pre-expansion telephone respondents, respectively; the "show up" rates were 69.6% and 63.9% for Group VIII and pre-expansion biometric participants, respectively. All telephone respondents throughout the data collection period were therefore asked to participate in the biometric screening.

Based on this design, **Table 6** presents the anticipated and actual number of respondents to the biometric screening by Medicaid enrollment type and stratified by respondent characteristics. The table shows that, for the Group VIII enrollees, the actual number of respondents to the screening was lower than the targeted amount because of lower than expected participation from people who were younger, male, and living in metro counties. Overall, actual respondent totals in any demographic group could be higher or lower than the anticipated number due to differential nonresponse.

Table 6. Respondent Counts for the Biometric Screening by Medicaid Enrollment Type and Stratified by Respondent Characteristics

Characteristic	Respondents			
	Group VIII		Pre-expansion	
	Anticipated	Actual	Anticipated	Actual
Total	725	599	266	287
Gender				
Male	408	283	80	87
Female	317	316	186	200
Chronic Condition				
Yes	341	344	150	168
No	384	255	116	119
Age				
19–44 years	362	178	201	143
45–64 years	363	421	65	144
County Type				
Metro	435	359	160	174
Rural	145	118	53	65
Suburban	145	122	53	48

Medical Records Abstraction

Selection of Respondents

All Group VIII enrollees who completed the biometric screening (725 projected; 599 completed screenings) were asked to participate in the medical records abstraction. Based on experience from similar studies (e.g., the Medical Expenditure Panel Survey [MEPS]), the following assumptions were used to estimate the sample yields for the medical records abstraction component: (1) an 80% participation rate of enrollees who completed the biometric screenings, providing signed authorization forms to their usual source-of-care (USOC)[3] medical providers for release of their medical records; and (2) an 80% provider cooperation rate to provide the requested medical records. The medical records abstraction obtained records from two time periods: (1) 2013 and (2) 2015–2016.

Based on these assumptions and the projected biometric screening participants, it was expected that 580 biometric screening participants would sign the authorization form, and medical providers would cooperate in providing records for 464 of these. However, at the end of data collection, there were 430 enrollees who had signed authorization forms and whose medical provider had cooperated. Of these 430 enrollees, 174 had data in both 2013 and 2015 or 2016. Because medical records from both periods were needed to understand how

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[3] Determining whether the "usual source of care (USOC)" was a primary care provider or some other medical provider was left up to the respondent.

Group VIII enrollees' medical conditions and diagnoses changed, only those with records in both periods were used in the case studies of the medical records. Enrollees for which medical records were not obtained in both periods predominantly did not have data from 2013; 92.6% of participants for whom data were received in only one period had data for 2015-2016 (most were uninsured during the earlier period and, therefore, did not see their provider). ***Table 7*** presents the demographic characteristics of the 174 Group VIII enrollees with medical records abstraction data covering both the 2013 and 2015-2016 time periods.

Table 7. Demographic Characteristics of the Group VIII Enrollees with Medical Records Abstraction Data Covering Both the 2013 and 2015–2016 Time Periods

Characteristic	Number of Participants	%
Total	174	100
Gender		
Male	65	37.4
Female	109	62.6
Chronic Condition		
Yes	116	66.7
No	58	33.3
Age		
19–44 years	39	22.4
45–64 years	135	77.6
County Type		
Metro	94	54.0
Rural	38	21.8
Suburban	42	24.2

For the subset of 174 patients with medical record information from their USOC for both the period in 2013 prior to enrolling in Medicaid and the period in 2015-2016 as Medicaid enrollees, these records were reviewed for information on health status, chronic disease diagnoses, preventive screenings, and medical treatments/ prescriptions. This review enabled an assessment of health care utilization, treatment regimens and changes in the health status of a subset of Group VIII enrollees both before and after enrolling in Medicaid. Given the multiple levels of additional nonresponse (acquisition of authorization forms, obtaining provider cooperation to release the medical records) encountered subsequent to the biometric screenings and the limited number of patients with medical data for both time periods necessary to conduct the analysis, a case study model was applied to the medical records component. Under this model, the data were deemed best used in unweighted analysis. Consequently, no weights were created for the medical records abstraction respondents.

3. Sample Results

Table 8 presents the targeted and actual number of telephone survey respondents and biometric screening participants by geographic stratum and Medicaid enrollment type. In total, 7,508 people responded to the telephone survey (5,111 Group VIII respondents and 2,397 pre-expansion respondents) and 886 people participated in the biometric screening (599 Group VIII participants and 287 pre-expansion participants).

Table 9 shows the distribution of the telephone survey respondents and biometric, and medical records participants by Medicaid enrollment type. For both the Group VIII and pre-expansion enrollees, the targeted participant distributions by county type were achieved for both the telephone survey and biometric screening.

Table 10 presents how the distribution of telephone and biometric participants by county type compared to the March 2016 Medicaid population that was eligible for this study. For both Group VIII and pre-expansion enrollees, as expected, the proportion of respondents in the rural and suburban counties was greater than the actual proportion of Medicaid enrollees in those county types.

Table 8. Telephone and Biometric Screening Target and Complete Participants by Region for Group VIII and Pre-expansion Enrollees

Region	Group VIII					Pre-expansion				
	Phone		Biometric			Phone		Biometric		
	Target	Complete	Scheduled	Target	Complete	Target	Complete	Scheduled	Target	Complete
Metro—Allen	34	42	6	6	4	14	20	6	3	5
Metro—Butler	121	113	26	24	18	43	57	11	9	9
Metro—Cuyahoga	662	599	188	129	114	203	214	76	40	40
Metro—Franklin	431	447	87	84	63	175	217	50	35	32
Metro—Hamilton	351	322	93	68	60	111	114	39	22	26
Metro—Lucas	189	204	43	37	29	80	114	31	15	20
Metro—Mahoning	83	75	20	16	12	40	45	12	8	10
Metro—Montgomery	207	242	52	40	35	80	120	30	15	18
Metro—Summit	157	161	36	31	24	67	74	25	13	14
Rural—Gallia	16	23	10	7	5	10	9	4	3	2
Rural—Hocking	14	12	2	6	2	8	8	2	1	1
Rural—Jackson	17	20	8	7	8	10	12	6	3	6
Rural—Muskingum	38	52	19	17	14	13	26	12	8	9
Rural—Scioto	40	45	16	16	12	21	45	20	10	13
Rural—Trumbull	36	154	51	49	35	24	50	24	14	12
Rural—Washington	113	87	11	17	9	35	70	7	5	6
Rural—Marion	24	33	20	10	17	12	21	11	4	8
Rural—Wayne	39	60	21	16	16	13	27	11	5	8
Suburban—Fairfield	115	105	30	40	20	45	47	21	15	14
Suburban—Greene	109	125	47	38	38	43	62	23	14	17
Suburban—Licking	126	129	42	45	36	51	57	19	17	9
Suburban—Wood	64	72	33	22	28	23	18	9	7	8

(continued)

Table 8. Telephone and Biometric Screening Target and Complete Participants by Region for Group VIII and Pre-expansion Enrollees (continued)

Region	Group VIII					Pre-expansion				
	Phone		Biometric			Phone		Biometric		
	Target	Complete	Scheduled	Target	Complete	Target	Complete	Scheduled	Target	Complete
Nonbiometric—Metro	213	234	—	—	—	97	163	—	—	—
Nonbiometric—Rural	888	903	—	—	—	336	423	—	—	—
Nonbiometric—Suburban	812	852	—	—	—	294	384	—	—	—
Total	4,899	5,111	861	725	599	1,848	2,397	449	266	287

Table 9. Distribution of Total Study Population, Telephone Respondents, Biometric Screening Assessment Participants, Medical Records Abstraction (MRA) Respondents by Medicaid Enrollment Type, Stratified by Population Characteristics

| | Group VIII | | | | | | | | Pre-expansion | | | | | |
| | Population | | Telephone | | Biometric | | MRA | | Population | | Telephone | | Biometric | |
	N	%	Resp	%	Resp	%	Resp	%	N	%	Resp	%	Resp	%
Total	219,342	100	5,111	100	599	100	174	100	477,518	100	2,397	100	287	100
Gender														
Male	122,449	55.8	2,502	49.0	283	47.2	65	37.4	144,131	30.2	762	31.8	87	30.3
Female	96,893	44.2	2,609	51.0	316	52.8	109	62.6	333,387	69.8	1,635	68.2	200	69.7
Chronic Disease Status														
Chronic	102,972	46.9	2,548	49.9	344	57.4	116	66.7	270,566	56.7	1,351	56.4	168	58.5
Non-Chronic	116,370	53.1	2,563	50.1	255	42.6	58	33.3	206,952	43.3	1,046	43.6	119	41.5
Age Category														
19–44 years	106,717	48.7	1,992	39.0	178	29.7	39	22.4	360,156	75.4	1484	61.9	143	49.8
45–64 years	112,625	51.3	3,119	61.0	421	70.3	135	77.6	117,362	24.6	913	38.1	144	50.2
County Type														
Metro	138,811	63.3	2,439	47.7	359	59.9	94	54.0	290,940	60.9	1,138	47.5	174	60.6
Rural	57,247	26.1	1,389	27.2	118	19.7	38	21.8	137,067	28.7	691	28.8	65	22.6
Suburban	23,284	10.6	1,283	25.1	122	20.4	42	24.2	49,511	10.4	568	23.7	48	16.7

Table 10. Distribution of Total Study Population, Telephone Respondents, and Biometric Screening Assessment Participants by Medicaid Enrollee Type, Stratified by County Type and Biometric Screening Assessment Status

	County Type	Group VIII						Pre-expansion					
		Population		Telephone		Biometric		Population		Telephone		Biometric	
		N	%	Resp	%	Resp	%	N	%	Resp	%	Resp	%
Total		219,342	—	5,111	—	599	—	477,518	—	2,397	—	287	—
Biometric	Total	149,136	100.0	3,122	100.0	599	100.0	312,490	100.0	1,427	100.0	287	100.0
	Metro	125,022	83.8	2,205	70.6	359	59.9	256,845	82.2	975	68.3	174	60.6
	Rural	15,950	10.7	486	15.6	118	19.7	37,303	11.9	268	18.8	65	22.6
	Suburban	8,164	5.5	431	13.8	122	20.4	18,342	5.9	184	12.9	48	16.7
Nonbiometric	Total	70,206	100.0	1,989	100.0	—	—	165,028	100.0	1,427	100.0	—	—
	Metro	13,789	19.6	234	11.8	—	—	34,095	20.7	163	16.8	—	—
	Rural	41,297	58.8	903	45.4	—	—	99,764	60.5	423	43.6	—	—
	Suburban	15,120	21.5	852	42.8	—	—	31,169	18.9	384	39.6	—	—

Ohio Medicaid Group VIII Assessment Methodology

III. Telephone Survey

1. Instrument Content

The telephone survey was administered to Group VIII and pre-expansion enrollees. The questionnaire consisted of separate sections focusing on topics including access to care, health system utilization, physical and mental health, financial hardship, and employment. Group VIII respondents also answered questions about their pathways to Medicaid coverage and were asked what gaining Medicaid coverage meant to them. **Table 11** is a summary of each questionnaire section.

Table 11. Summary of Questionnaire Sections

Opening Section	
SECTION A	Introduction
SECTION A	Screener and Cell Phone Usage
Limited Demographics	
SECTION B	Gender, Age, and County of Residence
Medicaid Coverage, Prior Coverage, Pathways to Coverage, and Health Status	
SECTION C	Confirmation of Insurance Status and Prior Coverage for Group VIII
SECTION D	Pathways to Medicaid Coverage (asked only of Group VIII Enrollees)
SECTION E	Health Status and Health Conditions
Health Care Utilization	
SECTION F	Health Care Utilization and Usual Source of Care
SECTION G	Health Care Access and Unmet Need
Employment and Financial Hardships, Health Behaviors, and Demographics	
SECTION H	Employment Status
SECTION I	Financial Hardships
SECTION J	Health Behaviors
SECTION J	Demographics
SECTION K	Perceived Value of Medicaid Coverage (asked only of Group VIII Enrollees)
SECTION L	Recruitment for Biometric Screening

2. Survey Instrument Development

The Group VIII Executive Committee (EC) collaborated on the development of the survey questionnaire. The EC initiated the development process by reviewing the 2012–2015 Ohio Medicaid Assessment Survey and 2004–2010 Ohio Family Health Survey instruments to assess which items could be used for the Group VIII telephone survey. The EC then collaborated with agency stakeholders to identify what new items would be necessary to meet their current needs. The research team drafted new survey questions and revised existing questions to meet

these data needs. After the EC developed a working draft of the instrument, RTI assisted in finalizing the instrument and preparing for pilot testing. Staff examined the instrument for ease of administration and response, wording and response categories for new items, transitions and overall survey flow, skip patterns, and item-specific logic.

The pilot test survey instrument specifications were completed on February 16, 2016, with the goal of programming, testing, and finalizing the survey for a pilot test in April. After several iterations and discussions, on March 10, 2016 a final instrument was provided and the computer-assisted telephone interviewing (CATI) programming began. The survey was programmed and a pilot test initiated in April.

3.   Interviewer Training

Survey interviewer training was conducted on April 19 and 20 at RTI's Research Operation Center in Raleigh, NC. Eight experienced interviewers and four supervisors participated in the initial training. After the pilot study, an additional 16 interviewers were given the same training protocol for the full study.

Interviewers had to complete training and certification prior to beginning "live" calling. Experienced interviewers attended a 4-hour session of project training and 1 to 2 hours of mock interviewing. Topics covered during training focused on the survey's background and structure, study-specific protocols and procedures, pronunciation, and answers to frequently asked questions (***Table 12***).

Table 12. 2016 Group VIII Survey Training Agenda

Time (minutes)	Topic	Time (minutes)	Topic
Evening 1		**Evening 2**	
15	Welcome and Introduction	10	Q&A/Review
25	Survey Background, Purpose, and Structure	30	Emotional Distress and Sensitivity
10	Roles and Responsibilities	30	Refusal Avoidance
10	General Contacting Procedures	55	Paired Practice
15	Respondent Rights and Importance of Confidentiality	15	**BREAK**
45	Review of Frequently Asked Questions (FAQs)	15	Review FAQs and Pronunciation
15	**BREAK**	40	Individual Read-Through of Questionnaire
20	Pronunciation Practice	35	Certification
75	Round-Robin	10	Q&A/Final Review
10	Q&A Sessions		

During training, interviewers participated in round-robin mock interviews and paired-practice mock interviews, and completed individual survey practice exercises. Interviewer certification involved completing two oral quizzes as well as successfully attending and participating during training sessions and exercises. Interviewers were required to achieve 100% correct answers on both oral quizzes to become certified.

The 2016 Group VIII Survey training agenda included the items in **Table 12**.

4.   Pilot Test

The primary objective and purpose of the pilot test was to replicate the conditions for full-scale survey data collection. The sample for the pilot was drawn in the same manner that was to be used to draw the final sample. However, there were several methodological differences between the implementation of the pilot and the ultimate fielding of the survey. For example, call attempt protocols were relaxed during the pilot in the number and timing of telephone attempts. Also, refusal conversion attempts and Spanish interviews were not conducted during the pilot. Pilot sample members also did not receive the prenotification letter that was mailed to all full sample members. Last, the final training protocol was modified based on observations from the pilot activities.

Interviewing for the pilot started on April 20, 2016, and continued through April 21, 2016, with the goal of completing 50 interviews. The interviewers made calls between the hours of 9:00 a.m. and 9:00 p.m. on weekdays. In total, RTI obtained 51 completed pilot survey interviews. Completed interviews were obtained with between one and three attempts per record; on average, two attempts had to be made to complete a survey.

5.   Disposition of Pilot Sample

The pilot completed 51 interviews. **Table 13** presents the final disposition for all 828 released sampled numbers.

For this survey, the results of each call attempt were assigned a disposition according to guidelines published by the American Association for Public Opinion Research (AAPOR). The final dispositions can be summarized as follows:

- Eligible

    – Completes and Partial Interviews (if applicable)

    – Refusals and Noncontacts

- Ineligible

    – Survey Ineligible = Person is determined to be 65 years of age or older, no longer has Medicaid, or has had Medicaid coverage for less than 1 year

- Unknown

    – Unknown Eligible (known person) = Confirmed correct person reached but did not establish survey eligibility

    – Unknown Person = Cannot confirm person and survey eligibility

Each sampled person's history of attempted contacts was analyzed to determine the record's final status. The final status was based on the contact attempt that provided the most information (e.g., a completed interview or a refusal). (For more information, see **Table 13**.)

Table 13. Distribution of Disposition Codes for the Group VIII Survey Pilot

Label	Total Number	% Total
Completes (full interviews only)	51	6.2
Partial Complete	0	0.0
Refusals and Break-offs	41	5.0
Noncontact	256	30.9
No Eligible Respondent	16	1.9
Unknown Eligibility, Noninterview	381	56.0

Timing

During the pilot, the mean interview time for all cases was 25.6 minutes, with a median time of 22.7 minutes. The minimum interview length was 17.2 minutes and the maximum interview time was 46.6 minutes.

Table 14 shows the mean and median interview times for the overall instrument as well as by module.

Table 14. Interview Time by Module in the Pilot Test

Section	Mean Time (seconds)	Median (seconds)
Section A	115	74
Section B	25	22
Section C	56.8	41
Section D*	31.9	24
Section E	399.5	378
Section F	155.8	134
Section G	339.3	324
Section H	66.8	50
Section I	96.2	83
Section J	114.5	111
Section K*	85	89
Section L	101.1	84

* Sections D and K were administered to Group VIII enrollees only.

6.   Cuts for Length

To bring the survey closer to the budgeted average of 20 minutes per adult respondent, questions were cut from and revised in the instrument. The EC developed guidelines for prioritizing questionnaire items to distinguish items that were critical to policy and program analyses from those that were less critical and could be deleted.

The guideline for deleted questions included time considerations (long banks of questions) and the degree to which a question was of importance to the Ohio Medicaid program and the requirements of the Statutory Report.

Beyond deletions, the introduction, transition, and closing statements were revised to shorten the survey and reduce break-offs. Other minor text changes were made for clarity and flow purposes. Finally, a number of small logic errors were found and corrected.

The final version of the questionnaire with CATI specifications can be found in **_Appendix A._**

7. Data Collection Procedures

RTI used the Voxco CATI software system to program and field the Group VIII Survey. This fully integrated program provided call management and replicate controls, multilingual interviewing capabilities, monitoring, and incidence tracking. The software automatically controlled skip and fill logic, and range checking for numeric data. The programming logic directed the questionnaire's flow and prevented an interviewer from entering data in the wrong field. On any given screen of the questionnaire, the program only accepted a predetermined range or type of response.

Implementation Protocol

The Group VIII Survey followed a calling protocol adapted from that used in the 2015 Ohio Medicaid Assessment Survey. Initially, each sample member was sent a prenotification letter including information about the survey and a means to contact the project. Shortly after they received the letter (usually within 3–5 days), calls were made to attempt to complete interviews. The Group VIII Survey used a 10-attempt protocol for reaching listed sample members, with attempts distributed across days of the week, and parts of the day, and across six weeks of fielding, to maximize the possibility of reaching respondents when they were able to set aside time for the survey.

Call Scheduling

The target interviewing period was between 5 p.m. and 9 p.m. respondent time on weekdays, between 10 a.m. and 9 p.m. on Saturdays, and between 1 p.m. and 9 p.m. on Sundays. RTI's Research Operations Center also scheduled shifts between 9 a.m. and 5 p.m. weekdays for up to a maximum of 40% of total session hours to reach respondents who worked or were otherwise unavailable in the evenings.

Number of Attempts

Interviewers made a minimum of 10 attempts to reach an eligible respondent. Each call attempt was given a minimum of five rings. The attempts were rotated through weekday day, weekday evening, Saturday day, and Sunday evening shifts to maximize coverage of the residential population. Persistent "ring no-answers" were attempted a minimum of four times and days of the week. If a respondent was contacted on the last call, and an interview could not be completed, another attempt was made. Lines with busy signals were called back a minimum of two times at 15-minute intervals. If the line was still busy after the third attempt, the number was attempted again on different calling time periods until the record was resolved.

Callbacks

A system-scheduled callback was assigned to a record that could not be given a specific date and time, and a scheduled callback was assigned for respondents who provided a definite appointment for re-contact.

Callbacks to specific respondents were entered into the computer by interviewers and handled automatically by the program. RTI's system accommodated both general and specific callbacks. For a specific appointment, the

record waited until the designated time to be released. At this time, the system found the next available interviewer and delivered the record as the next call. The call history screen that accompanied each record informed the interviewer that the call was a definite appointment and described the circumstances of the original contact. General callbacks, where respondents requested that RTI try to reach them at a generally specified time of day ("I usually get home around 6 o'clock"), were sorted and allotted automatically by the system. They were held out of the sample until the appointed hour, when they were sent to a station with an open slot for that call. They had a higher system priority than returning no-answer and busy records, but lower priority than specific callbacks.

RTI's system also accommodated the restarting of interrupted interviews. If a cooperative respondent had to terminate an interview, but wanted to finish at a later time, it was possible to set a definite callback for that time and resume the interview where it left off. If the interviewer who began the survey was available at the prescribed time, the system sent the call back to that station.

Respondent Selection

As a listed sample, the study assumed all those in the study were eligible to participate. In that administrative records are sometimes inaccurate, eligibility was verified; eligibility criteria included being 19 years through 64 years of age, currently on Medicaid, and having been on Medicaid for 1 or more years.

Sample Location Efforts

In some instances, the designated sample member was no longer at the phone number extracted from the Medicaid Eligibility and Enrollment data. In those cases, the interviewers attempted to get the most updated contact information from the individual who answered the phone. In addition, for the cases with outdated or inaccurate contact information, batch tracing was utilized to try to find the most updated information. Batch tracing involved providing the existing information to one of several vendors to obtain the most updated contact information.

Refusal Conversion

All interviewers calling on the Group VIII Survey were trained to avoid refusals. When respondents refused to participate, the interviewer left a note explaining what, if anything, had happened or had been said, and RTI's refusal conversion specialists made at least one more contact. Exceptions were made for cases in which the person answering the phone said something indicating a callback would not be appropriate, such as making threats. This information was reviewed by staff just before calling the telephone number again. During nonresponse refresher trainings, supervisory staff compiled these cases and reviewed effective strategies for nonresponse avoidance and conversion.

Although a high response rate was important, the role of the interviewers was not to harass respondents into participating in either the selection process or the interview. Interviewers were trained to inform their supervisor about the following situations:

- If the respondent was verbally abusive or threatened litigation;

- if the respondent requested to be placed on a "do not call" list; or

- if the person who answered the phone refused to transfer the call to the selected respondent and stated that they would never allow the call to be passed to the selected respondent. These cases were called back at another day and time in an effort to contact the respondent.

These numbers were terminated and coded as final refusals not to be called back.

Spanish Interviewing

RTI conducted the telephone survey in English and Spanish. Of the 7,508 completed records in the final data file, 45 (.01%) were collected in Spanish. Spanish-speaking interviewers were associated with records flagged during initial contact as having reached a non-English speaking potential respondent. When a bilingual interviewer reached a Spanish-speaking respondent, the interviewer explained the survey in Spanish and continued directly into the interview without interruption. When a non–Spanish-speaking interviewer contacted a Spanish-speaking sample member, the record was coded for Spanish interviewing, and the system automatically routed the record to a bilingual interviewer for subsequent attempts.

Methods Used to Increase Response Rates

A variety of methods were implemented to maximize response rates for the Group VIII Survey, including:

- mailing a prenotification letter prior to calling;

- leaving messages on answering machines and privacy managers;

- providing toll-free verification numbers for the survey sponsor;

- employing special refusal conversion efforts;

- reattempting phone numbers on different days, and at different times of the day, to maximize chances to reach each household;

- conducting interviews in Spanish and English; and

- offering a $20 gift card incentive for respondents.

Each of these is described in detail below.

Mailing a Prenotification Letter Prior to Calling

For the main fielding,[4] a single-page lead letter was used to notify the designated sample members that someone would be attempting to reach them. The letter was mailed to the address included in Medicaid Enrollment and Eligibility data. Written in both English and Spanish, the letter informed the sample member of the nature of the survey, that they could be expecting a call within a few days of receiving the letter, and provided them with contact information, including a toll-free number, if they had any questions or concerns. Respondents who called the toll-free number were able to complete the survey at the time of their call, and many did so. A copy of the prenotification letter appears in ***Appendix B***.

Leaving Messages on Answering Machines

Interviewing staff left messages on persistent "answering machine" and "privacy manager" dispositions, informing respondents of the study and scheduling another call attempt for the following day. The message stated that interviewers were calling on behalf of the Ohio Department of Medicaid and that a callback at their convenience would be appreciated. The toll-free telephone number was left on the answering machine. Messages were left on the first and fourth attempts to a sample member if an answering machine or privacy manager was

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[4] A prenotification letter was not sent for the pilot test.

reached on these attempts. For privacy managers, if a message could not be left, the interviewers were instructed to enter the toll-free telephone number.

The text of the answering machine message was as follows:

> *"Hello, my name is _____, from RTI International and we are conducting a survey about Medicaid Coverage and access to health care on behalf of the Ohio Department of Medicaid. Your name and contact information has been selected as someone who we would like to talk to about this important study. We would like to explain our survey to you. We will try to contact you again, however if you would like to reach us, you can call the Group VIII Study on our toll-free number at 1-866-406-7333."*

Survey Verification Toll-Free Number

A dedicated toll-free telephone number was established to receive respondent calls regarding the legitimacy and validity of the study. Contact information for GRC was made available to those respondents who wished to contact the survey sponsor directly. GRC took responsibility for responding to concerns about the survey effort and shared this information with ODM and RTI.

Refusal Conversion Efforts

Refusal conversation calls were made to all sample members who refused initial attempts. The calls were placed after a 7-day cooldown period by specifically trained refusal conversion specialists.

Reattempting Numbers

As discussed above in the Implementation Protocol, telephone numbers that did not initially result in a completed interview were contacted on different days, and at different times of the day, to maximize efforts to reach each sample member. The study protocol allowed calling over 6 weeks to ensure that respondents on vacation and those not at home during common calling hours could be reached.

Offering a Gift Card for Survey Completion

Respondents who completed the telephone interview were asked if they would like to receive a $20 Walmart gift card. For those who acknowledged that they would like to receive the card, their address was verified and a gift card was sent.

8.   Response Rates

To affirm the representation of the target population in a study, researchers look to response rates as indicators of performance. There is no one agreed-upon standard response rate formula because each project lends itself to different measures of performance. Several of these performance measures are discussed below.

The results of each call attempt were assigned a disposition according to guidelines published by AAPOR. The final dispositions can be summarized as follows:

- Eligible

    - Completes and Partial Interviews (if applicable)

- – Refusals and Noncontacts[5]

- Ineligible

    - – Survey Ineligible = Person is determined to be 65 years of age or older, no longer has Medicaid, or has had Medicaid coverage for less than 1 year

- Unknown

Each sampled person's history of attempted contacts was analyzed to determine the record's final status. The final status was based on the contact attempt that provided the most information (e.g., a completed interview or a refusal). In the Group VIII Survey, all persons who started the survey were required to finish for the survey to be considered completed. Therefore, there were no partial interviews for this study. (For more information, see **Table 15**.)

Table 15. Distribution of Disposition Codes by AAPOR Response Category, for All Survey Respondents and Stratified by Group VIII and Pre-expansion Enrollee Respondents

AAPOR Group	Disposition	Total	Group VIII	Pre-expansion
1.1	Completes (full interviews only)	7,508	5,111	2,397
2.1	Refusals and Break-offs	2,365	1,634	731
4.7	No Eligible Respondent	1,617	1,334	283
3.0	Unknown Eligibility, Non-interview	24,850	18,071	6,769

AAPOR Response Rates

The response rates take into account the ability of the interviewing staff to establish contact with potentially eligible persons and to resolve the eligibility status of the sampled person. The Group VIII Survey utilized a list frame from a database of known eligible persons. Therefore, the only persons considered ineligible were those who had been incorrectly identified in the frame as being under 65 years of age and currently having Medicaid coverage for 1 year or longer. In other words, unlike a random digit dial (RDD) study, a bad phone number (e.g., fax line, business number) does not make a sampled person ineligible. However, people who could not be reached and have their eligibility status confirmed were considered to have unknown eligibility. In cases where resolution of a person's eligibility status was not achieved—that is, the telephone number provided did not allow the eligibility of the selected person to be determined—these response rates generally use an estimate of the rate at which telephone numbers ring into eligible persons to classify a fraction of these numbers of unknown disposition as eligible. Compared to the lower-bound, this approach increases the response rate calculation by not assuming that all unscreened numbers belonged to qualifying persons. In addition, some "adjusted" response rates assign cases to the denominator where the respondent was eligible but unable to complete the interview because of impairment or language difficulties.

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[5] As mentioned above in the pilot study discussion, all individuals were assumed to be eligible given they had a valid record in the Medicaid administrative data, unless RTI collected information on a call confirming they were ineligible.

One adjusted response rate, AAPOR's response rate for mail and list telephone surveys, calculates the eligible persons by taking a proportion of the unresolved numbers and classifying them as eligible. Accordingly, the AAPOR response rate formula was used to measure the response rate across all sampled persons:

$$RR3 = \frac{Completes}{Eligible + e_u \times Unknown}, \text{ where } e_u = \left(\frac{Eligible}{Eligible + Ineligible}\right)$$

For this study, this calculation produced an AAPOR 3 response rate of 25.7% for the pre-expansion sample, 23.4% for the Group VIII sample, and 24.1% overall.

Cooperation Rate

The cooperation rate provides the percentage of respondents among those for which contact was made and eligibility was determined. The cooperation rate is a measure of interviewer performance and does not take into account sample quality (e.g., numbers that ring but are never answered) or a person's behavior that prevents contact (e.g., privacy manager technology, screening calls using an answering machine). The formula is:

$$Cooperation\ Rate = \frac{Completes}{Known\ Eligible}$$

The upper-bound cooperation rate for this study was 76.6% for the pre-expansion sample, 75.8% for the Group VIII sample, and 76.1% overall.

IV. Biometric Screening

1. Biometric Screening

A subset of survey respondents was asked to participate in a biometric screening in order to supplement self-reported and clinical findings of consenting study members who have chronic conditions.

2. Biometric Screening Nurse Team

Data collection was conducted and managed by a team of experienced nurses affiliated with the Ohio State University Health Plan (OSUHP). A team of 15 nurses from OSUHP managed and performed the biometric screenings at locations across Ohio. Members of the nurse team were experienced registered nurses (RNs), skilled to conduct similar types of health screenings. This same team is responsible for conducting annual biometric screenings for all OSU employees.

3. Training

Nurses were skilled professionals knowledgeable with the setup and use of the diagnostic equipment used to collect the biometric measurements. Therefore, diagnostic equipment and biometric measurement training was not required. Training included project-specific administrative protocols and data quality procedures.

Project Training

An in-person project training was conducted in May 2016. Training focused on study-specific protocols and consistency when interacting with participants. Review and completion of forms, review of scripts, and biometric screening procedures were covered in detail. The Spanish biometric screening process was also reviewed in anticipation of a small number of Spanish-speaking participants.

Ongoing Training

Follow-up training was conducted as needed during the data collection period to ensure consistency in following administrative protocols and data quality procedures.

4. Field Period and Sessions

Recruitment of clinic locations included identifying potential biometric screening sites and securing their cooperation. The following section describes the process used to secure the biometric screening sites, and describes when and where the biometric screening sessions were conducted.

Session Scheduling

Biometric screening sites were located in 21 of the 88 Ohio counties due to resource and logistics constraints.[6] A total of 32 sessions were scheduled across a 3-month period. Sessions were held on weekdays and primarily conducted in government-managed facilities (e.g., agriculture extension offices, local health departments, public libraries).

The first session was held on May 24 in Franklin County and the last session was held on August 19 in Mahoning County. In some larger metropolitan counties, multiple sessions were scheduled. In one county, biometric

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[6] See **Section 2.2** for a discussion of the rationale for selecting the 22 counties for biometric screening. Two counties, Mahoning and Trumbull, shared a site in Mahoning County, leading to a total of 21 sites.

screening sessions were held in two different locations to maximize participation. **Table 16** lists all biometric screening session dates and county designations.

Table 16. Biometric Screening Session Dates and Counties

Date	County	Date	County
May-24	Franklin	Jul-12	Allen
May-25	Hocking	Jul-13	Lucas
May-26	Licking	Jul-15	Hamilton
May-31	Fairfield	Jul-18	Franklin
Jun-02	Marion	Jul-19	Wayne
Jun-07	Muskingum	Jul-20	Montgomery
Jun-10	Cuyahoga	Jul-25	Wood
Jun-14	Butler	Jul-26	Trumbull
Jun-16	Jackson	Jul-29	Cuyahoga
Jun-20	Franklin	Aug-01	Hamilton
Jun-21	Trumbull	Aug-02	Washington
Jun-28	Greene	Aug-03	Cuyahoga
Jun-30	Hamilton	Aug-08	Cuyahoga
Jul-05	Summit	Aug-10	Scioto
Jul-06	Gallia	Aug-12	Cuyahoga
Jul-08	Cuyahoga	Aug-19	Mahoning

5.   Biometric Screening Protocol

During the CATI interview, a subset of survey respondents was asked to participate in a biometric screening (see **Section 2.1** for sample selection criterion). If the survey respondent agreed, an appointment was set for them to complete the biometric screening in person. Participants were asked to bring contact information for their 2013 and 2015/2016 usual source of care (USOC) and personal identification to the screening appointment. Acceptable forms of identification included a Medicaid card, driver's license, school ID, military ID, other photo ID, or recent utility bill with the participant's name and address listed.

During the biometric screening, if eligible, participants were invited to participate in the MRA portion of the study (see **Section 5**).

Biometric Screening Process

The biometric screening focused on five biometric indicators of chronic disease risk: (1) body mass index (BMI); (2) blood pressure (BP); (3) pulse; (4) hemoglobin A1c; and (5) cholesterol. Biometric screening procedures included:

- checking the participant's identity by examining their identification;

- obtaining informed consent for the biometric screening;

- collecting height, weight, BP, and pulse measurements;

- completing a blood spot collection including hemoglobin A1c, total cholesterol, high-density lipoprotein (HDL), and non-HDL measures;

- providing participants with a Biometric Results and Education Page that detailed their biometric measurements and explained what the measurements meant;

- confirming the USOC from the participant and obtaining consent for MRA (if eligible); and

- providing participants with a gift card incentive upon completion.

On average, biometric screenings took approximately 30 minutes.

Biometric measurements were collected with OSUHP diagnostic equipment, which included the Alere Afinion HbA1c used to screen for diabetes; Cholestech, which provided cholesterol count; a digital scale; a stadiometer; and a BP cuff.

In addition to the equipment, the nurse team had several hardcopy documents that were used for the biometric screening. These included:

- Biometric Session and Medical Abstraction Rosters (identified participants by session)

- Biometric Screening Informed Consent (see *Appendix D*)

- Medical Records Abstraction Informed Consent (see *Appendix D*)

- Biometric Screening Form (for recording measures taken) (see *Appendix E*)

- Biometric Screening and Medical Record Abstraction Incentive Receipts

- Biometric Results and Education Page (see *Appendix G*)

- Medicaid Provider Directory (see *Section 5* for more information)

The biometric screening protocol appears in *Appendix C*, and the adverse event protocol is in *Appendix F.* To assess whether observed differences in the biometric screening between Group VIII enrollees and pre-expansion enrollees were due to demographic differences, a series of logistic regression models that predicted the likelihood of biometric risk indicators and adjusted for demographics were fit. These additional analyses can be found in *Appendix N.*

Spanish Language

Biometric screenings were conducted in both English and Spanish. Spanish language specialists served as translators, and all hard copy participant documents were available in both English and Spanish.

Incentives

Walmart gift cards were provided as incentives for the biometric screening and the MRA component. Participants received $100 for participating in the biometric screening and $50 for participating in MRA (if eligible).

6.   Data Quality

Multiple steps were taken to ensure that all information obtained from the biometric screenings was of the utmost quality. These efforts ranged from onsite observations during the biometric screening sessions to a review of all hardcopy materials at multiple stages of the data collection process.

Field Observations

Field observations were conducted throughout the data collection period. Each observation consisted of an in-person presence during the biometric screening session to ensure that sessions were running as scheduled, and procedures and protocols were followed.

Data Quality Review and Receipt of Hardcopy Materials

All hardcopy forms collected during each session were reviewed for completeness and legibility. Once reviewed, all forms were securely stored. Data were then submitted to the RTI Sampling team for further review and analysis.

7.   Biometric Screening Participation Rates

Throughout the data collection period, participation rates were closely monitored to ensure that the Ohio Medicaid Group VIII Assessment project met its goals not only for total number of completed biometric screenings, but also for completion rates that were acceptable across all counties and county types. The following section describes the rate in which eligible survey respondents participated in the biometric screening.

Participant Participation Rates

Overall, 67.6% of survey respondents who agreed to the biometric screening (n=886) attended a session and completed the screening (see ***Table 17***). This included three Spanish-speaking participants who completed the biometric screening with the assistance of a translator (see ***Section 4.5***). A total of 552 participants eligible to participate in the MRA chose to do so. Biometric screening participation rates varied by county, ranging from 100% to 50% (see ***Table 17***). Participation was strongest in suburban counties and weakest in metropolitan counties; however, participation rates across the three types (i.e., metropolitan, suburban, and rural) were not drastically different (see ***Table 18***). In terms of tenure in the Medicaid program, participation rates were higher for Group VIII enrollees than pre-expansion enrollees (see ***Table 19***).

For one county where participation rates were low, RTI project staff recontacted respondents who initially refused to participate in the biometric screening or agreed and missed their scheduled appointment. Every effort was made to reschedule them for a later session. Ultimately, 27 participants who met this criteria were rescheduled for another appointment. Of those 27, 14 participants completed a biometric screening. In ***Tables 17***, ***18***, and ***19***, these individuals are only included once in the "scheduled" column.

Table 17. Biometric Screening Participation Rates by County

County	Scheduled Participants	Completed Biometric Screenings	Participation Rate %
Allen	12	9	75.0
Butler	37	27	73.0
Cuyahoga	265	154	58.1
Fairfield	51	34	66.7
Franklin	137	95	69.3
Gallia	14	7	50.0
Greene	70	55	78.6
Hamilton	132	86	65.2
Hocking	4	3	75.0
Jackson	14	14	100.0
Licking	61	45	73.8
Lucas	74	49	66.2
Mahoning	32	22	68.8
Marion	31	25	80.6
Montgomery	82	53	64.6
Muskingum	31	23	74.2
Scioto	36	25	69.4
Summit	60	38	63.3
Trumbull	75	47	62.7
Washington	18	15	83.3
Wayne	32	24	75.0
Wood	42	36	85.7
Total	**1,310**	**886**	**67.6**

Table 18. Biometric Screening Participation Rates by County Type

Type	Scheduled Participants	Completed Participants	Participation Rate %
Metropolitan	831	533	64
Suburban	224	170	76
Rural	255	183	72
Total	**1,310**	**886**	**67.6**

Table 19. Biometric Screening Participation Rates by Group VIII and Pre-Expansion Enrollees

Type	Scheduled Participants	Completed Participants	Participation Rate %
Pre-expansion	450	287	64
Group VIII	860	599	70
Total	**1,310**	**886**	**67.6**

V. Medical Record Abstraction

1. Medical Record Abstraction Process

During the biometric screening, participants signed an authorization form for RTI telephone specialists to contact the provider that they considered to be their usual source of care (USOC). ***Figure 3*** describes the steps that the telephone specialist followed after gaining cooperation from the medical provider's office. The medical records abstraction protocol is included in ***Appendix H***.

Figure 3. Ohio Group VIII Medical Record Data Collection Case Flow
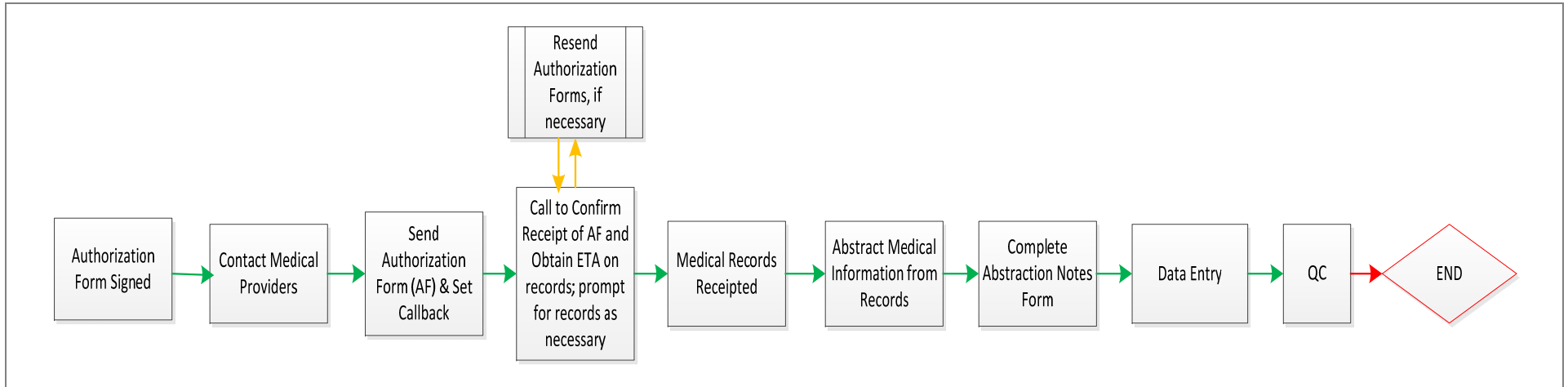
Field Period

The field period was July through December and included contacting medical providers, providing them with information about the study, determining how they would send medical records for the patients in the study, receiving and abstracting the records (**Table 20**).

Table 20. Data Collection Schedule

Data Collection Activity	Dates
Medical Record—Telephone	July 1, 2016 to October 14, 2016
Medical Record—Abstraction of Records for Inclusion in the Statutory Report	July 29, 2016 to October 14, 2016
Medical Record—Abstraction of any Additional Records Received	October 15, 2016 to December 30, 2016

2.   Training

Seven people were trained as record abstractors and four of those people were also trained as telephone specialists. In addition to the MRA task leader, another team member was trained on quality control assurance procedures. The staffing plans were designed to ensure that telephone specialists and abstractors were available and prepared to meet the projected workload. Members of RTI's current interviewer staff with experience working on the Medical Expenditure Panel Survey provider outreach component were recruited for both telephone and abstraction trainings. Each training class was led by project staff, with support from call center supervisors.

Telephone Specialist Training

Telephone specialist training was held for 1 day. Trainees received training materials including the agenda, a training manual, and a frequently asked questions sheet. An interactive approach was taken to ensure that all interviewers received ample instruction and practice with all data collection protocols and procedures. Training methods included lecture, demonstration of the provider contact and receipt software systems, round-robin exercises, and paired practice. This interactive approach allowed for questions to be asked during training and clarification points to be addressed.

Abstraction Training

Interactive abstraction training was held for 2 days. This approach allowed trainees to receive lecture material and the opportunity to practice abstracting information from records. Training focused heavily on the data elements that needed to be collected, as well as properly documenting the information and entering these items correctly into the system.

3.   Data Collection Systems

The MRA component utilized a software-based case management system that provided the flexibility of making telephone calls and abstracting data for electronic data entry. The system was designed to support a diverse set of users ranging from data collectors, supervisors, data managers, analysts, and project managers. There were five core components to the system: sample management; data receipt; coding; data capture & quality control; and case management.

The control system allowed users to manage contact with medical providers and associated forms for call scheduling, contact information, appointment times, and event/status information. The web component provided the electronic forms for data entry.

Contact Guides

The contact guides were used by the telephone specialists to initiate contact with the provider. During initial contact, the telephone specialist introduced the Ohio Medicaid Group VIII Assessment study and identified the appropriate point of contact (POC), collected the contact information of the POC, and determined if the provider materials should be sent by fax or mail. Once the provider materials were sent, the telephone specialist used the contact guide to call back the POC to confirm receipt of materials and then determine when RTI could expect to receive the medical records.

Medical Provider Materials

Prior to receiving the medical records, the telephone specialists used the contact information collected from the provider during initial contact to send providers (by fax or mail) the following materials (*see **Appendix J***):

- Fax/mail cover sheet.

- Cover letter providing general information about the study from ODM.

- A confidential patient checklist of all participants who agreed to participate in the MRA component.

- An authorization form for each patient on the patient list.

- Document that addresses commonly asked questions about the Ohio Medicaid Group VIII Assessment study.

- Fax/mail return form to be used by the respondent so they could choose either to fax or mail their medical records to RTI for hardcopy abstraction. The fax return cover sheet contained preprinted information for faxing records to RTI. The mail return form included a preprinted mailing label for the provider to send records to RTI via mail.

- The authorization form packets also included an 800 number for them to call if they had questions.

Event Forms

Once records were received, the abstractor used event forms to collect data for each 2013, 2015, and 2016 dates of service. This information was abstracted onto an abstraction notes form and then keyed into the electronic event form. The abstraction notes form allowed the abstractor to confirm that they collected all abstraction data elements appropriately, and allowed supervisors to assess an abstractor's work. The event forms were accessible to the telephone specialists and abstractors through the system.

Data to Be Abstracted from Medical Records

A large proportion of the individuals selected for the medical records component had one or more chronic conditions. Due to the limited sample size for the set of chronic conditions that received particular scrutiny (e.g., diabetes, heart disease, hypertension, depression, etc.), the study design anticipated that for analytic purposes, more aggregated analytical measures at the beneficiary level would be studied, where individuals would be pooled across diagnostic categories rather than analyzed separately by disease category. ***Appendix I*** is the

hardcopy form that the abstractors used to capture this information. The information that was abstracted for all individuals, when available, was:

- Date of birth
- Temperature
- Dates of service
- Diagnoses

- Height
- Procedures
- Weight

- Medications
- BP
- Tests

Medical Provider Payments

Some medical providers required payment for the processing, printing, and/or shipping of medical records. Upon request or receipt of an invoice, providers were paid the requested amount for the participant's medical records.

Data Quality

The abstraction monitoring system was used to ensure that staff were abstracting all data elements accurately. Each abstractor had their first five events completely reviewed and re-abstracted by a monitor trained to re-abstract cases.

4. Communication

Regular communication with members of GRC, RTI, and the abstraction team were conducted by way of weekly and ad hoc project meetings and email correspondence.

Project Meetings

Weekly and ad hoc project meetings were conducted with members of GRC, RTI, and the abstraction team. Weekly meetings covered protocol changes, data collection activities, production, and data quality.

5. Medical Provider Response Rates

Throughout the data collection period, participation rates were closely monitored to ensure that the Ohio Medicaid Group VIII Assessment project met its goals not only for total number of medical providers contacted but also for the number of medical providers that sent back records or some form of communication. The following section describes the rate at which eligible medical providers participated in the medical records portion of this study.

Medical Provider Participation Rates

Group VIII enrollees who completed the biometric screening were asked to provide voluntary access to their medical records. Approximately 91% (545) of the Group VIII enrollee biometric screening participants signed at least one authorization form to give their medical providers permission to release their medical records for this study. Of the 480 medical provider groups determined to be associated with these Group VIII enrollees with signed authorization forms, 390 of these medical provider groups (81.3%) provided the requested medical records for at least one of their associated patients.

Medical Records Received by Participant

Table 21 breaks down the three types of groups for which RTI received medical records. The first group comprised those participants who indicated during the biometric screening that they had the same provider in

2013 (pre-expansion) and 2015–2016 (post-expansion). The second group of participants indicated that they had different providers in 2013 and in 2015–2016. The third and final group comprised those participants who indicated that they had a different provider in 2013 and 2015–2016 but for whom RTI received a signed authorization form for only one of their medical providers. Overall, for the 545 Group VIII enrollee biometric screening participants who signed at least one authorization form, the medical records were abstracted for 430 of these enrollees (78.9%) for at least one of the eligible study time periods (2013 and 2015–2016). Medical records were obtained and abstracted for both time periods for 174 participants. These participants had sufficient data to conduct the analyses to assess changes in their medical care and health status over time.

Table 21. Records Received by Participant

2013–2016 (same provider) = 301 Participants		2013, 2015–2016 (multiple providers) = 141 Participants[1]		2013, 2015–2016 (multiple providers) = 103 Participants[2]	
Patients Abstracted	**230**	Patients Abstracted	**127**	Patients Abstracted	**73**
Both Periods Abstracted	114	Both Periods Abstracted	60	Both Periods Abstracted	—
2013 only	8	2013 only	10	2013 only	1
2015–2016 only	108	2015–2016 only	57	2015–2016 only	72

[1] These individuals signed a form for a provider in 2013 and another form for a provider 2015–2016, and RTI received both forms.

[2] These individuals indicated that they have multiple providers; however, RTI only received one signed form.

VI.   Imputation and Weighting

1.   Imputation

Imputation was conducted on survey variables needed for weighting as well as a few derived variables. All variables that were required in the weighting process had less than 5% missing data. Because of the low level of item nonresponse, a conditional stochastic imputation was conducted. Each variable imputed was conditioned on the age category and sex of the respondent. The following variables were imputed:

- Race
- Hispanic origin

- Marital status
- Education

- Chronic condition status
- Smoking status

2.   Weighting

Telephone Survey

Base Weights. The telephone survey was selected using a stratified simple random sample. ***Table 22*** lists the stratification characteristics. In all, there were 400 strata levels. The base weight was the inverse probability of selection within each stratum. In other words, if the probability of selection π_{ih} for person i in stratum h is $\pi_{ih} = \frac{n_h}{N_h}$ where n_h is the sample size in stratum h and N_h is the population in stratum h, then the design based weight (wi_{h1}) is the inverse probability of selection, which is defined as

$$w_{ih1} = \frac{1}{\pi_{ih}}$$

Table 22. Sampling Strata for Telephone Survey

Medicaid Status (Group VIII/Pre-expansion)	Age category (19–44 years/45–64 years)
Region[1]	Chronic condition (yes/no)
Sex	

[1] Region has 25 levels based on the 22 counties used in the biometric screening plus one level for metropolitan, suburban, and rural county for the remaining 66 counties.

Nonresponse Adjustment. The nonresponse adjustment was conducted using an iterative raking model based on the sampling strata along with all possible interactions. The model contained the marginal effect plus two-way and three-way interactions with region (see ***Table 23***). Given the large number of strata (400), some of which had very small respondent sample sizes, a full interaction model that would allow adjustments to take place within stratum was unlikely to fit. Therefore, collapsed strata (i.e., models with lower-level interactions) were used. Furthermore, a separate model was run for Group VIII and pre-expansion enrollees. For some interactions, the region variable was collapsed to allow model convergence (e.g., region may be collapsed to county type—metropolitan, suburban, and rural within the 22 biometric counties—for some interactions). The nonresponse weight (w_{ih2}) was equal to the design-based weight among respondents times the nonresponse adjustment. In other words,

$$w_{ih2} = w_{ih1} \times ADJ\_NR_{Ti}$$

where ADJ_NR_{Ti} is the telephone survey nonresponse adjustment for respondent i.

Table 23. Main Effect and Interaction Characteristics Used in Nonresponse Model

Sex	Age category (19–44 years/45–64 years)
Region	Chronic condition (yes/no)
Region by sex	Region by age category
Region by chronic condition	Region by sex by age category
Region by sex by chronic condition	Region by age by chronic condition
Region by sex by age by chronic condition	

Coverage Adjustment. The nonresponse adjusted weights were calibrated to the original Medicaid population totals (i.e., poststratification to known population totals to minimize coverage error). A separate calibration step was conducted for Group VIII and pre-expansion enrollees. The control totals were based on the Medicaid enrollment population used to select the sample—the March 2016 enrollment as provided by ODM.

The coverage adjusted weight (w_{ih3}) was computed as

$$w_{ih3} = w_{ih2} \times ADJ\_PS_{Ti}$$

where ADJ_PS_{Ti} is the telephone survey calibration adjustment for respondent i. **Table 24** presents the characteristics that were used in the calibration.

Table 24. Main Effect and Interaction Characteristics Used in Calibration Model

Sex	Age category (19–44 years/45–64 years)
Region	Chronic condition (yes/no)
Region by sex	Region by age category
Region by chronic condition	Region by sex by age category
Region by sex by chronic condition	Region by age by chronic condition
Region by sex by age by chronic condition	

Unequal Weighting Effect. *Table 25* details the unequal weighting effects (UWE) for the different stages of the weighting process.

Table 25. UWE for the Telephone Survey by Group VIII and Pre-expansion Enrolled

Telephone Weights	Group VIII	Pre-expansion
Design-based	1.19	1.35
Nonresponse adjustment	1.22	1.29
Poststratification	1.28	1.34

Biometric Screening

Nonresponse Adjustment. For the biometric screening, a nonrespondent was defined as any eligible person in a biometric assigned replicate who did not participate in a biometric screening. This includes those who refused to participate in a screening and those who initially agreed to participate but failed to show up during the screening period for their Ohio county.

The biometric nonresponse adjustment used the telephone survey poststratified weight as the starting weight (i.e., w_{ih3}). An iterative raking model was used to assign the weight of nonresponding biometric screening individuals to the responding biometric screening individuals. The resulting biometric screening nonresponse weight (w_{ih4}) was defined as

$$w_{ih4} = w_{ih3} \times ADJ\_NR_{Bi}$$

where ADJ_NR_{Bi} is the biometric screening nonresponse adjustment for respondent i.

Because biometric screening response was dependent on telephone screening response, the demographic characteristics provided in the telephone survey—for which there was more information and more accuracy than in Medicaid administrative data—were used. **Table 26** presents the variables that were used in the nonresponse model.

Table 26. Telephone Survey Characteristics Used in Biometric Screening Nonresponse Model

Sex	Age category (19-44 years/45-64 years)
Race/ethnicity	Marital status
Chronic condition	County
County type	County type by age category
County type by sex	County type by marital status
County type by race/ethnicity	County type by chronic condition

As with all survey data, some respondents did not provide responses to some of the characteristics listed in **Table 26**. However, a valid response was needed for each respondent for the nonresponse adjustment. In reviewing the telephone survey response, the level of missing data was less than 5% for all demographic characteristics. Because the level of missing data was so low, a simple stochastic imputation was used based on the distribution of respondents with valid responses prior to conducting the nonresponse adjustment.

Coverage Adjustment. Because only a subset of telephone survey replicates were used to select the biometric screening respondents, their telephone survey adjusted weights will only sum to a portion of the population in the 22 counties. Therefore, a coverage adjustment was conducted within each county to ensure that the weight totals equaled the population totals for each county. The coverage adjusted weight (w_{ih5}) was calculated as:

$$w_{ih5} = w_{ih4} \times ADJ\_PS_{Bi}$$

where ADJ_PS_{Bi} is the biometric screening calibration adjustment for respondent i.

Coverage adjustment models were conducted by Group VIII and pre-expansion Medicaid status. Within each enrollment type, the weights were benchmarked to the frame population totals. **Table 27** presents the frame characteristics used in the calibration adjustment model.

Table 27. Main Effect and Interaction Characteristics Used in Biometric Screening Calibration Model

Sex	Age category (19–44 years/45–64 years)
County type	Chronic condition (yes/no)
County type by sex	County type by age category
County type by chronic condition	Sex by age category
Sex by chronic condition	Age by chronic condition

Weight Extrapolation for the Entire Medicaid Population in Ohio. While the 22 counties selected for the biometric screening were purposively chosen, they were selected in a manner that would: (1) maximize the coverage of the Medicaid population in the state and (2) be representative of Group VIII and pre-expansion Medicaid enrollees in accordance to the study criteria. As such, the biometric screening counties covered 68% of the entire Medicaid population in Ohio and included multiple counties in each county type (metropolitan, suburban, and rural). To verify how the 22 counties were representative of the entire Ohio Medicaid population, a new set of weights were created to ensure that the weight total matched the population total of the entire Medicaid population. This was done through the poststratification adjustment. The state-level biometric screening weight (w_{ih5-S}) was computed as:

$$w_{ih5-S} = w_{ih5} \times ADJ\_PS_{Bi-S}$$

where ADJ_PS_{Bi-S} is the statewide biometric calibration adjustment for respondent i.

The poststratification adjustment ratio-adjusted the calibrated 22 county biometric screening weight to the state population totals controlling for the frame characteristics detailed in **Table 28**.

**Table 28. Main Effect and Interaction Characteristics Used in
State-level Biometric Screening Calibration Model**

Sex	Age category (19–44 years/45–64 years)
County type	Chronic condition (yes/no)
County type by sex	County type by age category
County type by chronic condition	County type by sex by age category
County type by sex by chronic condition	County type by age by chronic condition
County type by sex by age by chronic condition	

Unequal Weighting Effect

Table 29 details the unequal weighting effects for the different stages of the weighting process.

Biometric Weights	Group VIII	Pre-Expansion
Design-based	1.32	1.40
Nonresponse adjustment	1.53	1.53
Poststratification	1.71	1.61
Statewide poststratification	1.53	1.76

3. Medical Records Abstraction

Due to the small sample sizes of the medical records abstraction, the data were deemed best used in unweighted analysis. Therefore, no weights were created for the medical records abstraction participants.

Ohio Medicaid Group VIII Assessment Methodology The Ohio Department of Medicaid

VII. Medicaid Administrative Data

Medicaid administrative data include Medicaid claims submitted by health care providers for services rendered to Medicaid enrollees and the eligibility records for those Medicaid enrollees.

Each claim was submitted in an electronic format either to the Medicaid health plan to which enrollees were assigned or directly to the ODM if the enrollees were in fee-for-service. The claim included information on the patient, the provider, the services that the patient received, the dates the services were delivered, as well as the amount billed and paid. There were different formats for submission of institutional (hospital) claims, pharmacy claims, and all professional claims.

Eligibility data included enrollee identifiers, demographics, eligibility categories, health plan identifiers, and the inclusive dates that enrollees were eligible.

Claims and eligibility data were extracted from the Medicaid Information Technology System (MITS) for this study, including dates of eligibility and dates of service from January 1, 2015 through December 31, 2015, the designated period of analysis for this study. The data were extracted for all records that appeared in MITS through August 31, 2016. The claims and eligibility data were matched against the population sampling frame for the study, including the Group VIII enrollees and the pre-expansion comparison group.

The utilization and HEDIS measures below were calculated for the entire population sampling frame of Group VIII (219,342) and pre-expansion eligible persons (477,518).

1. Health Care Utilization

The administrative data were used to calculate measures of health care utilization, including hospital admission, emergency department, primary care, and pharmacy utilization rates. Emergency department utilization was classified as emergent or nonemergent using the NYU ED Algorithm[7] including preventive care and evidence-based care for chronic health conditions. Methods of analysis were derived from the National Center for Quality Assurance (NCQA) HEDIS. The HEDIS measures were calculated for the telephone survey sample as well as for the entire population of Group VIII (219,342) and pre-expansion enrollees (477,518) who were enrolled in Medicaid for at least 11 months in 2015.

2. HEDIS-based[8] Measures

Medicaid administrative data were used to create measures of the provision of evidence-based preventive care and clinically effective-based care for chronic health conditions. Methods of analysis were derived from the NCQA HEDIS. The HEDIS measures are used as a standard to measure the effectiveness of all health plans in the United States, including Medicare, commercial, and Medicaid. The HEDIS measures include:

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[7] For further information on the NYU ED Algorithm, see http://wagner.nyu.edu/faculty/billings/nyued-background

[8] The measures are HEDIS based, but not always exactly the HEDIS measures, as some of the measures require a lookback period of 1 to 2 years prior to the measurement year. For many of the Group VIII enrollees, 2015 was the first year of their Medicaid administrative data, so this study limited the lookback period to 2015 for the Group VIII enrollees and the pre-expansion comparison group.

- Adult BMI Assessment
- Breast Cancer Screening
- Cervical Cancer Screening
- Chlamydia screening in Women
- Colorectal Cancer Screening

- Comprehensive Diabetes Care
- Controlling High Blood Pressure
- Statin Therapy for Patients With Cardiovascular Disease
- Statin Therapy for Patients With Diabetes
- Antidepressant Medication Management

The summary figures for the HEDIS measures can be found in ***Appendix N***.

VIII. Qualitative Interviews

1. Qualitative Coding of Open-Ended Group VIII Survey Question

The Group VIII Survey included an open-ended question (item K4) that was only administered to Group VIII enrollees. It read, "In your own words, describe in a sentence what getting Medicaid has meant to you." A total of 5,051 individuals responded to this open-ended question. Interviewers administering the survey transcribed the responses verbatim.

Three researchers independently analyzed the responses for emerging themes to describe what Medicaid meant to them. After deriving these initial themes, each researcher analyzed 200 responses a week until the coding was completed on October 19, 2016.

In addition to these 200 responses, each researcher also independently coded the same 20 responses a week. These responses were used to compute weekly reliability statistics among the three researchers (using Krippendorf's Alpha statistic). As a result of these reliability statistics, theme definitions were refined.

Average alpha statistics were greater than 0.74, with 5 out of the 9 themes having alphas above 0.80 (two of the themes were so rare that there was never any variation during the reliability assessment). The theme "access to care" was completely redefined after approximately 1,600 responses had been coded. The original definition from which coders were working was deemed too ambiguous and thus had to be refined and clarified in order for coders to reliably code responses. Consequently, double-coding for this theme was performed for all 5,051 observations. **Table 30** lists the themes, definitions, and percentage of quotes that referenced the specific theme. Qualitative coding instructions for question K4 can be found in **Appendix M**.

Table 30. Qualitative Coding of Group VIII Survey Question K4

Code	Definition	% Quotes
Generally negative	General negative response about Medicaid or the government's decision to fund Medicaid.	0.6
Generally positive	Only used if nothing else applies and the comment was positive about Medicaid or having insurance. For example, a general positive response about Medicaid or the government's decision to fund Medicaid.	30.1
Don't know	Person did not know what to say.	0.3
Relief/less stress or worry	Response mentioned feeling relieved, secured, peace of mind, having less worry, less stress; feeling assured because of medical access.	27.9
Costs—positive	Response mentioned cost savings or that Medicaid will cover medical bills.	22.7
Access to care	Response explicitly mentioned the ability to access medical care or see a doctor. Coded yes if person talked about being able to go to the doctor, get medical care, go to the hospital, get prescriptions, and/or get dental or vision care.	31.3
Health	Mentioned the health benefits of having Medicaid, both physical and mental health. Talked about health improvements.	10.1

Code	Definition	% Quotes
Knowledge	Response indicated that person knows more about health now that Medicaid is available. Or, the person said that he/she has a better understanding of health or health problems.	1.0
Cost/access—negative	Any negative mention of costs or limited access, costs still incurred; costs person had to pay for before Medicaid.	1.9
Medical debt	Any specific mention of medical debt.	1.3
No fine	Any mention of getting Medicaid to avoid receiving a fine.	1.2

2.   Focus Group Discussions

Participants: Individuals who completed the Group VIII telephone survey (and possibly the biometric screening and medical record review) and resided in Cuyahoga County, Hamilton County, or Muskingum/Licking counties were invited to participate in a focus group discussion. Discussions occurred in downtown Cleveland (September 20, 2016), Zanesville (September 24, 2016), and Cincinnati (October 1, 2016). RTI provided GRC staff with a list of potentially eligible focus group participants, and GRC staff called these individuals until at least 12 had signed up for a focus group discussion. A total of 27 individuals participated in a focus group discussion.

Procedures: Prior to starting the focus group discussion, participants were asked to complete a short survey for basic demographic items and basic information about Medicaid enrollment (see ***Table 31***). After the surveys were completed, the focus group discussion began. Two OSU researchers conducted all three focus group discussions (one GRC staff member was present for one focus group discussion). All discussions were audio-taped and participants received a $50 Walmart card.

Table 31. Information Gathered by Survey Before Focus Groups Were Conducted

Characteristic	Statistic
Age (Mean [SD])	47.8 (14.0)
Gender	
Male	9 (33.3%)
Female	18 (66.7%)
Household Size	
Adults (Mean [SD])	1.6 (0.9)
Children (Mean [SD])	1.0 (1.4)
Marital Status	
Single	14 (51.9%)
Married or living with partner	6 (22.2%)
Divorced/separated/widowed	7 (25.9%)

Characteristic	Statistic
Educational Attainment	
Less than high school	4 (15.4%)
High school/GED	12 (46.2%)
More than high school	10 (38.5%)
Time in Medicaid	
Less than 1 year	1 (3.85%)
1–4 years	20 (76.9%)
More than 4 years	5 (19.2%)

Measures: The semistructured script included questions about use of health care services, impact on financial situation, and impact on health.

The focus group script can be found in ***Appendix L***.

3.   Stakeholder Interviews

Participants: ODM identified key stakeholders to contact for the qualitative interviews. These stakeholders comprised provider groups, such as long-term care groups, pharmacy groups, and medical service groups. Ten individuals completed interviews.

Procedures: Stakeholders were contacted via e-mail and asked to participate in a 30-minute phone interview. Three Group VIII researchers (two from OSU and one from GRC) conducted the interviews. All interviews were audio-taped and participants were offered a $50 Walmart card for completing the interview.

Measures: The semistructured script included questions about how Medicaid expansion affected the organization, the participant's job, and the demand and supply on providers. Respondents were also asked if there were any surprises related to Medicaid expansion, what they were hearing about expansion from providers and others outside of the organization, and what the benefits/challenges are to clients.

Stakeholder interview questions appear in ***Appendix K***.

Appendix A:
Group VIII Telephone Survey Instrument

Group VIII Telephone Survey Instrument

Prepared by
RTI International
3040 Cornwallis Road
Research Triangle Park, NC 27709

Contents

Notes to Group VIII Methods reviewers:

E1. Throughout sections of the survey, you will see "since getting Medicaid coverage/in the last 2 years." The first clause refers to Group VIII enrollees and the second clause refers to pre-expansion enrollees.

Section A: Introduction and Screener

A1. Hello, may I please speak with {FILL SAMPLE MEMBER NAME}?

      1   YES
      2   NOT AVAILABLE RIGHT NOW—SET CALL BACK
      3   NO, DOES NOT LIVE HERE ANYMORE (TRY TO LOCATE)
      4   NO→ REFUSED
      5   LANGUAGE BARRIER—GO TO END SCREEN
      6   SAMPLE MEMBER INCAPABLE (PHYSICALLY/MENTALLY INCAPABLE)—GO TO END SCREEN

      (INTERVIEWER: IF ASKED WHY CALLING SAY:
            I'm calling to speak to {FILL SAMPLE MEMBER NAME} about a survey that the Ohio Department of Medicaid is doing with people who are enrolled in Medicaid to find out about their experiences with that program. Is {FILL SAMPLE MEMBER NAME} available?)

      (INTERVIEWER: IF THEY SAY SAMPLE MEMBER IS NOT INTERSTED SAY:
            {FILL SAMPLE MEMBER NAME} will receive $20 for completing the survey.)

A2. (Hello, this is _____). I'm calling on behalf of the Ohio Department of Medicaid, which is doing a survey to find out about your experience with Medicaid. This is an evaluation **only**. A couple of weeks ago, you should have received a letter about this survey. You will receive a $20 gift card for completing this survey. I am hoping you will have a few minutes to complete it now.

      01   CONTINUE

A3. Are you currently covered by Medicaid? You may also know the program as {FILL SPECIFIC MANAGED CARE PLAN NAME}.

      (IF NECESSARY: You may also know the program as Healthy Families or MBIWD.)

      01 YES
      02 NO—TERMINATE
      98 DK—TERMINATE
      99 REF—TERMINATE

A4. Before we begin, have I reached you on a cell phone or a landline phone?

      01   CELL PHONE
      02   LANDLINE PHONE

//IF A4 = 01//

A5. Are you driving or doing anything that requires your full attention right now?

    01   YES
    02   NO (GO TO A7)
    03   NOT A CELL PHONE (GO TO A7)

A6. When would be a better time to call you?

(INTERVIEWER: IF RESPONDENT INDICATES THAT THEY ARE WILLING TO TALK NOW SAY:
I´m sorry, but for your safety we´re not able to do the interview while you´re driving.
When would be a better time to call you?)

    01   SET CALL BACK

A7. Now, I would like to ask a few general questions about you and your experience with Medicaid. Before we start the survey, the Ohio Department of Medicaid would like me to tell you that the interview will last approximately 20 minutes, your participation is voluntary, you do not have to answer any question you do not want to, and everything you say will be kept confidential. If you choose not to participate in this survey, you will not be penalized or lose your Medicaid benefits. May we begin?

(INTERVIEWER: IF THE R SAYS NO, CLICK BREAK TO SET AN APPOINTMENT OR CODE A REFUSAL)

    01   YES
    02   NO
    99   REF

Section B: Limited Demographic Information

These first few questions are about you.

B1. What is your gender?

>(INTERVIEWER: READ ANSWER OPTIONS IF NECESSARY)

>01 MALE
>02 FEMALE
>97 OTHER
>99 REFUSED

B2. Please tell me how old you were on your last birthday.

>(IF NECESSARY: Your best guess is fine.)
>RECORD AGE   (RANGE 019-125)
>998   DK (GO TO B3)
>999   REFUSED (GO TO B3)

//IF B2 >=65 AND B2<998 – TERMINATE//

//IF B2=998,999//

B3. On your last birthday would you say that you were…

>(IF NECESSARY: Your best guess is fine.)

>01   19-24 years old
>02   25-34 years old
>03   35-44 years old
>04   45-54 years old
>05   55-64 years old
>06   65 years or older

>98   DK
>99   REFUSED

//IF B3=6, 98, 99 –TERMINATE//

//DO NOT ASK IF COUNTY NAME IS MISSING//

B4. To confirm, do you live in <COUNTY NAME> county?

>(IF NECESSARY: Is this the county you live in **most of the time**?)

>01 YES

02 NO

98 DK

99 REF

//ASK IF B4=02, 98, 99 OR IF COUNTY NAME IS MISSING//

B5. In what county in the State of Ohio do you live?

(IF NECESSARY: Which county do you live in **most of the time**?)

(INTERVIEWER NOTE:

- o FIND THE COUNTY RESPONDENTS NAME IN THE LIST AND CODE ACCORDINGLY.

- o IF RESPONDENT SAYS MORE THAN ONE COUNTY NAME, CODE ONLY THE ONE RESPONDENT LIVES IN MOST OF THE TIME IS MOST SURE OF.)

001	ADAMS	061	HAMILTON	121	NOBLE
003	ALLEN	063	HANCOCK	123	OTTAWA
005	ASHLAND	065	HARDIN	125	PAULDING
007	ASHTABULA	067	HARRISON	127	PERRY
009	ATHENS	069	HENRY	129	PICKAWAY
011	AUGLAIZE	071	HIGHLAND	131	PIKE
013	BELMONT	073	HOCKING	133	PORTAGE
015	BROWN	075	HOLMES	135	PREBLE
017	BUTLER	077	HURON	137	PUTNAM
019	CARROLL	079	JACKSON	139	RICHLAND
021	CHAMPAIGN	081	JEFFERSON	141	ROSS
023	CLARK	083	KNOX	143	SANDUSKY
025	CLERMONT	085	LAKE	145	SCIOTO
027	CLINTON	087	LAWRENCE	147	SENECA
029	COLUMBIANA	089	LICKING	149	SHELBY
031	COSHOCTON	091	LOGAN	151	STARK
033	CRAWFORD	093	LORAIN	153	SUMMIT
035	CUYAHOGA	095	LUCAS	155	TRUMBULL
037	DARKE	097	MADISON	157	TUSCARAWAS
039	DEFIANCE	099	MAHONING	159	UNION
041	DELAWARE	101	MARION	161	VAN WERT
043	ERIE	103	MEDINA	163	VINTON
045	FAIRFIELD	105	MEIGS	165	WARREN
047	FAYETTE	107	MERCER	167	WASHINGTON
049	FRANKLIN	109	MIAMI	169	WAYNE
051	FULTON	111	MONROE	171	WILLIAMS
053	GALLIA	113	MONTGOMERY	173	WOOD
055	GEAUGA	115	MORGAN	175	WYANDOT
057	GREENE	117	MORROW		
059	GUERNSEY	119	MUSKINGUM		

998	DK
999	REFUSED

Section C: Confirmation of Insurance Status and Prior Coverage

IF NEWLY ELIGIBLE

Throughout this survey I will be asking about your experiences before having Medicaid and while having Medicaid. When I say "Medicaid" I am referring to your current plan, {FILL SPECIFIC MANAGED CARE PLAN NAME}, and any previous Medicaid coverage you had just before this plan.

IF OLDLY ELIGIBLE

Throughout this survey I will be asking about your experiences while having Medicaid. When I say "Medicaid" I am referring to your current plan, {FILL SPECIFIC MANAGED CARE PLAN NAME}, and any previous Medicaid coverage you had just before this plan.

C1. How long have you had your Medicaid coverage? Would you say…

> (IF NECESSARY: You should consider the total amount of time you have had Medicaid, including any managed care plans and not just how long you have had your current plan.
>
> IF NECESSARY: You should not count periods where you have lost Medicaid for one month or less.)
>
> 01 Less than one year (END SURVEY, TELL PARTICIPANT THAT SURVEY IS FOR PEOPLE WITH MEDICAID FOR ONE OR MORE YEARS)
> 02 One to two years
> 03 More than two to three years
> 04 More than three years
> 98 DK
> 99 REF

//ASK OF ALL NEWLY ELIGIBLES//

C2. Just prior to your current Medicaid coverage, were you covered by any health insurance plan?

> 01 YES
> 02 NO
> 98 DK (GO TO D1)
> 99 REF (GO TO D1)

//IF C2 = 1//

C3. Just prior to your current Medicaid coverage, were you covered by a health insurance plan obtained through an employer or union?

> (IF NECESSARY:
>
> • Either through your own or someone else's employment.
>
> • Include retiree coverage and COBRA.
>
> • Do not include Medicare or Medicaid coverage.)
>
> 01 YES

02 NO
98 DK
99 REF

//IF C3 = 1//

C4. Why did your previous employer health insurance end? For each statement I read, please tell me yes or no.

   C4a. The employer stopped offering insurance.
   C4b. The employer's health insurance cost too much.
   C4c. You thought Medicaid was a better option than the employer's health insurance.
   C4d. You or a family member stopped working at the job that provided health insurance.
   C4e. You were no longer eligible for the employer's health insurance.

   DO NOT RANDOMIZE STATEMENT ORDER

   01 Yes
   02 No
   98 DK
   99 REF

//IF C2 = 1 AND C3 NE 1//

C5. Just prior to your current Medicaid coverage, were you covered by any other insurance that you or your family paid for completely, including insurance purchased through the Ohio Health Care Exchange or a healthcare.gov insurance plan?

   (IF NECESSARY: The Ohio Health Care Exchange and healthcare.gov are part of the new health care law with gold, silver, and bronze plans.)

   01 YES
   02 NO
   98 DK
   99 REF

//IF C2=1//

C6. Just prior to your current Medicaid coverage, for how long did you have this insurance coverage?

   (IF NECESSARY: Your best guess is fine.)

C6_VALUE

   _____

   DK
   REF
C6_UNITS

   01 DAYS
   02 WEEKS

03 MONTHS
04 YEARS
DK
REF

//IF C2=2//

C7. For how long were you uninsured?

(IF NECESSARY: Your best guess is fine.)

C7_VALUE

_____
DK
REF

C7_UNITS

01 DAYS
02 WEEKS
03 MONTHS
04 YEARS
DK
REF

Section D: Pathways to Medicaid Enrollment

//ONLY ASK IF NEWLY ELIGIBLE//

This next question is about how you enrolled in the Medicaid program.

D1. How did you sign up for Medicaid? Did you sign up...
      01 Online?
      02 At a county or government office?
      02 At a medical center or doctor's office when you went there to get health care?
      03 Or some other way?
      98 DK
      99 REF

      (INTERVIEWER NOTE: IF RESPONDENT SAYS 'NURSING HOME' OR "HOSPITAL" THEN CODE AS '03')

Section E: Health Status and Health Conditions

Now I am going to ask you about your health and certain medical conditions.

E1. In general, would you say that your health is excellent, very good, good, fair, or poor?

> 01 EXCELLENT
> 02 VERY GOOD
> 03 GOOD
> 04 FAIR
> 05 POOR
> 98 DK
> 99 REF

E2. <Since getting Medicaid coverage/In the last 2 years>, would you say your health is better, worse, or about the same?

> 01 BETTER
> 02 WORSE
> 03 ABOUT THE SAME
> 98 DK
> 99 REF

Hypertension

E3. Have you **ever** been told by a doctor or other health professional that you had hypertension, also called high blood pressure?

> (INTERVIEWER NOTE: IF RESPONDENT SAYS 'BORDERLINE', "PRE-HYPERTENSION" OR "HIGH NORMAL" THEN CODE AS '02')
>
> 01 YES
> 02 NO
> 98 DK
> 99 REF
>
>
> //FOR NEWLY ELIGIBLE ONLY: ASK IF E3 = 1//

E4. Were you **first** told that you had hypertension or high blood pressure before or after you got your current Medicaid coverage?

> 01 BEFORE
> 02 AFTER
> 98 DK
> 99 REF
> //IF E3 = 1//

E5. Are you **now** taking any medicine prescribed by a doctor for your high blood pressure?

    01 YES
    02 NO
    98 DK
    99 REF

//IF E5 = 1//

E6. For about how long have you been taking medicine for your high blood pressure? Has it been...

    01 Less than 1 year
    02 1 year but less than 2 years
    03 2 years but less than 5 years, or
    04 5 years or more
    98 DK
    99 REF

    //ONLY FOR NEWLY ELIGIBLES ASK IF E4 = 1//

E7. Since getting your Medicaid coverage, has managing your high blood pressure gotten easier, harder, or has it stayed the same compared to before you had Medicaid coverage?

    01 EASIER
    02 HARDER
    03 STAYED THE SAME
    98 DK
    99 REF

High Cholesterol

E8. Have you **ever** been told by a doctor or other health professional that you had high cholesterol?

    01 YES
    02 NO
    98 DK
    99 REF
    //FOR NEWLY ELIGIBLE ONLY ASK IF E8 = 1//

E9. Were you **first** told that you had high cholesterol before or after you got your current Medicaid coverage?

    01 BEFORE
    02 AFTER
    98 DK
    99 REF
    //IF E8 = 1//

E10. Are you **now** taking any medicine prescribed by a doctor to help lower your cholesterol?

> 01 YES
> 02 NO
> 98 DK
> 99 REF
> //IF E10 = 1//

E11. For about how long have you been taking medicine to help lower your cholesterol? Has it been...

> 01 Less than 1 year
> 02 1 year but less than 2 years
> 03 2 years but less than 5 years, or
> 04 5 years or more
> 98 DK
> 99 REF

> //ONLY FOR NEWLY ELIGIBLES ASK IF E9=1//

E12. Since getting your Medicaid coverage, has managing your high cholesterol gotten easier, harder, or has it stayed the same compared to before you had Medicaid coverage?

> 01 EASIER
> 02 HARDER
> 03 STAYED THE SAME
> 98 DK
> 99 REF

Diabetes

E13. [*Other than during pregnancy*], have you **ever** been told by a doctor or other health professional that you had diabetes or sugar diabetes?

> (DIABETES: dahy-uh-**bee**-teez)

> (INTERVIEWER NOTE: IF RESPONDENT SAYS 'BORDERLINE' OR "PRE-DIABETES" THEN CODE AS '02')

> 01 YES
> 02 NO
> 98 DK
> 99 REF
> //FOR NEWLY ELIGIBLE ONLY: ASK IF E13 = 1//

E14. Were you **first** told that you had diabetes or sugar diabetes before or after you got your current Medicaid coverage?

> 01 BEFORE
> 02 AFTER

98 DK
99 REF
//IF E13=1//

E15. Are you **now** taking insulin or diabetic pills to lower your blood sugar?

IF NECESSARY: Diabetic pills are sometimes called oral agents or oral hypoglycemic agents.

01 YES
02 NO
98 DK
99 REF

//IF E15=1//

E16. For how long have you been taking insulin or diabetic pills to lower your blood sugar? Has it been...

IF NECESSARY: What is the longest amount of time you have been taking either insulin or diabetic pills?

01 Less than 1 year
02 1 year but less than 2 years
03 2 years but less than 5 years, or
04 5 years or more
98 DK
99 REF

//ONLY FOR NEWLY ELIGIBLES: ASK IF E14=1)

E17. Since getting your Medicaid coverage, has managing your diabetes gotten easier, harder, or has it stayed the same compared to before you had Medicaid coverage?

01 EASIER
02 HARDER
03 STAYED THE SAME
98 DK
99 REF

Other Chronic Conditions

Has a doctor or other health professional **ever** told you that you had any of the following?
For each, tell me Yes, No, or you're not sure.

(INTERVIEWER: READ INTRODUCTION FIRST TIME AND THEN AS NEEDED)
(Has a doctor or other health professional **ever** told you that you had any of the following?)

E18. Coronary heart disease?

(CORONARY: KAWR-E-NEREE)

01 YES
02 NO
98 DK
99 REF

E19. A heart attack (also called a myocardial infarction)?

(MYOCARDIAL: mahy-uh-kahr-dee-uh-l)

(INFARCTION: in-fahrk-shuhn)

01 YES
02 NO
98 DK
99 REF

E20. Congestive heart failure?

(CONGESTIVE: KUN-JES- TIV)

01 YES
02 NO
98 DK
99 REF

E21. A stroke?

01 YES
02 NO
98 DK
99 REF

E22. Emphysema?

(EMPHYSEMA: em-fuh-**see**-muh)

01 YES
02 NO
98 DK
99 REF

E23. Chronic obstructive pulmonary disease, also called COPD?

01 YES
02 NO
98 DK
99 REF

E24. Chronic bronchitis?

(BRONCHITIS: brong-**kahy**-tis)

01 YES
02 NO
98 DK
99 REF

E25. Cancer?

01 YES
02 NO
98 DK
99 REF

//FOR NEWLY ELIGIBLE ONLY ASK IF E18 = 1//

E26. Were you **first** told that you had coronary heart disease before or after you got your current Medicaid coverage?

(CORONARY: KAWR-E-NEREE)

01 BEFORE
02 AFTER
98 DK
99 REF

//FOR NEWLY ELIGIBLE ONLY ASK IF E19 = 1//

E27. Were you **first** told that you had a heart attack or myocardial infarction before or after you got your current Medicaid coverage?

(MYOCARDIAL: mahy-uh-kahr-dee-uh-l)

(INFARCTION: in-fahrk-shuhn)

01 BEFORE
02 AFTER
98 DK
99 REF

//FOR NEWLY ELIGIBLE ONLY ASK IF E20 = 1//

E28. Were you **first** told that you had congestive heart failure before or after you got your current Medicaid coverage?

(CONGESTIVE: KUN-JES- TIV)

01 BEFORE
02 AFTER
98 DK
99 REF

//FOR NEWLY ELIGIBLE ONLY ASK IF E21 = 1//

E29. Were you **first** told that you had a stroke before or after you got your current Medicaid coverage?

01 BEFORE
02 AFTER
98 DK
99 REF

//FOR NEWLY ELIGIBLE ONLY ASK IF E22 = 1//

E30. Were you **first** told that you had emphysema before or after you got your current Medicaid coverage?

(EMPHYSEMA: em-fuh-**see**-muh)

01 BEFORE
02 AFTER
98 DK
99 REF

//FOR NEWLY ELIGIBLE ONLY ASK IF E23 = 1//

E31. Were you **first** told that you had chronic obstructive pulmonary disease, also called COPD, before or after you got your current Medicaid coverage?

01 BEFORE
02 AFTER
98 DK
99 REF

//FOR NEWLY ELIGIBLE ONLY ASK IF E24 = 1//

E32. Were you **first** told that you had chronic bronchitis before or after you got your current Medicaid coverage?

(BRONCHITIS: brong-**kahy**-tis)

01 BEFORE
02 AFTER
98 DK
99 REF

//FOR NEWLY ELIGIBLE ONLY ASK IF E25 = 1//

E33. Were you **first** told that you had cancer before or after you got your current Medicaid coverage?

      01 BEFORE
      02 AFTER
      98 DK
      99 REF

Functional Status

E34. Now, thinking about your physical health, which includes physical illness and injury, for how many days, **during the past 30 days** did a physical health condition keep you from doing your work or other usual activities?

      (INTERVIEWER: IF RESPONDENT SAYS "NO", PROBE FOR THE EXACT NUMBER OF DAYS.

      IF THE RESPONDENT SAYS "NONE," ENTER 0.)

      _____

        DK
        REF

E35. Now, thinking about your mental health, which includes stress, depression, and problems with emotions or substance abuse, for how many days **during the past 30 days** did a mental health condition or emotional problem keep you from doing your work or other usual activities?

      (INTERVIEWER: IF RESPONDENT SAYS "NO", PROBE FOR THE EXACT NUMBER OF DAYS.

      IF THE RESPONDENT SAYS "NONE," ENTER 0.)

      _____

        DK
        REF

Mental Health

Over the last 14 days, how often have you been bothered by any of the following problems?

(INTERVIEWER: FOR FIRST QUESTION READ THE CATEGORIES OF RESPONSE AND IF NECESSARY ON SUBSEQUENT QUESTIONS).

E36. Feeling nervous, anxious or on edge.

    00   0 to 1 days
    01   2 to 6 days
    02   7 to 11 days
    03   12 to 14 days
    98   DK
    99   REF

E37. Not being able to stop or control worrying.

    00   0 to 1 days
    01   2 to 6 days
    02   7 to 11 days
    03   12 to 14 days
    98   DK
    99   REF

E38. Little interest or pleasure in doing things.

    00   0 to 1 days
    01   2 to 6 days
    02   7 to 11 days
    03   12 to 14 days
    98   DK
    99   REF

E39. Feeling down, depressed, or hopeless.

    00   0 to 1 days
    01   2 to 6 days
    02   7 to 11 days
    03   12 to 14 days
    98   DK
    99   REF

Section F: Healthcare Utilization and Usual Source of Care

I would now like to ask about your use of health care services.

//ASK IF NEWLY ELIGIBLE//

F1. **Since getting Medicaid coverage**, have you been a patient in the hospital emergency room more often, less often, or about as often compared to before you had Medicaid coverage?

    01 MORE OFTEN
    02 LESS OFTEN
    03 ABOUT AS OFTEN
    98 DK
    99 REF

    (INTERVIEWER NOTE: IF RESPONDENT. IF A RESPONDENT SAYS "I NEVER GO THE EMERGENCY ROOM" OR "I'VE NEVER BEEN HOSPITALIZED" STATE "THE OPTION 'ABOUT THE SAME' CAN ALSO MEAN THAT YOU DID NOT GO BEFORE MEDICAID AND YOU HAVE NOT GONE SINCE GETTING MEDICAID COVERAGE.")

//IF F1 = 2//

F2. What is the **main** reason you are going to the hospital emergency room less often? Is it because…

    01 You now have a regular doctor you can go to
    02 You now go to urgent care instead of the hospital emergency room
    03 You are healthier now and no longer need to go as often
    04 Or some other reason?
    98 DK
    99 REF

//IF F1 = 1//

F3. What is the **main** reason you are going to the hospital emergency room more often? Is it because…

    01 You no longer have a regular doctor
    02 You are sicker now than you used to be
    04 You had an illness or injury that required immediate attention
    05 You now have health insurance
    03 Or some other reason?
    98 DK
    99 REF

//ASK OF NEWLY ELIGIBLES ONLY//
F4. For this next question, I want you to think about times you have been admitted to the hospital for overnight or longer. **Since getting Medicaid coverage,** have you been admitted to the hospital more often, less often, or about as often compared to before you had Medicaid coverage?

    01 MORE OFTEN
    02 LESS OFTEN
    03 ABOUT AS OFTEN
    98 DK
    99 REF

    (INTERVIEWER NOTE: IF RESPONDENT. IF A RESPONDENT SAYS "I NEVER GO THE EMERGENCY ROOM" OR "I'VE NEVER BEEN HOSPITALIZED" STATE "THE OPTION 'ABOUT THE SAME' CAN ALSO MEAN THAT YOU DID NOT GO BEFORE MEDICAID AND YOU HAVE NOT GONE SINCE GETTING MEDICAID COVERAGE.")

//ASK OF EVERYONE//
F5. Is there one place that you usually go to when you are sick or you need advice about your health?

    (IF NECESSARY: this can include an ER.)
    (IF NECESSARY: We are interested in whether you have one place you usually go to seek medical care, not whether you have been there recently.)

    01 YES
    02 NO
    03 YES, VOLUNTEERED THAT THERE IS MORE THAN ONE PLACE
    98 DK
    99 REFUSE

//IF F5=02, 98, 99//
F6. Just to be sure, is it that there is no place at all that you usually go to when you are sick or you need advice about your health, or is it that you go to more than one place?

    01 NO PLACE AT ALL
    02 MORE THAN ONE PLACE
    98 DK
    99 REFUSED

//IF F6=01//
F7. What are the reasons you do **not** have a place where you usually go for care? For each statement I read, please tell me yes or no. You...

    F7a. Do not know where to go for care.
    F7b. Cannot find a provider who takes your Medicaid coverage.
    F7c. Think that health care providers are too expensive.
    F7d. Do not have a way to get to a provider's office.
    F7e. Seldom or never get sick.

    01 YES
    02 NO
    98 DK
    99 REFUSED

//IF F5 = 01, 03 or F6 = 02//

F8. Is this place where you **usually** go for care

    01 a doctor's office or health center?
    02 a hospital emergency room?
    03 an urgent care center?
    04 or some other place?
    98 DK
    99 REFUSED

//IF F8 = 02 or 03 //
F9. What is the **main** reason you usually go to the <hospital emergency room/urgent care center>? Is it that you...

    01 Cannot afford to go elsewhere?
    02 Think <hospital emergency rooms/urgent care centers> are convenient?
    03 Think <hospital emergency rooms/urgent care centers> are the best place to get care?
    04 Have no regular doctor?
    05 Or have some other reason I have not mentioned?
    98 DK
    99 REFUSED

//ASK OF EVERYONE//
F10. <**Just before getting Medicaid coverage/Two years ago**>, did you have one place where you usually went when you were sick or you needed advice about your health?

    01 YES
    02 NO
    98 DK
    99 REF

//IF (F5 = 01, 03 or F6 = 02) AND F10 = 01//
F11. Has the place where you usually go to when you are sick or you need advice about your health changed
<**since getting Medicaid coverage/within the last two years**>?

      01 YES
      02 NO
      98 DK
      99 REF

//IF F11 = 01//
F12. Was the place where you usually went for care <**before getting Medicaid coverage/two years ago**>

      01 a doctor's office or health center?
      02 a hospital emergency room?
      03 an urgent care center?
      04 or some other place?
      98 DK
      99 REFUSED

//IF F6=01 AND F10 = 01//
F13. Was the place where you usually went for care <**before getting Medicaid coverage/two years ago**>

      01 a doctor's office or health center?
      02 a hospital emergency room?
      03 an urgent care center?
      04 or some other place?
      98 DK
      99 REFUSED

//IF (F5 = 01, 03 or F6 = 02//
F14. A personal doctor or nurse is a health professional who knows you well and is familiar with your health history. This can be a general doctor, a specialist doctor, a nurse practitioner, or a physician´s assistant. Do you have one or more persons you think of as your personal doctor or nurse?

      (INTERVIEWER: IF R IS NOT CLEAR WHETHER THEY SEE ONE PERSON OR MORE THAN ONE PERSON
      ASK: Do you have one person or more than one person you think of as your personal doctor or nurse?)

      01 YES, ONE PERSON
      02 YES, MORE THAN ONE PERSON
      03 NO
      98 DK
      99 REFUSED

//IF F14 = 01, 02//
F15. In the past 12 months, have you seen your personal doctor or nurse?

01 YES
02 NO
98 DK
99 REFUSED

//IF NEWLY ELIGIBLE//
F16. Did you have a personal doctor or nurse just before getting Medicaid coverage?

01 YES
03 NO
98 DK
99 REFUSED

Section G: Healthcare Access and Unmet Need

Did any of the following things happen to you <since getting Medicaid coverage/in the last 2 years>?

G1. <Since getting Medicaid coverage/In the last 2 years>, did you have any major medical costs?

(IF NECESSARY: Including co-pays)
(IF R ASKS WHAT IS MEANT BY "MAJOR", SAY: Whatever it means to you.)

01 YES
02 NO
98 DK
99 REFUSED

//ASK OF NEWLY ELIGIBLES ONLY//

G2. **Since getting Medicaid coverage,** have you had more or fewer major medical costs compared to before you had Medicaid coverage?

(IF NECESSARY: Including co-pays)
(IF R ASKS WHAT IS MEANT BY "MAJOR", SAY: Whatever it means to you.)

01 MORE MEDICAL COSTS
02 FEWER MEDICAL COSTS
03 R OFFERED THAT COSTS HAVE NOT CHANGED
98 DK
99 REFUSED

//IF G2 = 01//

G3. Why have you had more major medical costs? For each statement I read, please tell me yes or no.

G3a. You could not find a health care provider who accepts your Medicaid coverage.
G3b. Medicaid does not cover the care that you need.
G3c. Your health got worse since you got Medicaid coverage.

RANDOMIZE G3a through G3c

01 YES
02 NO
98 DK
99 REFUSED

G4. <Since getting Medicaid coverage/In the last 2 years>, did you delay or avoid getting care?

(IF NECESSARY: "Care" means any health care, including prescription drugs.)

01 YES
02 NO
98 DK
99 REFUSED

//IF G4 = 01//
G5. Why did you delay or avoid getting care? For each statement I read, please tell me yes or no.

G5a. You thought it would cost too much.
G5b. You did not have transportation.
G5c. The provider was not available when you needed to go.
G5d. You could not find a provider who took your Medicaid coverage.

RANDOMIZE G5a through G5d.

01 YES
02 NO
98 DK
99 REF

//IF NEWLY ELIGIBLE//
G6. In the year before you got Medicaid coverage, did you delay or avoid getting care?

(IF NECESSARY: "Care" means any health care, including prescription drugs.)

01 YES
02 NO
98 DK
99 REFUSED

G7. <**Since getting Medicaid coverage/In the last 2 years**>, did you have any problems getting the care you needed?

(IF NECESSARY: "Care" means any health care, including prescription drugs.)

01 YES
02 NO

98 DK

99 REFUSED

//IF NEWLY ELIGIBLE//
G8. In the year before you got Medicaid coverage, did you have any problems getting the care you needed?

(IF NECESSARY: "Care" means any health care, including prescription drugs.)

01 YES
02 NO

98 DK
99 REFUSED

My next questions are about times when you may have needed healthcare but could not get it.

G9. <**Since getting Medicaid coverage/In the last 2 years**>, was there a time when you needed dental care but could **not** get it at that time?

01 YES
02 NO
98 DK
99 REFUSED

//IF G9 = 01//
G10. Why could you **not** get the dental care you needed? For each statement I read, please tell me yes or no.

G10a. You thought it would cost too much.
G10b. You did not have transportation.
G10c. The dentist was not available when you needed to go.
G10d. Medicaid would not pay for the dental care you needed.
G10e. You could not find a dentist who would take your Medicaid coverage.

RANDOMIZE G10a through G10e

01 YES
02 NO
98 DK
99 REFUSED

G11. <**Since getting Medicaid coverage/In the last 2 years**>, was there a time when you needed vision care or eye glasses but could **not** get it at that time?

  01 YES
  02 NO
  98 DK
  99 REFUSED

//IF G11 = 01//
G12. Why could you not get the vision care or eye glasses you needed? For each statement I read, please tell me yes or no.

  G12a. You thought it would cost too much.
  G12b. You did not have transportation.
  G12c. The vision care provider was not available when you needed to go.
  G12d. Medicaid would not pay for the vision care or eye glasses you needed.
  G12e. You could not find a vision care provider who would take your Medicaid coverage.

  RANDOMIZE G12a through G12e

  01 YES
  02 NO
  98 DK
  99 REFUSED

G13. <**Since getting Medicaid coverage/In the last 2 years**>, was there a time when you needed mental health care or counseling services but could **not** get it at that time?

  01 YES
  02 NO
  98 DK
  99 REFUSED

//IF G13 = 01//
G14. Why could you **not** get the mental health care or counseling services you needed? For each statement I read, please tell me yes or no.

  G14a. You thought it would cost too much.
  G14b. You did not have transportation.
  G14c. You did not know where to go to get care.
  G14d. The mental health care provider was not available when you needed to go.
  G14e. Medicaid would not pay for the mental health care or counseling services you needed.
  G14f. You could not find a mental health care provider who would take your Medicaid coverage.
  RANDOMIZE G14a through G14f

01 YES
02 NO
98 DK
99 REFUSED

G15. <**Since getting Medicaid coverage/In the last 2 years**>, have you **not** filled a prescription? This includes refills.

01 YES
02 NO
98 DK
99 REFUSED

//IF G15 = 01//
G16. Why did you **not** fill a prescription? For each statement I read, please tell me yes or no.

G16a. You thought it would cost too much.
G16b. You did not have transportation to the pharmacy.
G16c. Medicaid would not pay for the prescription.
G16d. You did not think you needed the prescription.
G16e. You do not like taking medicine.
G16f. You could not find a pharmacy that would take your Medicaid coverage.

RANDOMIZE G16a through G16f

01 YES
02 NO
98 DK
99 REFUSED

G17. <**Since getting Medicaid coverage/In the last 2 years**>, was there a time when you needed any other health care, such as a medical exam or medical supplies, but could **not** get it at that time?

01 YES
02 NO
98 DK
99 REFUSED

G18. For this next question, please think about all possible unmet health needs, including unmet dental, vision, mental health, prescription, medical exam, and medical supply needs. <**Since getting Medicaid coverage/Compared to 2 years ago**>, do you have fewer, more, or about the same number of unmet health needs?

01 FEWER
02 MORE
03 SAME
04 RESPONDENT VOLUNTEERED THAT THEY DIDN'T HAVE ANY UNMET HEALTH NEEDS
98 DK
99REF

G19. <**Since getting Medicaid coverage/Compared to 2 years ago**>, is getting the medical care you need easier, harder, or has it stayed the same?

(IF NECESSARY: "Care" means any health care, including prescription drugs.)

01 EASIER
02 HARDER
03 STAYED THE SAME
98 DK
99 REFUSED

//IF G19 = 01//
G20. Why is getting the medical care you need easier? For each statement I read, please tell me yes or no.

G20a. You have fewer out-of-pocket costs.
G20b. It is easier to get a provider to see you.
G20c. You have more providers to choose from.
G20d. Your family situation has improved.
//ONLY ASK G20e OF THE NEWLY ELIGIBLES//
G20e. You now have insurance coverage or your Medicaid coverage is better than your prior insurance coverage.

RANDOMIZE G19a through G19e

01 YES
02 NO
98 DK
99 REFUSED

//IF G19 = 02//
G21. Why is getting the medical care you need harder? For each statement I read, please tell me yes or no.

G21a. You have more out-of-pocket costs.
G21b. It is harder to get a provider to see you.
G21c. You have fewer providers to choose from.

G21d. Your family situation has gotten worse.

//ONLY ASK G21e OF THE NEWLY ELIGIBLES//

G21e. Your Medicaid coverage is worse than your prior insurance coverage.

RANDOMIZE G20a through G20e

01 YES
02 NO
98 DK
99 REFUSED

G22. <**Since getting Medicaid coverage/Compared to 2 years ago**>, is getting the dental care you need easier, harder, or has it stayed the same?

01 EASIER
02 HARDER
03 STAYED THE SAME
04 R SAID CARE WAS NOT NEEDED
98 DK
99 REFUSED

G23. <**Since getting Medicaid coverage/Compared to 2 years ago**>, is getting the vision care or eye glasses you need easier, harder, or has it stayed the same?

01 EASIER
02 HARDER
03 STAYED THE SAME
04 R SAID CARE WAS NOT NEEDED
98 DK
99 REFUSED

G24. <**Since getting Medicaid coverage/Compared to 2 years ago**>, is getting the mental health care or counseling services you need easier, harder, or has it stayed the same?

01 EASIER
02 HARDER
03 STAYED THE SAME
04 R SAID CARE WAS NOT NEEDED
98 DK
99 REFUSED

G25. <**Since getting Medicaid coverage/Compared to 2 years ago**>, is filling the prescriptions you need easier, harder, or has it stayed the same?

        01 EASIER
        02 HARDER
        03 STAYED THE SAME
        04 R SAID CARE WAS NOT NEEDED
        98 DK
        99 REFUSED

G26. <**Since getting Medicaid coverage/Compared to 2 years ago**>, is getting any other health care you need, such as a medical exam or medical supplies, easier, harder, or has it stayed the same?

        01 EASIER
        02 HARDER
        03 STAYED THE SAME
        04 R SAID CARE WAS NOT NEEDED
        98 DK
        99 REFUSED

Section H: Employment Status

These next questions are about your current employment status.

H1. **Last week** did you have a job either full or part-time?

(IF NECESSARY: Include any job from which you were temporarily absent.

IFNECESSARY: The sponsors want to know whether it is difficult it is for people with Medicaid to find and keep jobs.)

01 YES
02 NO
98 DK
99 REFUSED

//IF H1 = 01**//**

H2. Does your employer or union offer a health insurance plan to any of its employees?

(INTERVIEWER: IF RESPONDENT HAS MORE THAN ONE JOB, ASK RESPONDENT TO CONSIDER THE JOB WHERE (HE/SHE) WORKS THE MOST HOURS.

INTERVIEWER: THIS QUESTION REFERS TO INSURANCE OFFERED BY THE EMPLOYER, NOT NECESSARILY INSURANCE THE RESPONDENT HAS.)

01 YES
02 NO
98 DK
99 REFUSED

//IF H2 = 01 **//**

H3. Are you currently eligible to participate in your employer or union health plan?

(INTERVIEWER: IF RESPONDENT STATES THAT THEY ARE IN A WAITING PERIOD, THEY ARE NOT CURRENTLY ELIGIBLE.

INTERVIEWER: IF RESPONDENT HAS MORE THAN ONE JOB, ASK RESPONDENT TO CONSIDER THE JOB WHERE (HE/SHE) WORKS THE MOST HOURS.)

01 YES
02 NO
98 DK

99 REFUSED

//IF NEWLY ELIGIBLE AND H1 = 01//

H4. Did getting Medicaid coverage make it easier for you to get a job or continue working?

    01 YES
    02 NO
    98 DK
    99 REFUSED

//IF H1 = 02//

H5. When did you last work at a job or business? Was it...

    01 Within the last 12 months
    02 More than 12 months ago, or
    03 Or you have never worked
    98 DK
    99 REF

//IF H1 = 02//

H6. Do you have a disability that prevents you from accepting any kind of work during the next six months?

    01 YES
    02 NO
    98 DK
    99 REFUSED

H7. Are you currently looking for work?

    01 YES
    02 NO
    98 DK
    99 REFUSED

    //ASK OF NEWLY ELIGIBLE ONLY: IF H1 = 02 & H7=1//

H8. Does having Medicaid coverage make it easier or harder to look for work?

    01 EASIER
    02 HARDER
    98 DK
    99 REFUSED

//IF H1 = 01//

H9. Altogether, how many jobs or businesses do you currently have?

      01 1 JOB
      02 2-3 JOBS
      03 4 OR MORE JOBS
      98 DK
      99 REF

//IF H1 = 01//

H10.   Do you usually work 35 hours or more per week <**at your job/at all your jobs combined**>?

      01 YES
      02 NO
      03 R SAID THAT HOURS VARY
      98 DK
      99 REF

//IF H10 = 02 or 03 //

H11.   Do you want to work a full time work week of 35 hours or more per week?

      01 YES
      02 NO
      03 REGULAR HOURS ARE FULL TIME
      98 DK
      99 REF

//IF H10 = 02 or 03 AND H11 ne 03//

H12.   Some people work part time because they cannot find full time work or because business is poor. Others work part time because of family obligations or other personal reasons. I am going to read several reasons why you may be working part time. For each, please tell me yes or no.

    H10a. You could only find part-time work
    H10b. You are caring for a family member
    H10c. You have health or other limitations
    H10d. You are going to school
    H10e. You are concerned you will no longer qualify for your Medicaid coverage or other benefits if you work full time
    H10f. You only want to work part time

RANDOMIZE H10a through H10f

01 YES
02 NO
98 DK
99 REFUSED

Section I: Financial Hardship

These next questions are about your financial situation.

I1. <**Since getting Medicaid coverage/In the last 2 years**>, has your financial situation been getting better, worse, or has it stayed the same?

     01 BETTER
     02 WORSE
     03 STAYED THE SAME
     98 DK
     99 REEFUSED

I2.

     //QUESTION STEM FOR NEWLY ELIGIBLES//

     I want you to consider your financial situation now compared to your financial situation before you had Medicaid. For each question please say yes or no. Since getting Medicaid coverage, is it easier to…

     //QUESTION STEM FOR OLDLY ELIGIBLES//

     I want you to consider your financial situation over the last 2 years. For each question please say yes or no. In the last 2 years, is it easier to…

     I2a. Buy food for your family or household?
     I2b. Pay your rent or mortgage?
     I2c. Pay off any debt that you had <before getting Medicaid>?

     RANDOMIZE I2a THROUGH I2c

     01 YES
     02 NO
     03 RESPONDENT SAID THEY DID NOT HAVE THIS
     98 DK
     99 REF

These next few questions are about medical debt. Medical debt includes unpaid hospital bills, doctor bills, or any other bills that you acquired while getting medical care.

//ASK OF NEWLY ELIGIBLE**//**

I3. Before getting Medicaid coverage, did you acquire any medical debt?

(IF NECESSARY: Medical debt includes unpaid hospital bills, doctor bills, or any other bills that you acquired while getting medical care.)

> 01   YES
> 02   NO
> 98   DK
> 99   REFUSED

//IF I3 = 01//

I4. Are you still paying off your medical debt?

> 01   YES
> 02   NO
> 98   DK
> 99   REFUSED

//IF I4 = 01//

I5. About how much medical debt do you still owe? Your best guess is fine.

> ___ENTER DOLLAR AMOUNT
> DK
> REFUSED

//ASK IF I5=DK OR REFUSED//

I6. Which category best represents the total amount of medical debt that you still owe?

> 01 Less than $1,000
> 02 $1,000 to $10,000
> 03 More than $10,000 to $30,000, or
> 04 More than $30,000
> 98 DK
> 99 REF

//IF I3 = 01//

I7. For this next set of items, I want you to think about the medical debt you acquired before getting Medicaid coverage. Did you ever do any of the following or have any of the following happened as a result of the **unpaid medical bills** or **medical debt** you acquired before getting Medicaid coverage? For each statement I read, please tell me yes or no.

> I7a. Borrowed money from friends or relatives.
> I7b. Taken a loan of any kind.
> I7c. Filed for or taken bankruptcy.

I7d. Fallen behind in paying bills.
I7e. Had a creditor call or come to see you to demand payment.
I7f. Had your wages attached or garnisheed by a creditor.

RANDOMIZE I7a THROUGH I7f

01 YES
02 NO
98 DK
99 REF

I8. <Since getting Medicaid coverage/In the last 2 years>, have you acquired medical debt?

(IF NECESSARY: Medical debt includes unpaid hospital bills, doctor bills, or any other bills that you acquired while getting medical care.)

01   YES
02   NO
98   DK
99   REFUSED

//IF I8 = 01//

I9. About how much medical debt have you acquired <since getting Medicaid coverage/in the last 2 years>? Your best guess is fine.

___ENTER DOLLAR AMOUNT
        DK
        REFUSED

//ASK IF I9=DK OR REFUSED//

I10. Which category best represents the total amount of medical debt that you have acquired <since getting Medicaid coverage/in the last 2 years>?

01 Less than $500
02 $500 to $1,000
03 More than $1,000 to $5,000, or
04 More than $5,000
98 DK
99 REF

Section J: Health Behaviors and Additional Demographics

These next few questions are about your experiences with tobacco and alcohol.

J1. Have you smoked at least 100 cigarettes in your entire life?

(IF NECESSARY: 5 packs contain 100 cigarettes. This does not include smoking pipes, cigars, and electronic cigarettes or e-cigarettes.)

01   YES
02   NO
98   DK
99   REFUSED

//IF J1 = 01//

J2. Do you smoke cigarettes every day, some days, or not at all?

01   EVERY DAY
02   SOME DAYS
03   NOT AT ALL
98   DK
99   REFUSED

//IF J2=3//

J3. How long has it been since you quit smoking cigarettes? Would you say…

01 Less than 1 year ago
02 1 year but less than 2 years ago
03 2 years but less than 5 years ago, or
04 5 years or more ago
98 DK
99 REF

J4. During the past 30 days, considering all types of alcoholic beverages, on how many days, if any, did you have <**4 (WOMEN) / 5 (MEN)**> or more drinks on an occasion?

(INTERVIEWER: IF RESPONDENT SAYS "NO", PROBE FOR THE EXACT NUMBER OF DAYS.

IF THE RESPONDENT SAYS "NONE," ENTER 0)

_____(Number of days 0-30)
98   DK
99   REFUSED

The next few questions are for general classification purposes.

J5. How many children 18 years of age **or younger** live in your household?

(IF NECESSARY:

- o   For purposes of this survey, "household" is defined differently from "family". Household refers to all of the people who are living in your house, apartment, or mobile home where we reached you.)

00   NO CHILDREN
01   1 CHILD
02   2 CHILDREN
03   3 CHILDREN
04   4 CHILDREN
05   5 CHILDREN
06   6 CHILDREN
07   7 CHILDREN
08   8 CHILDREN
09   9 CHILDREN
10   10 CHILDREN
11   11 CHILDREN
12   12 OR MORE CHILDREN
98   DK
99   REFUSED

J6. Are you…

01 married
02 divorced
03 widowed
04 separated
05 never married, or

06 a member of an unmarried couple?
98 DK
99 REFUSED

//IF J7 = 01 or 06//

J7. Is your spouse or partner currently employed?

      01   YES
      02   NO
      98   DK
      99   REFUSED

J8. What is the highest level of school you have completed or the highest degree received?

(INTERVIEWER NOTE: IF RESPONSE IS:
"HIGH SCHOOL", ASK "Does this mean "some high school" or "high school graduate"
"COLLEGE", ASK "Does this mean "some college" or "four year college graduate"
"DEGREE", ASK "what type of degree")

01 LESS THAN FIRST GRADE
02 FIRST THROUGH 8TH GRADE
03 SOME HIGH SCHOOL, BUT NO DIPLOMA
04 HIGH SCHOOL GRADUATE OR EQUIVALENT (GED/VOCATIONAL/TRADE SCHOOL GRADUATE)
05 SOME COLLEGE, BUT NO DEGREE
06 ASSOCIATE DEGREE (1-2 YEAR OCCUPATIONAL, TECHNICAL OR ACADEMIC PROGRAM)
07 FOUR YEAR COLLEGE GRADUATE/BACHELOR'S DEGREE
08 ADVANCED DEGREE (INCLUDING MASTER'S, PROFESSIONAL DEGREE, OR DOCTORATE)
98 DK
99 REFUSED

J9. Are you of Hispanic or Latino origin?

01 YES
02 NO
98 DK
99 REFUSED

J10. Which one or more of the following would you say is your race? Are you White, Black or African American, Asian, Native American, American Indian, or Alaskan Native, Native Hawaiian or Pacific Islander, or some other race I have not mentioned?

    01 WHITE
    02 BLACK OR AFRICAN AMERICAN
    03 ASIAN
    04 NATIVE AMERICAN, AMERICAN INDIAN, OR ALASKAN NATIVE
    05 NATIVE HAWAIIAN OR OTHER PACIFIC ISLANDER
    06 HISPANIC, LATINO, SPANISH
    97 OTHER (DO NOT COLLECT AS OPEN-ENDED)
    98 DK
    99 REFUSED

Section K: Importance of Medicaid

These last questions are about your experiences since getting Medicaid.

//ASK NEWLY ELIGIBLE ONLY//

K1. **Since getting Medicaid coverage** do you worry about paying medical bills less often, more often, or about as often compared to before you had Medicaid coverage?

    01 LESS
    02 MORE
    03 ABOUT THE SAME
    98 DK
    99 REF

K2. **Since getting Medicaid coverage** do you worry about getting sick and going to the doctor less often, more often, or about as often compared to before you had Medicaid coverage?

    01 LESS
    02 MORE
    03 ABOUT THE SAME
    98 DK
    99 REF

K3. **Since getting Medicaid coverage** do you worry about getting injured and going to the doctor less often, more often, or about as often compared to before you had Medicaid coverage?

    01 LESS
    02 MORE
    03 ABOUT THE SAME
    98 DK
    99 REF

In your own words, describe in a sentence what getting Medicaid has meant to you.

OPEN-ENDED RESPONSE; INTERVIEWER SHOULD TYPE VERBATIM IF POSSIBLE

Section L: Final Script, Including Incentive and Recruitment for Biometric Screening

Thank you for answering our questions. We want to reassure you that your responses will be kept strictly confidential.

> //SKIP TO INCENT FOR THOSE NOT SELECTED FOR BIOMETRIC SCREENING//
> //ASK IF SELECTED FOR BIOMETRIC SCREENING//

Survey respondents are being asked to participate in a quick health assessment that will help us learn more about the current health status of those enrolled in Medicaid. You will receive $100 for your time. A registered nurse will check your blood pressure, height, and weight, and use a finger prick to measure your blood sugar and cholesterol. The visit will take no more than 30 minutes. If you are interested, we can schedule the assessment right now?

> (IF NECESSARY: Your participation in the health assessment is completely voluntary. The information we gather is confidential and will be used only to learn about the health profiles of those in the Medicaid program. Your information will not be shared with anyone outside of the research team and you will get the results of your health assessment.)

> (IF RELUCTANT: Do you have any questions or thoughts about participating in this health assessment? We can schedule the assessment right now and you will receive a reminder call from us prior to the appointment.)
> 01   YES
> 02   NO
> 03   NOT SURE (re-contact)

//ASK IF YES, BIOMET=01//
We currently have dates and times available on ....
> //SELECT BIOMETTIME//
> //VERIFY TIME//

> We want to thank you for agreeing to participate in the Ohio Medicaid Group VIII health assessment. Your appointment is scheduled on TIME/DATE at LOCATION. You are required to bring personal identification (ID) to this health assessment. This ID could be your Medicaid benefit card, an Ohio Driver's License, a school ID, a military ID, another photo ID, or a recent utility bill with your name and address listed. You are also encouraged to bring with you the contact information for your primary health care provider or the place you usually go for health care services.
> We would like to send you an e-mail reminder for your appointment. What is your e-mail address?
> //INSERT EMAIL ADDRESS//

INTERVIEWER:
YOU ARE REQUIRED TO READ BACK THE EMAIL ADDRESS CHARACTER BY CHARACTER
IF R DOESN'T HAVE AN EMAIL ADDRESS, ENTER 96 NO EMAIL ADDRESS

INCENT

To thank you for your participation in the survey, we would like to verify your address to send you a gift card for $20. The gift card may take 3 to 4 weeks to reach you.

ADDRESS

I have your name and address as: READ AND SPELL NAME AND ADDRESS. CORRECT CHANGES AS NEEDED.

THANKS

I would like to thank you again for your participation on this important project. Have a nice (day/evening).

(IF NECESSARY, If you would like to speak to someone about the survey please or if you have questions about your rights as a study participant please call RTI at 1-866-406-7333).

01 CONTINUE

Appendix B: Group VIII Telephone Survey Prenotification Letter

Case ID: <<Voxco_ID>>
<<Barcode>>

Español en el reverso

<<Respondent Name>>
<<Address1>>
<<Address2>>
<<City>>, <<State>> <<Zip>>

Dear <<Respondent Name>>:

Your name has been selected to participate in a survey by the Ohio Department of Medicaid that asks about your experiences with Medicaid. This important telephone survey is your opportunity to assist the Ohio Department of Medicaid to evaluate the State's Medicaid program.

The Ohio State University and the survey company RTI International has been selected to help the Ohio Department of Medicaid conduct this study. In the coming week representatives of RTI will try to reach you by phone to give you an opportunity to share your experiences. Those who are eligible to participate in the study will receive a $20 gift card for doing so.

Your participation is very important because you are part of a scientific sample representing **communities in the State of Ohio.** The survey will ask a few general questions about you and your experiences with Medicaid. If you choose not to participate, you will not be penalized or lose your Medicaid benefits.

Thank you for your help and please be assured that **we are not selling anything or asking for money.** You can also call us toll-free at **866-406-7333** to update your contact information or ask any questions about the survey.

Sincerely,

Dr. Mary S. Applegate
Medical Director
The Ohio Department of Medicaid
50 West Town Street, Suite 400
Columbus, Ohio 43215

50 W. Town Street, Suite 400
Columbus, Ohio 43215

An Equal Opportunity Employer and Service Provider

Ohio
Department of Medicaid

Estimado Participante de Encuesta,

La presente es para informarle, que el Departamento de Medicaid de Ohio está llevando a cabo una encuesta sobre la calidad del programa. Su nombre ha sido seleccionado al azar por Medicaid de Ohio, para participar en ésta importante encuesta. La encuesta hace preguntas sobre las experiencias que usted ha tenido con los cuidados y servicios proporcionados por Ohio Medicaid. Esta encuesta, es su oportunidad para ayudarle a Ohio Medicaid a mejorar los servicios que provee.

RTI internacional es la firma independiente que la cual está ayudándonos a conducir esta encuesta. La próxima semana, una persona de RTI lo llamará por teléfono para hacerle las preguntas relacionadas con la encuesta. Si usted es elegible y decide participar recibirá una tarjeta de compras por un valor de $20 dólares.

¡Su participación es muy importante para nosotros! Usted pertenece a un pequeño grupo, seleccionado entre todos los usuarios de Medicaid, por esta misma razón le pido que nos ayude. Sus respuestas serán confidenciales y solamente serán vistas por el equipo de investigación. Esta encuesta es voluntaria. Si usted decide no participar, no perderá ninguno de los beneficios ofrecidos por Medicaid.

Por favor, llame RTI al número gratuito **1-866-406-7333** para poner al día su información y para responder cualquier pregunta que usted tenga, relacionada con esta encuesta.

Gracias por su ayuda con esta importante encuesta.

Sinceramente,

Dr. Mary S. Applegate
Directora Médica
Departamento de Medicaid de Ohio
50 West Town Street, Suite 400
Columbus, Ohio 43215

Appendix C:
Group VIII Biometric Screening Protocol

Ohio Medicaid Group VIII Study - Data Collection Checklist

Roster Receipt

- Seven days prior to clinic session date, RTI will upload Clinic Session Roster and Medical Records Abstraction Roster to FTP site.

- OSUHP POC will be notified by RTI via email when rosters are uploaded to FTP site.

- OSUHP will download the rosters provided by RTI prior to clinic session date.

Data Quality Review

- As health screenings are completed, nurses will bring completed forms *by participant* to the OSUHP Clinic Session POC who will review all forms for completeness and legibility to ensure all issues are resolved ***while participant is present***.

  o Each nurse will also complete an individual gift card transmittal form as they pay their assigned participants for completing the health screening. They will review this form at the end of the day for completeness and provide the form to the OSUHP POC.

- Clinic Session Roster completion (OSUHP Clinic Session POC)

  o Confirm roster is complete and participant's status is indicated (Complete, No-show).

  o Confirm all forms marked as receipted on the Clinic Session Roster are present.

  o Paper clip documents together, by participant.

- Gift card transmittal form completion (OSUHP Clinic Session POC)

  o Complete the transmittal form, and confirm the number of cards distributed at the session matches the number of completed health screenings, and Medical Record Abstraction participants.

- Forms review, by OSUHP POC post-clinic session

  o Confirm per completed Clinic Session Roster that required forms are present, complete, and legible.

  o Confirm per Gift card Transmittal Form that gift card reconciliation is accurate for clinic session.

  o Resolve any discrepancies with OSUHP Clinic Session POC prior to shipping hard copy session materials to RTI.

- If Adverse Event Reports were submitted for session, review for completeness and retain original copy.

- OSUHP POC will copy the adverse event forms and ship a copy to RTI along with the clinic session materials. OSUHP will keep the originals.

Shipping Materials to RTI

- Once all steps above have been completed, place the completed Clinic Session Roster and gift card transmittal form in the clinic session envelope.

- Retain yellow copies of forms that were duplicates and place originals in clinic session envelope (paper clipped by participant) and seal. Complete the clinic session label on envelope (if not already done).

- Place sealed clinic session envelope in an RTI-provided FedEx Envelope. The FedEx envelope will have a pre-filled, pre-paid label already attached. Make a note of the FedEx tracking number.

- Arrange for FedEx pick-up or take it to a FedEx location.

- Ship all session envelopes together weekly, after last session of the week is completed.

- Send an email to RTI regarding shipment - include the Clinic Session ID numbers of sessions included in the package, along with the FedEx tracking number and ship date. Include the following RTI Staff on the email:

  o Amy Kowalski - akowalski@rti.org

  o Edrina Burnette - eburnette@rti.org

  o Mallory Grammar - mgrammar@rti.org

  o Milton Cahoon - mcahoon@rti.org

Appendix D:
Group VIII Medical Records Authorization Informed Consent & Authorization Forms

Consent to Be Part of a Research Project

We are inviting you to take part in a research project. This consent form will help you decide if you want to be in the study. Please read this form carefully, and ask study staff to explain anything you do not understand. You will have a chance to ask questions before you decide whether to be in the study.

Description and Purpose of the Ohio Medicaid Group VIII Study (Ohio Group VIII): The Ohio Group VIII will study Medicaid quality, Medicaid Health Homes, and how the Affordable Care Act might change how Medicaid is used.

The study is being conducted by the Ohio State University Medical Center and nurses at the Ohio State University Health Plan. RTI International is a research organization that will help with the health screenings. The screenings include a short physical health screening and blood spot collection.

Health Screening:

- *Screening.* A nurse will conduct a short (10 to 15 minute) health screening. The nurse will measure your height, weight, and blood pressure. You might be asked to remove certain pieces of clothing, like a jacket or shoes, to make it easier for the nurse to give you the health screening. After the health screening, the nurse will tell you what your measurements are.

- *Blood spot.* A nurse will take a small blood sample from one of your fingers. The nurse will place a few drops of blood into a machine for testing. It will take 3 to 5 minutes for the machine to run the tests. The blood will be tested for blood sugar and certain types of fats that are in the blood. The nurse will tell you your test results after the tests are done.

Award for being in the Study: It will cost you no money to be in the Ohio Group VIII study. We will give you a $100 Walmart gift card for completing the health screening. It is recommended that you not use the gift card for the purchase of alcohol, tobacco, firearms or ammunition.

You Are Free to Decide: Your decision to be a part of the Ohio Group VIII is up to you. You can refuse any part of the health screening. You can change your mind and quit the study at any time.

Your Privacy Is Protected: We will keep your health screening results private. We will not report your name, or any other information that says who you are (address or other personal information), to anyone outside our organization. The people in charge of this study are committed to protecting your privacy, and have signed a pledge that they will never give your test results to any other organization. The people doing the research will store your test results in very secure computer files. Only certain people with secret passwords can see this information. All paper forms will be handled very carefully, and will be destroyed at the end of the study period.

Benefits and Risks:

You will be helping us in our health research if you agree to be a part of our study. You can refuse to be in the study. If you do not want to be in the study, you will never lose any of your rights to receive healthcare under your Medicaid plan. While there is a very small chance for loss of personal information, this is highly unlikely to happen because we keep your information safe. The blood test is very safe, but it could cause a small bruise on your finger. You can tell us if you do not wish to have any part of the health screening, and you may take a break at any time.

Further Questions: If you have any questions about the research now or in the future, or about your rights as part of this study, you can contact the project's toll-free phone number at 1-866-406-7333.

My Consent: I read this Ohio Group VIII consent form (or the form has been read to me) and I understand it.
I know that I can help the study by being a part of it. I also understand that there are some very small risks in being part of the study. All my questions have been answered. I know that any future questions that I may have will also be answered. I freely agree to be part of the Ohio Group VIII. I understand that by signing, I am not giving up any of my legal rights. I will be given a copy of this statement.

I have signed below to show that I agree to be part of the Ohio Group VIII Health Screening.

Printed Name of Participant	Signature of Participant	Date

Printed Name of Nurse	Signature of Nurse	Date

AUTHORIZATION FOR THE RELEASE OF MEDICAL RECORDS FOR THE
OHIO MEDICAID GROUP VIII STUDY
CASE ID: XXXXXXXX-X

Patient Name: _____

Date of Birth: _____ / _____ / _____
             Month   **Day**   **Year**

Other Names Under Which Records May be Filed (ex: maiden name, surname, etc.):

_____

_____

_____

I agree to be in the Ohio Medicaid Group VIII Study. I allow you, my doctor or clinic, to give the study the health records they ask for. Ohio State University Medical Center (OSUMC) and RTI International are doing this study. They will need medical records about all health services that I received from you from January 1, 2013 through September 30, 2016. This includes care from any staff (such as doctors or nurses).

I understand that the Health Insurance Portability and Accountability Act of 1996 (HIPAA) keeps my health records private. My records can only be given out if I agree to it. I freely signed this form (or copy of this form) to allow you to share my health records. I also understand that I will always be able to get the health care that I need under Medicaid, even if I do not I sign this form.

I agree that my records will only be used for this study. After my records are given to the study, I know that they will no longer be covered under HIPAA, but will be covered by the Public Health Service Act. The Public Health Service Act says that you cannot let anyone know who I am, unless I agree to it. My name, social security number, or other personal data must be kept safe by all study staff. Also, the study cannot give out the names of the doctor or clinic who gave me medical care, unless they agree to it.

The study can use information I have given in the survey to help you put together my health records. I know that I can change my mind at any time. If I change my mind about being part of the study, I will call or write a study staff member to let them know I changed my mind. I understand that I cannot ask you to take back any records that you already gave to the study before I changed my mind about being part of it. This form will be good for 30 months from the date I sign it.

Medical Provider and/or Medical Group Name: _____

_____

Street Address: _____

Suite: _____

City: _____ **State:** _____ **Zip:** _____

Telephone: __(_____)__ _____ - _____
          Area Code

_____   _____
            Patient's Signature   **Date Signed**

(For Internal Use Only) Records to be Located	
	2013
	2013-2016
	2015-2016

Appendix E:
Group VIII Biometric Screening Form

Biometric Screening Form

Case ID								Clinic ID				
Date (mm/dd/yyyy)								**Nurse ID**				

☐ Identification Provided

Biometric Measurement Results:

Component	Reading	Notes
Height (to nearest .1 cm)		☐ **Self-Reported**
Weight (to nearest .1 kg)		☐ **Self-Reported**
1st Pulse (beats/min.)		
1st Blood Pressure (Systolic/Diastolic)		
2nd Pulse (beats/min.)		
2nd Blood Pressure (Systolic/Diastolic)		

Write "REF" in the Reading column if the measure was refused. Write "UTC" if unable to capture.

Finger Stick Results:

Blood Test	Level	Notes
Hemoglobin A-1C		
Total Cholesterol		
HDL		
Non-HDL		

Write "REF" in the Reading column if the measure was refused. Write "UTC" if unable to capture.

Summary:

Component	Complete	Refused	N/A
Health Screening			
Blood Tests			
Medical Records Abstraction			

Note. Place an X in the appropriate column for each component

Additional Comments

Appendix F:
Group VIII Biometric Screening Adverse Event Protocol

2016 Ohio Medicaid (Group VIII) Adverse Event Protocol

Screening for High Blood Pressure	Action

Emergent - Take BP 2x.
Systolic BP $\geq$ **180**   **With symptoms** such as chest pain,
Diastolic BP $\geq$ **110**   slurred speech, mentation changes,
      visual changes, facial drooping, headache
      Asymptomatic
	Call 911 or to ED for immediate care
	
	Refer to Urgent Care or PCP for same day appointment. Participant to call PCP first and call Urgent Care if PCP can't see them on the same day

Abnormal^
Systolic $\geq$ 140   **Current symptoms such as mentation**
Diastolic $\geq$ 90   **changes, visual changes, or**
      headache and BP 160-179 / 100-109
 	
      Asymptomatic
^For patients age $\geq$ 60, cut-off is $\geq$ 150 / $\geq$ 90
	Same Day Urgent Care or PCP for same day appointment. ED if necessary due to emergent symptoms
	
	Recommend follow-up with PCP in 1-2 weeks

Normal Systolic BP **< 140** SBP < 150 if age $\geq$ 60 Diastolic BP **< 90**	Recommend yearly BP check
Screening for Type 2 Diabetes Mellitus	**Action**
Diabetes (diagnosed or potential new diagnosis) Hgb A1c **$\geq$ 6.5%** **Symptomatic** **Asymptomatic**	**Call 911/refer to ED/Urgent Care/PCP - symptoms drive urgency.** **Recommend follow-up with PCP in 1-2 weeks**
Abnormal (Pre-Diabetes 5.7% - 6.4%) Hgb A1c **$\geq$ 5.7%** **Asymptomatic**	**Recommend follow-up with PCP in 1-2 weeks**
Normal HgbA1c **< 5.7%**	Recommend screening every 5 years
Screening for Obesity	**Action**
Abnormal (Overweight/ Obesity) **Obese: BMI $\geq$ 30.0 kg/m²** Overweight: BMI ….25-29.9	**Recommend follow-up with PCP for annual PE**
Normal **BMI 18.5 kg/m² - 24.9 kg/m²**	Recommend follow-up with PCP for annual PE
Screening for Lipid Disorders	**Action**
Abnormal Non-HDL **$\geq$ 130 mg/dL** HDL **< 40 mg/dL (men)** or **< 50 mg/dL (women)**	**Recommend follow-up with PCP for Annual PE**
Normal Non-HDL **< 130 mg/dL**	Recommend screening every 5 years

Indicators of Possible Distress

The following table provides some guidance as to what behaviors might indicate that a participant is under distress. Note that this is not an exhaustive list.

LEVEL OF DISTRESS	SIGNS OR INDICATORS OF POSSIBLE DISTRESS
MILD	• Change in voice tone or volume. • Hesitancy to answer questions. • Use of inappropriate language/cursing. • Provides non-relevant answers to questions asked. • Displays an unwillingness or hesitancy to continue.
MODERATE	• Displays signs of distress that may include long pauses, or sighing • Sobbing, weeping, and/or crying. • Displays flat voice tones. • Being non-responsive. • Provides nonsensical/bizarre answers.
SEVERE	• Talks about passive or active suicidal thoughts with or without a plan. • Talks about wishing another person was dead with or without a plan to kill the person. • Respondent asks for immediate help from emergency services or 911. • Respondent poses an immediate threat to themselves or someone else.

If participant exhibits a distressed behavior, provide the hotline number to the Ohio Department of Mental Health and Addiction Services @ 1-877-275-6364. Complete an Adverse Event Form describing the distressed behavior (**see Exhibit 1**), and alert the OSUHP Clinic Session POC, who will then alert the OSUHP POC as soon as possible.

Similarly, in the unlikely event that a participant exhibits severe distress by expressing thoughts/intentions of suicide, encourage the participant to call the National Suicide Hotline @ 1-800-273-8255 (TALK). Detailed comments about any case involving suicidal thoughts/intensions should be reported to the OSUHP Clinic Session POC immediately, and recorded on an Adverse Event Form (**see Exhibit 1**). The OSUHP Clinic Session POC will then alert the OSUHP POC as soon as possible.

Exhibit 1. Adverse Event Form

Ohio Medicaid Group VIII Study
Adverse Event Form

Participant Name (Print)		Case ID	
Nurse Name (Print)		Date of Event	

Event Classification *(e.g., High Blood Pressure, Type 2 Diabetes)*	

Event Description:	

Resolution/Action Taken:	

Once complete, submit this form to your OSUHP Clinic Session POC

Appendix G:
Group VIII Biometric Screening Participant Results Form

Ohio Medicaid Group VIII Study - Health Screening and Blood Test Findings

The health screening was not a full exam and should not take the place of visits to your doctor. Feel free to share the results with your doctor. Below is the information we collected and what it means for your general health. If you have any questions, you may call 1-866-406-7333.

Name (Print)		Date	

Your physical measurements were:

Height (inches)	
Weight (pounds)	

Your Body Mass Index (BMI) is:

BMI	

Your blood test results were:

Hemoglobin A1c	
Total Cholesterol	
HDL	
Non-HDL	

Your pulse readings were:

1st Reading	BPM
2nd Reading	BPM

Your blood pressure readings were:

1st Systolic Blood Pressure	mmHg	2nd Systolic Blood Pressure	mmHg
1st Diastolic Blood Pressure	mmHg	2nd Diastolic Blood Pressure	mmHg

Follow-up Recommendation:	
TODAY/IMMEDIATELY	
Within One Month	
Routine Healthcare	

Notes:			
Signature		Date/Time	

Improving Your Numbers

How to Maintain a Healthier Body Weight - Avoid sugar sweetened beverages; drink water throughout the day. Follow a well-balanced, portion-controlled diet. Aim for a weight reduction of 1 to 2 pounds per week. Work with a health coach or dietitian to improve chances for success. Follow the same recommendations for reducing cholesterol.

Classification of Overweight/Obesity by BMI and Associated Disease Risk Relative to Normal Weight*

	BMI (kg/m²)	Obesity Class
Underweight	< 18.5	
Normal	18.5–24.9	
Overweight	25.0–29.9	
Obesity	30.0–34.9	I
	35.0–39.9	II
Extreme Obesity	≥ 40	III

* Disease risk for type 2 diabetes, hypertension, and CVD.

How to Reduce Blood Glucose/A1c - Follow a well-balanced diet, and reduce portion sizes of carbohydrates and simple sugars. Avoid sugar sweetened beverages. Maintain a healthy body weight. Check with your doctor about increasing your physical activity to accumulate at least 150 minutes of moderate activity broken up over a week's time. Schedule an appointment to follow-up with your doctor.

How to Reduce Cholesterol - Eat foods free of trans-fat (partially hydrogenated oil), low in saturated fat, and cholesterol. Eat fish, skinless chicken, skim milk, and legumes such as beans. Eat more fruits, vegetables, and whole grains. Use healthier cooking methods (baking, broiling, steaming, or grilling). Maintain a healthy body weight. Check with your doctor about increasing your physical activity with a goal of 150 minutes of moderate intensity physical activity broken up over a week's time. Schedule an annual physical exam.

How to Increase High-density Lipoprotein (HDL) - Starting an aerobic exercise program may help increase your HDL by as much as 5% - check with your doctor. Weight loss can help increase HDL. Follow the same nutrition recommendations for reducing cholesterol. If you smoke, quitting all forms of tobacco can increase your HDL by 10%.

How to Reduce Blood Pressure - Eat foods with low or no added salt. Limit the number of processed or pre-prepared meals (canned foods and fast food) that you eat. Limit alcohol intake (1 drink/day for women and 1–2 drinks/day for men). Begin a tobacco-cessation program. Learn how to manage stress more effectively. Follow the same recommendations for reducing cholesterol and maintaining a healthier body weight.

Sources

American Heart Association (April 24, 2014) Diseases and Conditions: Prevention and Treatment. Retrieved from http://www.heart.org/HEARTORG/Conditions/Conditions_UCM_001087_SubHomePage.jsp

Schafer, Ernst J. 2002. Lipoproteins, Nutrition and Heart Disease. *American Journal of Clinical Nutrition* 75: 191–212

2008 physical activity guidelines for Americans. U.S. Department of Health and Human Services. Retrieved from http://www.health.gov/paguidelines/pdf/paguide.pdf (accessed June 24, 2013).

Singh,Inder M., MD, Shishehbor, Medni H., DO, MPH, Ansell, Benjamin J, MD. 2007. High-density Lipoprotein as a Therapeutic Target. *Journal of the American Medical Association* 298 (7).

Forrester, James S., MD, Shah, Prediman K., MD. 2006. Emerging Strategies for Increasing High-density Lipoprotein. *American Journal of Cardiology* 98:1542–1549.

Mayo Clinic. Novemeber 9, 2012. HDL Cholesterol: How to Boost Your 'Good' Cholesterol. Retrieved from http://www.mayoclinic.org/diseases-conditions/high-blood-cholesterol/in-depth/hdl-cholesterol/art-20046388?pg=1

Information adapted from The American Diabetes Association – Standards of Medical Care in Diabetes

Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults: Evidence Report. National Heart, Lung, and Blood Institute at www.nhlbi.nih.gov

Appendix H:
Group VIII Medical Records Abstraction Protocol

Ohio Medicaid Group VIII
Medical Records Abstraction
Protocol

A. Overview and Objectives

The primary analytic objectives of the Ohio Medicaid Group VIII Study are to determine the impact of the ACA Medicaid Expansion in Ohio for the newly enrolled Medicaid beneficiaries in the areas of 1) access to health care; 2) health care utilization; 3) health status; 4) financial hardship; 5) health risk behaviors; 6) employment opportunities; 7) health care compliance; and 8) pathways to enrollment.

A core survey questionnaire is under development that will be administered to a representative sample of both newly and pre-expansion Medicaid enrollees to address these issues. In addition to information on the newly eligible Medicaid enrollees collected for the targeted time period in 2015-2016, it will be necessary to assess their health status and health care experiences in 2013 (analyses pre and post the ACA expansions). The design will be supplemented with 1) the administration of a biometric screening for a representative subsample of newly eligible survey respondents to obtain clinical data on their health status in 2016 and 2) the collection of medical records information for a subset of these newly eligible Medicaid enrollees that:

 a) participate in the biometric screening protocol;
 b) give permission and provide the necessary identifying information to contact their targeted in-scope medical providers; and
 c) whose providers agree to participate in the study and provide access to the clinical information that is requested.

The data obtained from the Medical Records Component of the Group VIII Study will serve to inform and supplement study analyses related to health care utilization, health status and health care compliance.

B. Targeted Medical Providers In-Scope for the Medical Records Component

Clinical measures to be obtained from the medical records could include patient assessments; diagnoses; frequency of visits over the eligible time frame. The data should provide information on undiagnosed cases of diabetes, hypertension, etc. and help inform assessments of changes in health status and health care utilization pre and post the Medicaid expansions.

The request of the respondent's usual source of care (USOC) will help identify those cases where the respondent, during the core questionnaire, did not mention being a diabetic, having hypertension, heart disease, or suffer from depression. The biometric screenings will occur post the initial interview and will identify several of these conditions.

At this stage, much greater specificity as to the content to be acquired from the medical records need to be provided by the Group VIII study clinicians and analytic team, in addition to the planned formal analyses that will be conducted with the data that are obtained. Explicit specifications of study hypotheses to be tested and clarification of what medical record data will be required to facilitate these analyses have been formalized and are discussed below.

C. Medical Record Abstraction Recommendation

Given the difficulty in getting the eligible survey participants that consent to the biometric screening to also identify all the providers they have had encounters with during the study time frame in 2013 and 2015-2016; to provide signed permission to contact them and the necessary locating information; and to gain the medical providers cooperation and access to the necessary clinical information, it is essential to minimize the complexity of the design in order to achieve analytic objectives. A design that requires complete information on all eligible medical providers will result in an inefficient use of study resources, as study participants with abstracted data from only a subset of the set medical providers will be viewed as incomplete (not obtaining a full benefit from the costs of acquiring the incomplete information).

Consequently, the design would significantly benefit by

1) restricting the medical records acquisitions to a single provider per individual, preferably their usual source of care (USOC); and

2) restricting the number of events during the time period for which we abstract the data from the medical records.

Under this protocol, the following option is recommended:
For the time period 2015-2016, acquire the medical record information *for the first, the last, and an additional subsample of all encounters with the USOC*; and for the time period pre ACA, acquire the medical record information *for the most recent encounter in 2013 and an additional subsample of all encounters with the USOC in that year.*

Operationalization: For the process of requesting the permission from the Medicaid enrollee for the acquisition of medical record data from their medical provider(s), the request should cover the entire study eligible time period. On occasion, it will be easiest from the provider's perspective to just send RTI all the records within the approved time period. We would then have flexibility in doing the streamlined data abstraction and data entry once the medical records are receipted.

D. Identifying the Usual Source of Care (USOC) for 2013 and 2015-2016

During the biometric screening, eligible survey participants will be asked to give their consent for RTI to contact their medical provider where they received their usual source of care. Upon consent, the nurse will ask the participant to recall their usual source of care in 2013 and who their usual source of care for 2015-2016. For 2013, survey participants will be asked to provide their usual source of care, address and telephone number. The on-site nurse will probe as necessary if the survey participant is having difficulties with recalling who their USOC. For 2015-2016, survey participants will again be asked to provide their usual source of care, address and telephone number. If the participant is unable to recall who their usual source of care is, the nurse on-site will provide the usual source of care for the Medicaid data.

If the survey respondent is still having difficulty identifying their usual source of care, the nurse will ask them to consider identifying the provider or location they most frequently have sought medical care from during the eligible time frames. It is possible that a subsample of the newly eligible Medicaid enrollees will have the same medical provider as their usual source of care pre and post the ACA Medicaid Expansions. This will not always be the case and for a subset, their most frequent site of medical care in 2013 will be a clinic or an ER.
In order to improve the capacity to identify the usual source of care these newly eligible Medicaid enrollees sought treatment from in 2013 and 2015-2016, the on-site nurse will have access to a full list of all providers in the state of Ohio use of to look up provider information. This would be available at the time of the biometric screening, when provider contact permission forms are signed.

E. Elements of Data to be Abstracted from Medical Record

A large proportion of the individuals selected for the Medical Records component will have one or more chronic conditions. Due to the limited sample size for the set of chronic conditions that will receive particular scrutiny (e.g. diabetes, heart disease, hypertension, depression, etc.), the study design anticipates that for analytic purposes, more aggregated analytical measures at the beneficiary level will be studied, where individuals will be pooled across diagnostic categories rather than analyzed separately by disease category. The information that will be abstracted for all individuals, when available, are:

- DOB

- Dates of Service

- Height

- Weight

- Blood Pressure

- Temperature

- Diagnoses

- Procedures

- Medications

- Tests

With this information Group VIII analysts would have the capacity to assess changes in health status overall and by demographic subgroups (pooling across individuals with chronic diseases).
With respect to the measurement of health care utilization, household reports of the frequency of medical events are subject to significant recall error which expands in concert with the length of the recall period, the counts of encounters available in the medical recorders should improve assessments of utilization and may also provide additional information of other sources of medical care received by the patient.

Appendix I:
Group VIII Medical Records Abstraction Form

Abstraction Notes Form

EVENT DATE OF SERVICE	TOTAL DATES OF SERVICE FOR THE YEAR (*Only complete one time*)
⊔⊔⊔ ⊔⊔⊔ 2 0 ⊔⊔⊔	⊔⊔⊔

BIOMETRICS	**Height:** _____ / _____ **Weight:** _____ **BP:** _____ / _____ **Temperature:** _____

ICD9 or ICD10/ DIAGNOSES	_____ _____ _____ _____ _____ □ ICD-10 checkbox □ ICD-10 checkbox □ ICD-10 checkbox □ ICD-10 checkbox □ ICD-10 checkbox **Descriptions:** _____ – _____ – _____ – _____ – _____

CPT-4 CODES/PROCEDURES (*Code or Description*)	TESTS	RESULTS

	NAME	DOSAGE	TYPE
MEDICATIONS/Rx **Name/Dosage/Type** (*Tablet, capsule, shot, etc*)			

Appendix J:
Group VIII Medical Records Authorization Packet

«DATE»

«CONTACT_NAME»

Provider Name

MEDICAL RECORDS DEPARTMENT

«FAX_NUMBER»

Total Pages (including cover sheet): «TOTAL_PAGES»

Total Number of Patients: [FILL]

«Instructions»

Thank you for speaking with me earlier. Per our conversation, this fax packet includes the study information and the signed patient authorization forms. These forms were signed by your patients who are actively participating in this research study. These signed forms allow us to contact you to obtain data from the _complete_ medical records (including Date(s) of Service, Services Provided (CPT-4, DRG, or descriptions), Diagnoses or Conditions (ICD codes), Tests and Results, and Prescriptions), for 2013, 2015, and/or 2016, for the patients listed on the enclosed confidential patient checklist.

«SPECIAL_COMMENT»

Enclosures:

- Letter from the Ohio Department of Medicaid
- Confidential Patient Check List
- Fax Coversheet and Mail Return Form
- Frequently Asked Questions (FAQ)
- «TOTAL_AFS» – Signed Authorization Forms

Ohio
Department of Medicaid
John R. Kasich, Governor
John B. McCarthy, Director

«DATE»

Dear «POC_NAME»:

Thank you for agreeing to participate in the Medical Records component of the Ohio Medicaid Group VIII Study. We understand that one of our data collection specialists recently spoke to you about the study, which is being conducted by the Ohio Department of Medicaid and the Ohio State University (OSU). We thank you in advance for your contributions and would like to take this opportunity to tell you more about the study.

The objective of the study is to collect data from Ohio Medicaid enrollees across the state, with the goal of assessing the health status and health care utilization of the "newly-eligible" Medicaid population – those who gained Medicaid through State expansion under the Affordable Care Act – as compared with the "previously-eligible" population who met the pre-ACA eligibility criteria. The study is required by specific legislation passed by the State of Ohio legislature late last year, which requires this data for the program evaluation of the effectiveness and impact of Medicaid expansion under the ACA.

With the written permission from the enrollees, we are now contacting the appropriate medical providers to request medical records on selected visits, one in 2015 after Medicaid expansion, and one in 2013 before Medicaid expansion, to determine presence of specific diagnostic and health care information, such as chronic conditions, prescriptions, and other care-related information. You are receiving this letter because one or more of your patients have given us written authorization to request this information from your medical records.

The study materials enclosed with this letter include a list of your patients who have agreed to participate in the survey with an authorization form for each patient.

A data collection specialist from our research partner, RTI International, will call shortly after you have received these materials to address any additional questions and confirm receipt of the Authorization Forms. If you have questions about the forms or procedures, call RTI International toll-free at «TOLL_PHONE_NUMBER».

Again, thank you for your participation.

Sincerely,

Dr. Mary Applegate, MD
Medical Director

50 W. Town Street, Suite 400
Columbus, Ohio 43215
medicaid.ohio.gov

An Equal Opportunity Employer and Service Provider

Confidential Patient Checklist – PLEASE

Step 1: Please check the appropriate box next to the patient name on the list below to indicate which of the following applies to each patient: you were able to locate the patient's records for 2013, 2015 and/or 2016 or you were able to locate the patient but there were no 2013, 2015 and/or 2016 records.

Step 2: Please Provide the <u>Complete</u> Records for Each Patient (*year specified in parentheses*) that you were able to locate for 2013, 2015 and/or 2016. For each patient listed below, we are requesting information for all services each patient received *for the year specified in parentheses*.

FOR EACH PATIENT EVENT WE NEED THE FOLLOWING:

- **Date(s) of Service**
- **Services Provided (CPT-4, DRG, revenue code, HCPCS, or descriptions)**
- **Diagnoses or Conditions (ICD-9 Codes or descriptions)**
- **Tests and Results**
- **Prescriptions (*all*)**

Step 3: Please Return Copies of the Records by Fax or Mail: When returning copies, please use the Fax Cover Sheet or Mail Return Form included in this fax. Please include this **<u>completed</u>** Confidential Patient Check List, which includes the patients name and *specific year of records* we are looking to obtain.

The patient(s) listed below have given us written authorization to contact you and request information from your records. Copies of the signed authorization forms are included in this fax.

	Provider Name	(Year of Records),Patient Name	Date of Birth	Gender	**CHECK ONE FOR EACH PATIENT**	
					Patient Records Located	No Patient Records Located

Fax Cover Sheet and Mail Return Form

When returning the Confidential Patient Checklist and copies of the records, please use this page as either a Fax Cover Sheet or Mail Return Form.

To	Ohio Group VIII Study – Medical Records
Fax	«TOLL_FAX_NUMBER»
Phone	«TOLL_PHONE_NUMBER»
From	
Reference Number	«GID»
Date	
Total Pages (including cover sheet)	

Please send mail to:

Ohio Group VIII Study – Medical Records
«MEPS_MAIL_ADDRESS»

REFERENCE#: «GID»

This fax includes confidential information, and may be used only by the person or entity to which it is addressed. If the receiver of this fax is not the intended recipient or his or her authorized agent, the receiver is hereby notified that dissemination, distribution or copying of this fax is prohibited. If you have received this fax in error, please notify the sender by calling «TOLL_PHONE_NUMBER» and destroy the contents of this fax immediately. Thank you.

Frequently Asked Questions

What information is needed?

For each of the patients on the enclosed list, we need information about their hospital events. For each date of service in 2013, 2015, and/or 2016, we need:

- Date(s) of Service
- Services Provided (CPT-4, DRG, revenue code, HCPCS, or descriptions)
- Diagnoses or Conditions (ICD-9 Codes or descriptions)
- Tests and Results *(all)*
- Prescriptions (*all*)

How do I know the information will be kept confidential?

The confidentiality of data collected for the Ohio Group VIII Study is protected by Federal law under Sections 944(c) and 308(d) of the Public Health Service Act [42 U.S.C. 299c-3(c) and 242m(d)]. No information that could identify an individual or establishment will be disclosed unless that individual or establishment has consented to such a disclosure.

Personal identifying information such as names or addresses are removed before information from the study is made available to researchers. Findings are published in statistical summaries and tables and micro-data is released on "public use" data files.

Who is sponsoring/conducting this study?

This study is sponsored by the State of Ohio. This study is sponsored by the State of Ohio Department of Medicaid.

What is this survey about? / What is the purpose of this survey?

The purpose of the study is to help the State of Ohio gather information on Medicaid coverage, the use of medical services, and problems getting health care. These data will inform healthcare policy decisions and ultimately, have the potential to make a significant impact on the lives of people living in Ohio.

How are Provider's or Offices chosen?

Provider's names and/or facilities associated with a medical provider were named by respondents in the household data collection as sources of care during 2013, 2015, and/or 2016. The patients we are asking about signed HIPAA-compliant forms authorizing and requesting you to release the information sought by the study.

Appendix K:
Group VIII Stakeholder Interview Questions

Stakeholder Interview Questions

We are very interested in knowing what you think about this important issue. Questions will be about your experiences with Medicaid recipients. The interview will be audio taped with a tape recorder and transcripts of the discussion will be created and the data will then be analyzed. Identifiable information will not be included in the report.

1. How has Medicaid expansion affected your organization?
2. How has Medicaid expansion affected your job?
3. Has Medicaid expansion impacted the demand on providers within your organization?
4. What impact did it have on the supply of providers from your perspective?
5. Have there been any surprises that are directly related to Medicaid expansion?
6. What are you hearing about Medicaid expansion from providers in your organization or from others outside the organization?
7. From your perspective, what are the benefits of Medicaid expansion on your clients? What are the challenges the clients have faced with Medicaid expansion?

Appendix L:
Group VIII Focus Group Script

Focus Group Script

I would like to introduce myself. My name is Amy and I welcome you to the focus group discussion today and thank you for taking the time to participate. This focus group is being held today to talk about your experiences with the Ohio Medicaid program since you became covered by Medicaid.

We are very interested in knowing what you think about this important issue. Questions will be about your experiences enrolling in Medicaid, getting care from doctors and other health care providers, and how the health care you receive now differs from what you received before you had Medicaid.

We use focus groups to gather information about opinions and beliefs. We invite all of you to participate and to assist us by doing the following:

- Please speak up when you have an opinion or comment on any of the topics we discuss.
- If you do not hear clearly or understand a specific question, please let me know.

This part of the session today will last between 60 and 90 minutes. Remember that the session today will be audio taped with a tape recorder and transcripts of the discussion will be created and the data will then be analyzed.

Again, we ask that you speak up and directly to the recorder so that everyone's responses will be heard. We want everyone to participate and speak out.

- I do ask that only one person speak at a time.
- Please feel free to share your ideas, even if they are different from others.
- There is no right or wrong answer.
- Also, remember that everything that is said during the discussion is <u>confidential</u> and specifics of what individuals say should not be repeated outside of the discussion today. None of your names or personal information will be shared with anyone outside of the study team.
- Your information will only be presented in summary form.
- If at any time you wish not to participate any longer, you may be excused.

ICEBREAKER QUESTION: First I would like to go around the room and have each of you introduce yourself and tell us when you enrolled in Medicaid and which managed care company handles your Medicaid coverage.

NOTE: Throughout this discussion, I will refer to "Medicaid" but when you answer the questions you should consider both Ohio Medicaid and the managed care pan that handles your Medicaid coverage.

Throughout the discussion, when I ask about doctors and healthcare I want you to consider both your physical health and mental health.

Questions:

1. The first topic is about your use of health care services, like doctors, hospitals, clinics, and emergency rooms. Since you enrolled in Medicaid have you had to change your usual source of care, whether it be a doctor, clinic or the emergency room?

   a. Have you or anyone in your household had a change in use of the emergency room? Why did the change occur?

   b. Have you or anyone in your household had a problem getting in to see a doctor? Elaborate on the reason.

   c. For those of you who are newly enrolled in Medicaid, what has not worked so well with Medicaid, either accessing care, coverage of services, or anything else?

2. The next topic relates to the effect that Medicaid has had on your finances. We have heard in the survey that most people say that Medicaid has made it easier for them to look for work? Has Medicaid had an impact on your ability, or the ability of anyone in your household, to look for a job?

   a. How else has Medicaid impacted your family finances?

   b. If you have been able to save more money because of Medicaid, how have you used the money?

   c. Let's now talk a bit about your health-related costs now compared to before you had Medicaid. Thinking of all the costs, including time off work, transportation, and other costs related to going to appointments, do you think the costs are now greater or less compared to before you had Medicaid?

3. The third topic relates to how Medicaid may have impacted your health. A number of participants in the survey told us that their health has improved. Can you talk about why health may be better when someone is on Medicaid?

4. The final topic relates to some specific questions from the surveys you completed a while back. If you recall, we asked about your "usual source of care". Did you know what we meant when we used that phrase? If no, how would we ask who you see when you are sick/ill?

5. We also asked about who you saw for health care in 2013. How easy was it for you to recall who you usually saw in 2013?

6. When thinking about the medical provider you saw in 2013, what would help you to recall who you saw?

Appendix M:
Group VIII Telephone Survey Verbatim Question Coding

Qualitative Coding of Question K4

Code	Definition	% Quotes
Generally negative	General negative response about Medicaid or the government's decision to fund Medicaid.	0.6
Generally positive	Only used if nothing else applies and the comment is positive about Medicaid or having insurance. For example, a general positive response about Medicaid or the government's decision to fund Medicaid.	30.1
Don't know	Person does not know what to say.	0.3
Relief/less stress or worry	Response mentions feeling relieved, secured, peace of mind, having less worry, less stress; feeling assured because of medical access.	27.9
Costs – Positive	Response mentions cost savings or that Medicaid will cover medical bills.	22.7
Access to care	Response explicitly mentions the ability to access medical care or see a doctor. Coded yes if person talks about being able to go to the doctor, get medical care, go to the hospital, get prescriptions, and or get dental or vision care.	31.3
Health	Mentions the health benefits of having Medicaid, both physical and mental health. Talks about health improvements.	10.1
Knowledge	Response indicates that person knows more about health now that Medicaid is available. Or, the person says that he/she has a better understanding of health or health problems.	1.0
Cost/access – Negative	Any negative mention of costs or limited access, costs still incurred; costs person had to pay for before Medicaid.	1.9
Medical debt	Any specific mention of medical debt.	1.3
No fine	Any mention of getting Medicaid to avoid receiving a fine.	1.2

Appendix N:
Supplemental Analyses of Group VIII Medicaid Administrative, Telephone Survey, & Biometric Screening Data

HEDIS-based Measures from the Medicaid Administrative Data

Ohio Medicaid administrative data were used to create measures of the provision of evidence based preventive care and clinically effective-based care for chronic health conditions. Methods of analysis were derived from the National Center for Quality Assurance (NCQA) Healthcare Effectiveness Data and Information Set (HEDIS). The HEDIS measures are a standard used to measure the effectiveness of all health plans in the U.S., including Medicare, commercial, and Medicaid. Measures included:

Adult BMI Assessment

Description

The percentage of members 18– 64 years of age as of December 31, 2015 who had an outpatient visit and whose body mass index (BMI) was documented during 2015. Eligible participants must not have more than one gap in enrollment of up to one month during 2015.

Measure Specification

Denominator   The eligible population.

Numerator   For members 21 years of age or older on the date of service, BMI (BMI Value Set) during 2015.

For members younger than 21 years of age on the date of service, BMI percentile (BMI Percentile Value Set) during 2015.
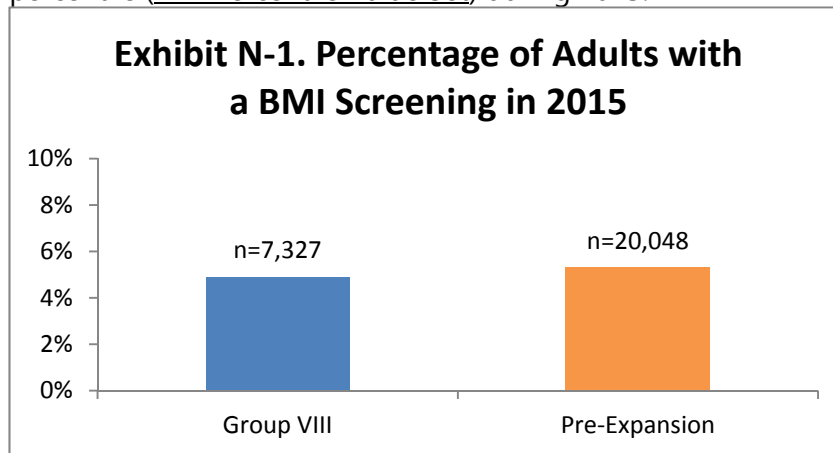
Exhibit N-1. Percentage of Adults with a BMI Screening in 2015

Table N-1. Adult BMI Screening by Enrollee Type

	Group-VIII	Pre-Expansion
BMI Screening (n)	7,327	20,048
BMI Screening (%)	4.9	5.3

Breast Cancer Screening

Description

The percentage of women 50–64 years of age as of December 31, 2015 who had a mammogram to screen for breast cancer during 2015. Eligible participants must not have more than one gap in enrollment of up to one month during 2015.

Measure Specification

Denominator   The eligible population.

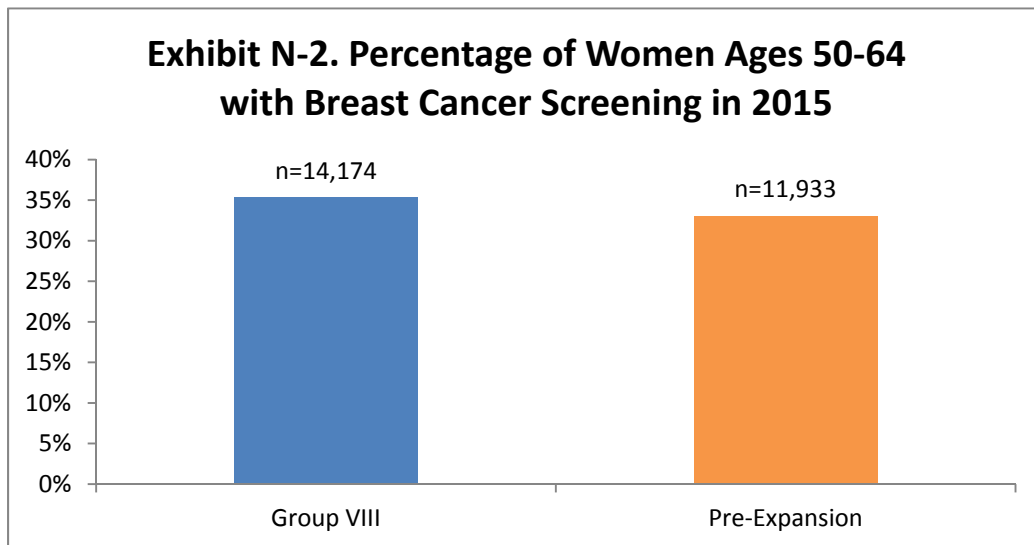**Numerator**   One or more mammograms (Mammography Value Set) any time during 2015.

Exhibit N-2. Percentage of Women Ages 50-64 with Breast Cancer Screening in 2015

Table N-2. Breast Cancer Screening by Enrollee Type

	Group-VIII	Pre-Expansion
Breast Cancer Screening (n)	14,174	11,933
Breast Cancer Screening (%)	35.3	33.0

Cervical Cancer Screening

Description

The percentage of women 21–64 years of age as of December 31, 2015 who were screened for cervical cancer using either of the following criteria:

- Women age 21–64 who had cervical cytology performed every 3 years.

- Women age 30–64 who had cervical cytology/human papillomavirus (HPV) co-testing performed every 5 years.

Eligible participants must not have more than one gap in enrollment of up to one month during 2015.

Measure Specification

Denominator   The eligible population.

Numerator   Identify women 24–64 years of age as of December 31, 2015 who had cervical cytology (Cervical Cytology Value Set) during 2015.

Exclusion: Hysterectomy with no residual cervix, cervical agenesis or acquired absence of cervix (Absence of Cervix Value Set) through December 31, 2015.

Exhibit N-3. Percentage of Women Ages 21-64 Cervical Cancer Screening in 2015
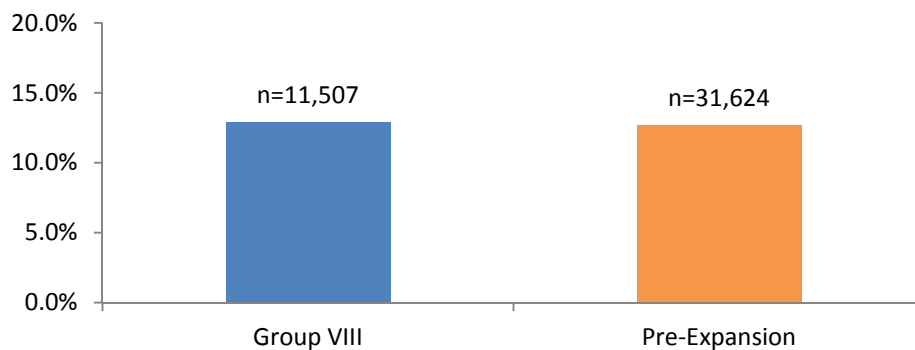
Table N-3. Cervical Cancer Screening by Enrollee Type

	Group-VIII	Pre-Expansion
Cervical Cancer Screening (n)	11,507	31,624
Cervical Cancer Screening (%)	12.9	12.7

Chlamydia Screening in Women

Description

The percentage of women 16–24 years of age as of December 31, 2015 who were identified as sexually active and who had at least one test for chlamydia during 2015. Eligible participants must not have more than one gap in enrollment of up to one month during 2015.

Eligible Population

Event/ diagnosis

Sexually active. Two methods identify sexually active women: pharmacy data and claim/encounter data. A member only needs to be identified in one method to be eligible for the measure.

Claim/encounter data. Members who had a claim or encounter indicating sexual activity during 2015. A code from any of the following meets criteria:

- Pregnancy Value Set.
- Sexual Activity Value Set.
- Pregnancy Tests Value Set.

Pharmacy data. Members who were dispensed prescription contraceptives during 2015 (Table CHL-A).

Table N-4: Prescriptions to Identify Contraceptives

Description	Prescription	
Contraceptives	• Desogestrel-ethinyl estradiol • Dienogest-estradiol multiphasic • Drospirenone-ethinyl estradiol • Drospirenone-ethinyl estradiol-levomefolate biphasic • Ethinyl estradiol-ethynodiol • Ethinyl estradiol-etonogestrel • Ethinyl estradiol-levonorgestrel • Ethinyl estradiol-norelgestromin	• Ethinyl estradiol-norethindrone • Ethinyl estradiol-norgestimate • Ethinyl estradiol-norgestrel • Etonogestrel • Levonorgestrel • Medroxyprogesterone • Mestranol-norethindrone • Norethindrone
Diaphragm	• Diaphragm	
Spermicide	• Nonxynol 9	

Measure Specification

Denominator   The eligible population.

Numerator   At least one chlamydia test (Chlamydia Tests Value Set) during the measurement year.

Exclusion: Exclude members who qualified for the denominator based on a pregnancy test (Pregnancy Tests Value Set) alone **and** who meet either of the following:

- A pregnancy test (<u>Pregnancy Test Exclusion Value Set</u>) during 2015 **and** a prescription for isotretinoin (Table CHL-E) on the date of the pregnancy test or the 6 days after the pregnancy test.

- A pregnancy test (<u>Pregnancy Test Exclusion Value Set</u>) during 2015 **and** an x-ray (<u>Diagnostic Radiology Value Set</u>) on the date of the pregnancy test or the 6 days after the pregnancy
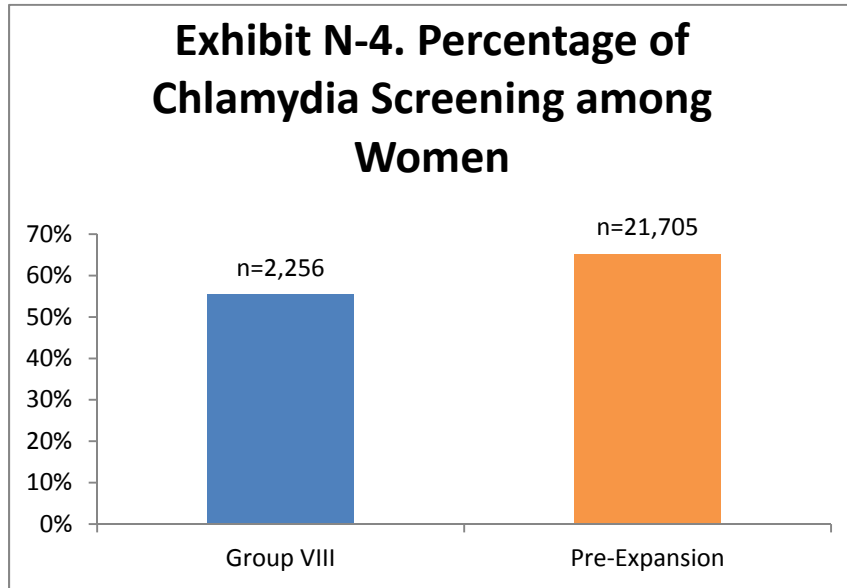
Exhibit N-4. Percentage of Chlamydia Screening among Women

Table N-5. Chlamydia Screening by Enrollee Type

	Group-VIII	Pre-Expansion
Chlamydia Screening (n)	2,256	21,705
Chlamydia Screening (%)	55.4	65.1

Colorectal Cancer Screening

Description

The percentage of members 50–64 years of age as of December 31, 2015 who had appropriate screening for colorectal cancer. Eligible participants must not have more than one gap in enrollment of up to one month during 2015.

Measure Specification

Denominator   The eligible population.

Numerator   One or more screenings for colorectal cancer. Any of the following meet criteria:

- Fecal occult blood test (FOBT Value Set) during 2015. For administrative data, assume the required number of samples were returned, regardless of FOBT type.

- Flexible sigmoidoscopy (Flexible Sigmoidoscopy Value Set) during 2015.

- Colonoscopy (Colonoscopy Value Set) during 2015.

Exclusion: Either of the following any time during the member's history through December 31, 2015:
- Colorectal cancer (Colorectal Cancer Value Set).
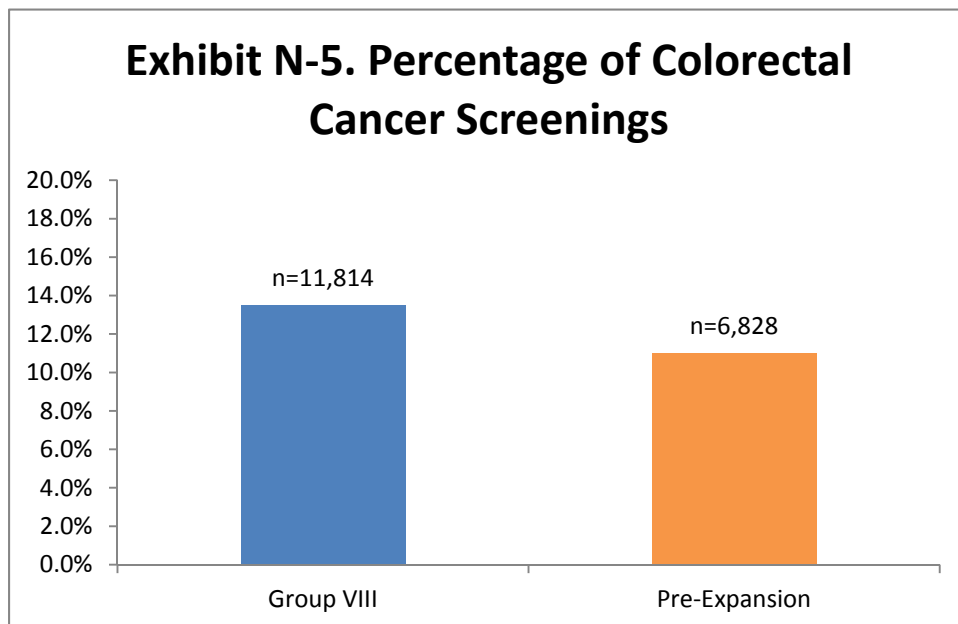- Total colectomy (Total Colectomy Value Set).

Exhibit N-5. Percentage of Colorectal Cancer Screenings

Table N-6. Colorectal Cancer Screening by Enrollee Type

	Group-VIII	Pre-Expansion
Colorectal Cancer Screening (n)	**11,814**	**6,828**
Colorectal Cancer Screening (%)	**13.5**	**11.0**

Comprehensive Diabetes Care (CDC)

Description

The percentage of members 18–64 years of age as of December 31, 2015 with diabetes (type 1 and type 2) who had each of the following:

- Hemoglobin A1c (HbA1c) testing.
- HbA1c poor control (>9.0%).
- HbA1c control (<8.0%).
- Smoking status and date of cessation counseling, or treatment during 2015 if the patient is a tobacco smoker

- Eye exam (retinal) performed.
- Medical attention for nephropathy.
- BP control (<140/90 mm Hg)
- LDL-C Screen

Eligible Population

Event/ diagnosis   There are two ways to identify members with diabetes: by claim/encounter data and by pharmacy data. A member only needs to be identified by one method to be included in the measure. Members may be identified as having diabetes during 2015.

Claim/encounter data. Members who met any of the following criteria during 2015 (count services that occur over one year):

- At least two outpatient visits (Outpatient Value Set), observation visits (Observation Value Set), ED visits (ED Value Set) or nonacute inpatient encounters (Nonacute Inpatient Value Set) on different dates of service, with a diagnosis of diabetes (Diabetes Value Set). Visit type need not be the same for the two visits.

- At least one acute inpatient encounter (Acute Inpatient Value Set) with a diagnosis of diabetes (Diabetes Value Set).

Pharmacy data. Members who were dispensed insulin or hypoglycemics/ antihyperglycemics on an ambulatory basis during 2015 (Table CDC-A).

Table N-7: Prescriptions to Identify Members With Diabetes

Description	Prescription		
Alpha-glucosidase inhibitors	• Acarbose	• Miglitol	
Amylin analogs	• Pramlinitide		
Antidiabetic combinations	• Alogliptin-metformin • Alogliptin-pioglitazone • Canagliflozin-metformin • Glimepiride-pioglitazone • Glimepiride-rosiglitazone • Glipizide-metformin	• Glyburide-metformin • Linagliptin-metformin • Metformin-pioglitazone • Metformin-repaglinide • Metformin-rosiglitazone • Metformin-saxagliptin	• Metformin-sitagliptin • Sitagliptin-simvastatin
Insulin	• Insulin aspart • Insulin aspart-insulin aspart protamine • Insulin detemir • Insulin glargine • Insulin glulisine	• Insulin isophane human • Insulin isophane-insulin regular • Insulin lispro • Insulin lispro-insulin lispro protamine • Insulin regular human	
Meglitinides	• Nateglinide	• Repaglinide	
Glucagon-like peptide-1 (GLP1) agonists	• Exenatide	• Liraglutide	• Albiglutide
Sodium glucose cotransporter 2 (SGLT2) inhibitor	• Canagliflozin	• Dapagliflozin	• Empagliflozin
Sulfonylureas	• Chlorpropamide • Glimepiride	• Glipizide • Glyburide	• Tolazamide • Tolbutamide
Thiazolidinediones	• Pioglitazone	• Rosiglitazone	
Dipeptidyl peptidase-4 (DDP-4) inhibitors	• Alogliptin • Linagliptin	• Saxagliptin • Sitaglipin	

Measure Specification

Denominator The eligible population.

Numerators

HbA1c Testing An HbA1c test (HbA1c Tests Value Set) performed during 2015, as identified by claim/encounter or automated laboratory data.

HbA1c Poor Control >9% Use codes in the HbA1c Tests Value Set to identify the *most recent* HbA1c test during 2015. The member is numerator compliant if the most recent HbA1c level is >9.0% or is missing a result, or if an HbA1c test was not done during 2015. The member is not numerator compliant if the result for the most recent HbA1c test during the measurement year is ≤9.0%.

Value Set	Numerator Compliance
HbA1c Level Less Than 7.0 Value Set	Not compliant

HbA1c Level 7.0–9.0 Value Set	Not compliant
HbA1c Level Greater Than 9.0 Value Set	Compliant

***HbA1c Control
<8%***

Use codes in the HbA1c Tests Value Set to identify the *most recent* HbA1c test during 2015. The member is numerator compliant if the most recent HbA1c level is <8.0%. The member is not numerator compliant if the result for the most recent HbA1c test is ≥8.0% or is missing a result, or if an HbA1c test was not done during 2015.

Value Set	Numerator Compliance
HbA1c Level Less Than 7.0 Value Set	Compliant
HbA1c Level 7.0–9.0 Value Set	Not compliant
HbA1c Level Greater Than 9.0 Value Set	Not compliant

Eye Exam

An eye screening for diabetic retinal disease as identified by administrative data. This includes diabetics who had one of the following:

- A retinal or dilated eye exam by an eye care professional (optometrist or ophthalmologist) in 2015.

- A *negative* retinal or dilated eye exam (negative for retinopathy) by an eye care professional in 2015.

Any of the following meet criteria:

- Any code in the Diabetic Retinal Screening Value Set billed by an eye care professional (optometrist or ophthalmologist) during 2015.

- Any code in the Diabetic Retinal Screening Value Set billed by an eye care professional (optometrist or ophthalmologist) during 2015, with a negative result (negative for retinopathy).

- Any code in the Diabetic Retinal Screening With Eye Care Professional Value Set billed by any provider type during 2015.

- Any code in the Diabetic Retinal Screening With Eye Care Professional Value Set billed by any provider type during 2015, with a negative result (negative for retinopathy).

- Any code in the Diabetic Retinal Screening Negative Value Set billed by any provider type during 2015.

***Medical
Attention for
Nephropathy***

A nephropathy screening or monitoring test *or* evidence of nephropathy, as documented through administrative data. This includes diabetics who had one of the following during 2015:

- A nephropathy screening or monitoring test (Urine Protein Tests Value Set).

- Evidence of treatment for nephropathy or ACE/ARB therapy (Nephropathy Treatment Value Set).

- Evidence of stage 4 chronic kidney disease (CKD Stage 4 Value Set).

- Evidence of ESRD (ESRD Value Set).

- Evidence of kidney transplant (Kidney Transplant Value Set).

- A visit with a nephrologist, as identified by the organization's specialty provider codes (no restriction on the diagnosis or procedure code submitted).

- At least one ACE inhibitor or ARB dispensing event (Table CDC-L).

Table N-8: ACE Inhibitors/ARBs

Description	Prescription				
Angiotensin converting enzyme inhibitors	• Benazepril • Captopril	• Enalapril • Fosinopril	• Lisinopril • Moexipril	• Perindopril • Quinapril	• Ramipril • Trandolapril
Angiotensin II inhibitors	• Azilsartan • Candesartan	• Eprosartan • Irbesartan	• Losartan • Olmesartan	• Telmisartan • Valsartan	
Antihypertensive combinations	• Aliskiren-valsartan • Amlodipine-benazepril • Amlodipine-hydrochlorothiazide-valsartan • Amlodipine-hydrochlorothiazide-olmesartan • Amlodipine-olmesartan • Amlodipine-telmisartan • Amlodipine-valsartan	• Azilsartan-chlorthalidone • Benazepril-hydrochlorothiazide • Candesartan-hydrochlorothiazide • Captopril-hydrochlorothiazide • Enalapril-hydrochlorothiazide • Eprosartan-hydrochlorothiazide • Fosinopril-hydrochlorothiazide • Hydrochlorothiazide-irbesartan		• Hydrochlorothiazide-lisinopril • Hydrochlorothiazide-losartan • Hydrochlorothiazide-moexipril • Hydrochlorothiazide-olmesartan • Hydrochlorothiazide-quinapril • Hydrochlorothiazide-telmisartan • Hydrochlorothiazide-valsartan • Trandolapril-verapamil		

BP Control <140/90 mm Hg Use automated data to identify the most recent BP reading taken during a visit in 2015.

The member is numerator compliant if the BP is <140/90 mm Hg. The member is not compliant if the BP is ≥140/90 mm Hg, if there is no BP reading during the measurement year or if the reading is incomplete (e.g., the systolic or diastolic level is missing). If there are multiple BPs on the same date of service, use the lowest systolic and lowest diastolic BP on that date as the representative BP.

| Value Set	Numerator Compliance
Systolic Less Than 140 Value Set	Systolic compliant
Systolic Greater Than/Equal To 140 Value Set	Systolic not compliant
Diastolic Less Than 80 Value Set	Diastolic compliant
Diastolic 80–89 Value Set	Diastolic compliant
Diastolic Greater Than/Equal To 90 Value Set	Diastolic not compliant

Exhibit N-6. Percentage of Diabetics who had an HbA1c Test performed
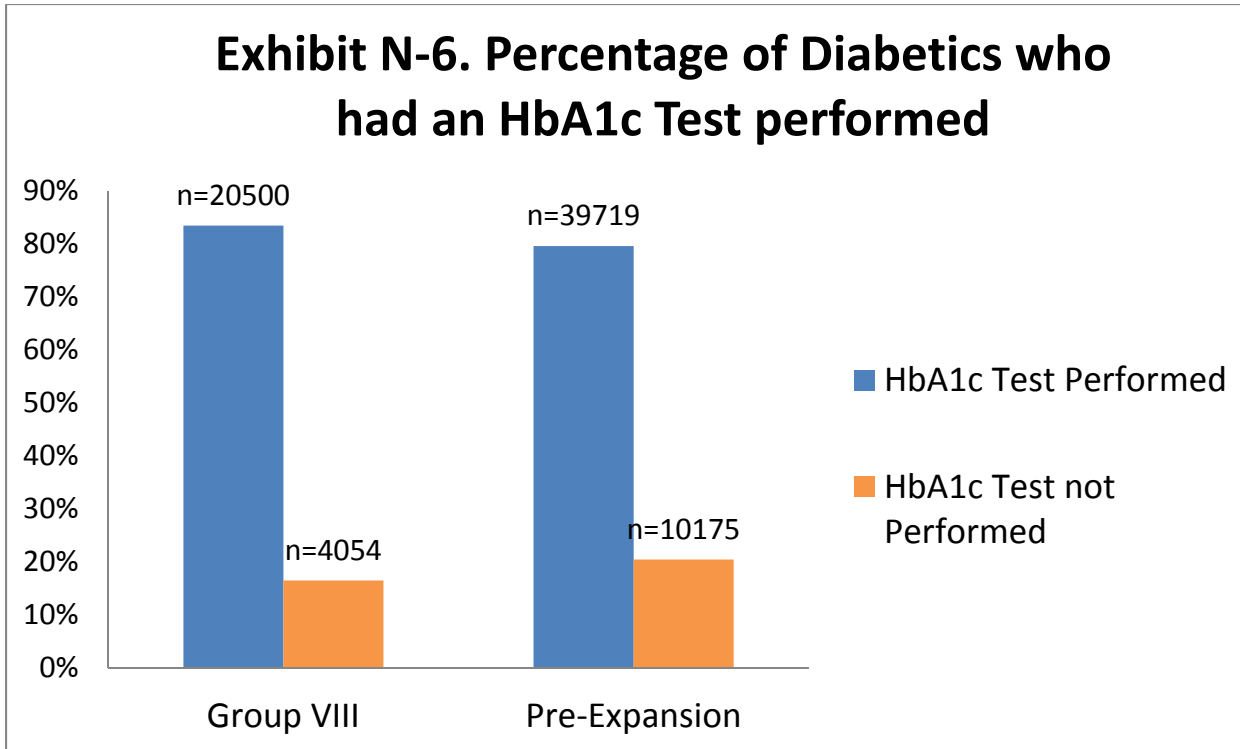
The proportion of Group VIII Diabetics who had an HbA1c test performed was 83.5%. The proportion of Pre-Expansion Diabetics who had an HbA1c test was 79.6%.

Exhibit N-7. Percentage of Diabetics with HbA1c values under control
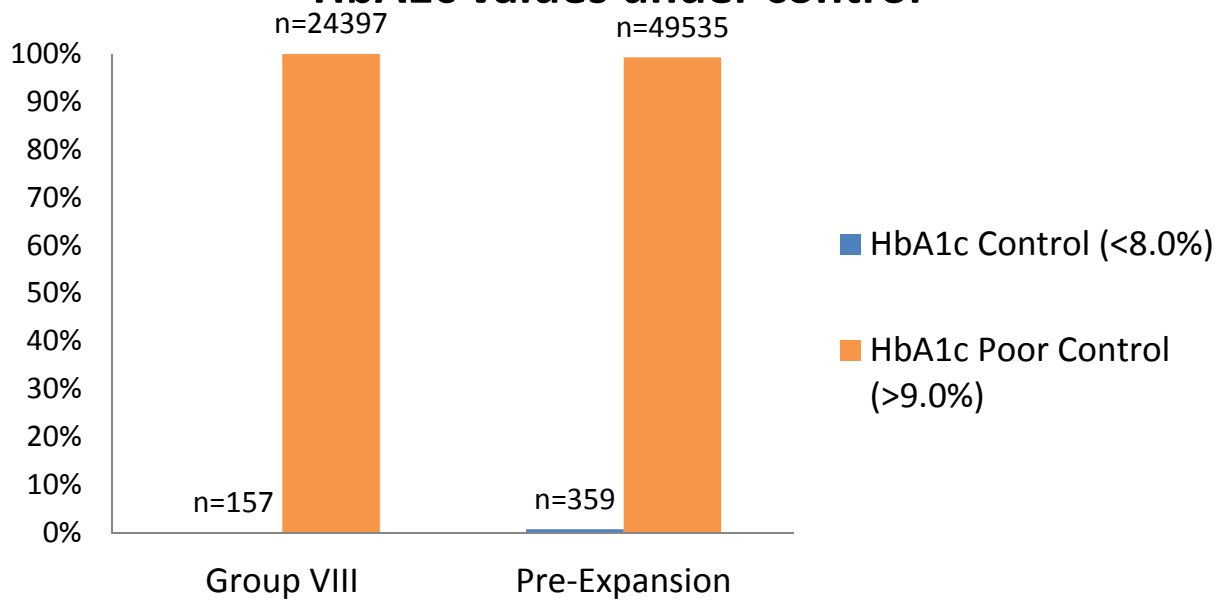
The proportion of Group VIII Diabetics who had their HbA1c values under control was 0.6%, the proportion of Pre-Expansion Diabetics who had their HbA1c values under control was 0.7%.

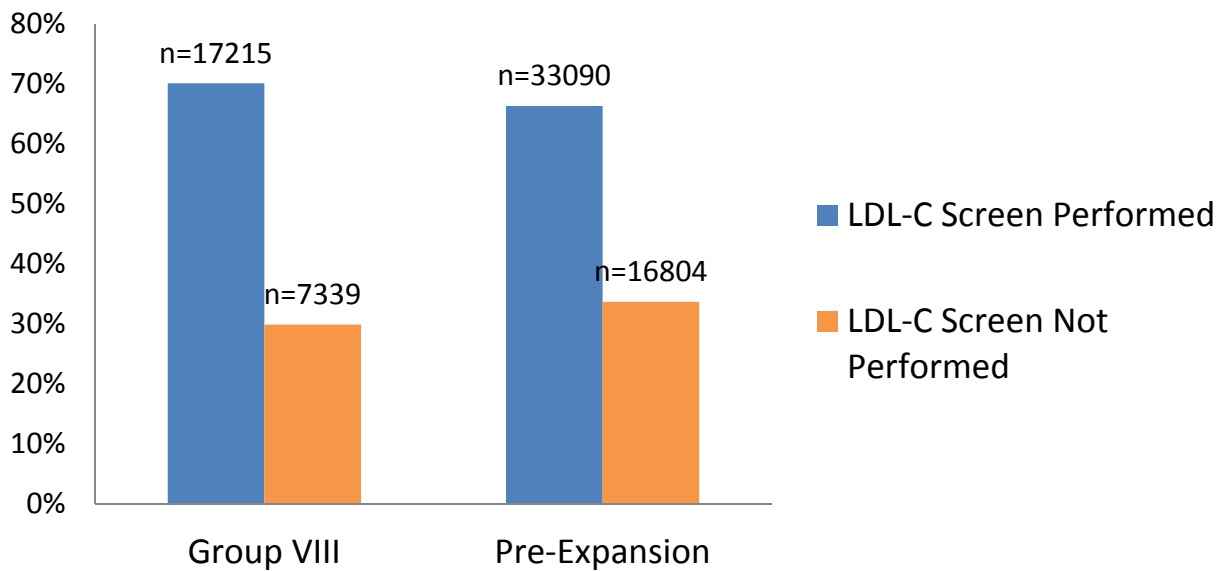## Exhibit N-8. Percentage of Diabetics who had their Blood Pressure tested
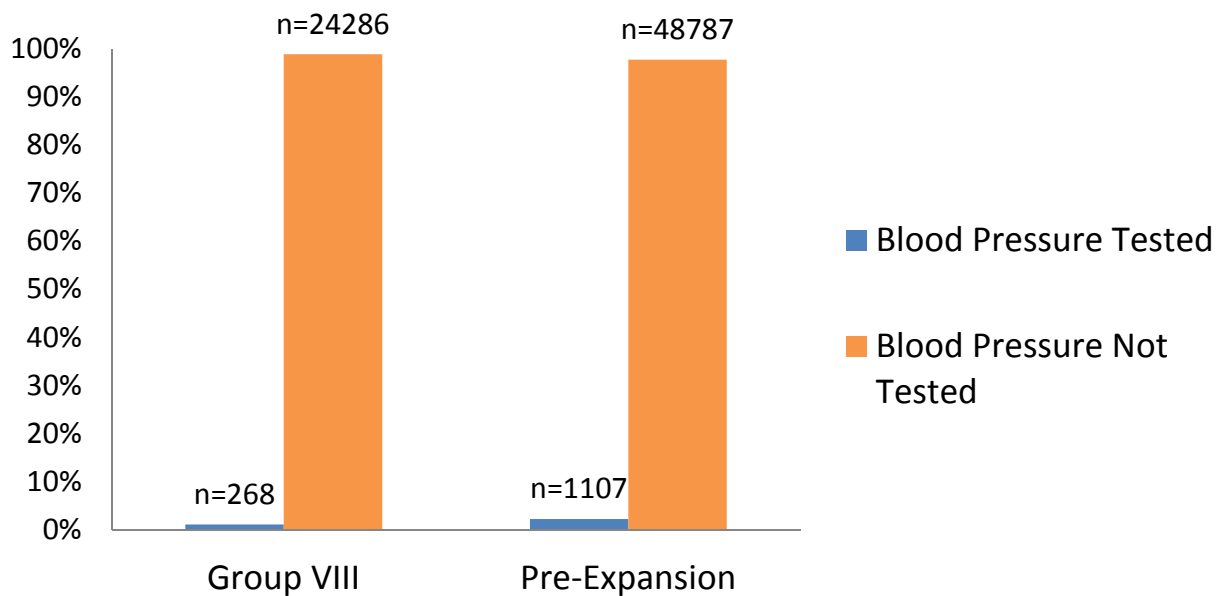
The proportion of Group VIII Diabetics who had their Blood Pressure tested was 1.1%, the proportion of Pre-Expansion Diabetics who had their Blood Pressure tested was 2.2%.

Exhibit N-9. Percentage of Diabetics who had their Blood Pressure under control (<140/90 mm Hg)

Legend:
- Blood Pressure < 140/90 mm Hg
- Blood Pressure >= 140/90 mm Hg

Group VIII: n=187, n=24367
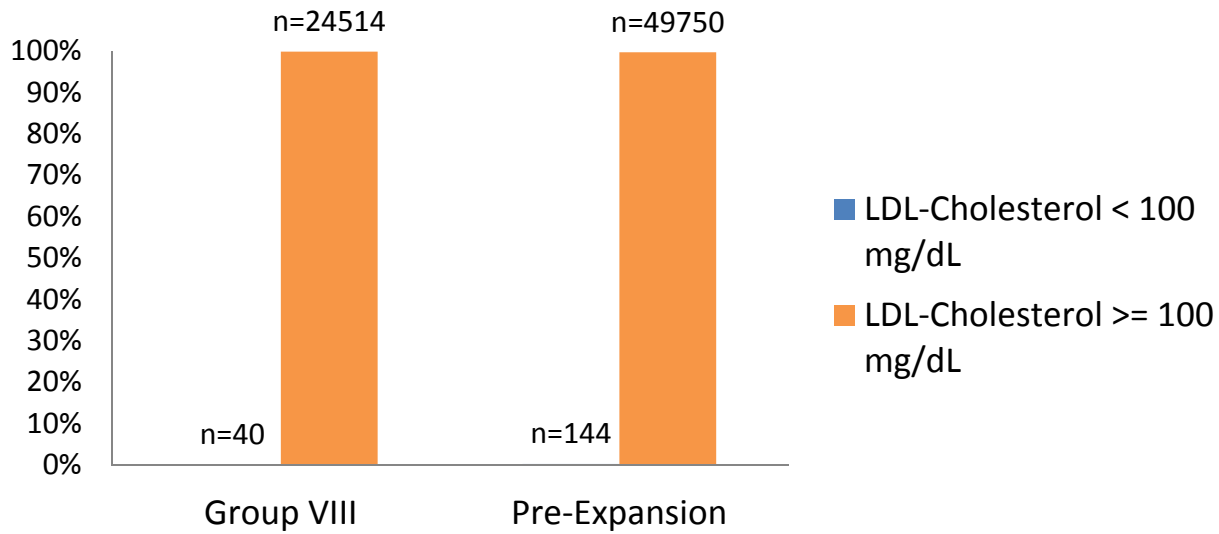Pre-Expansion: n=868, n=49026
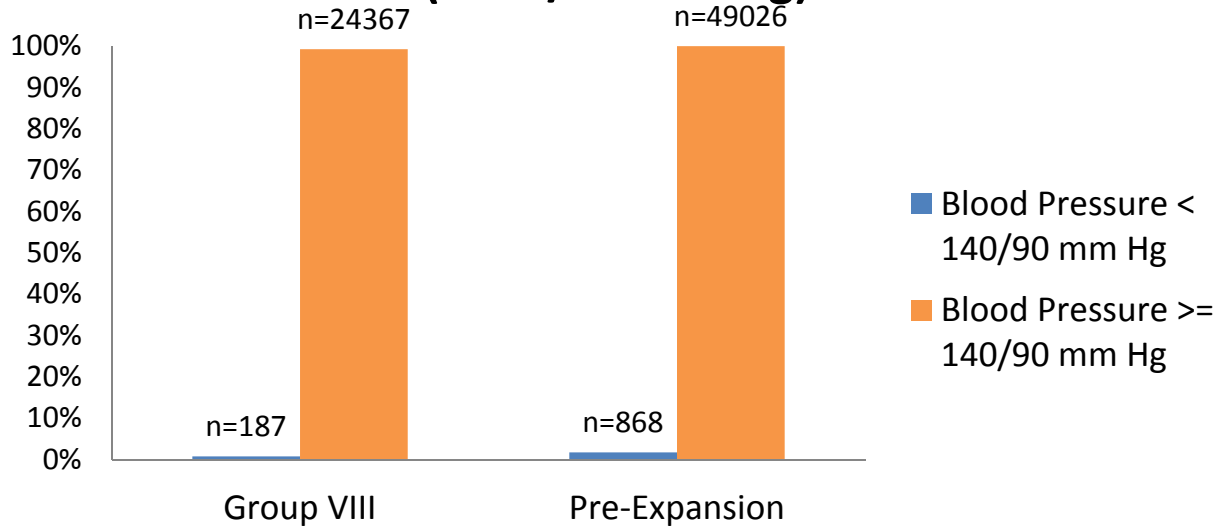
The proportion of Group VIII Diabetics who had their Blood Pressure under control was 0.8%. The proportion of Pre-Expansion Diabetics who had their Blood Pressure under control was 1.6%.

Exhibit N-10. Percentage of Diabetics who had their LDL-Cholesterol Screened

Legend:
- LDL-C Screen Performed
- LDL-C Screen Not Performed

Group VIII: n=17215, n=7339
Pre-Expansion: n=33090, n=16804

The proportion of Group VIII Diabetics who had their LDL-C screened was 70.1%. The proportion of Pre-Expansion Diabetics who had their LDL-C screened was 66.3%.

Exhibit N-11. Percentage of Diabetics who had their LDL-Cholesterol under control (< 100 mg/dL)

n=24514
n=49750
n=40
n=144

- ■ LDL-Cholesterol < 100 mg/dL
- ■ LDL-Cholesterol >= 100 mg/dL
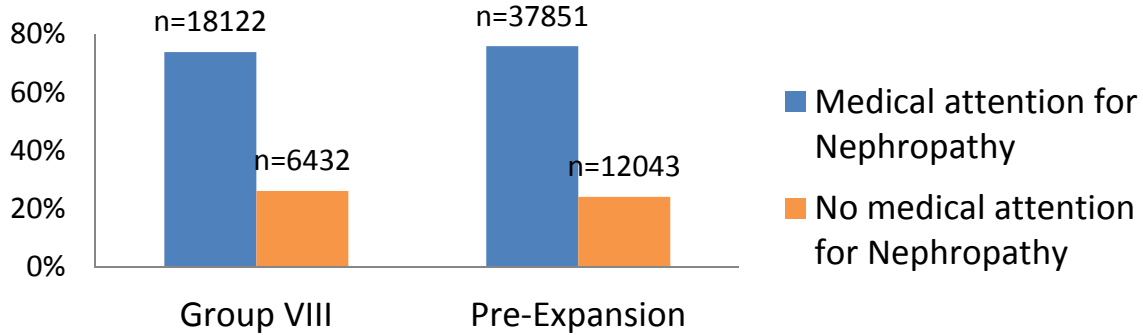
Group VIII
Pre-Expansion

The proportion of Group VIII Diabetics who had their LDL-C under control was 0.2%. The proportion of Pre-Expansion Diabetics who had their LDL-C under control was 0.3%.

Exhibit N-12. Percentage of Diabetics who had a Retinal Eye Exam Performed

n=23864
n=48715
n=690
n=1179

- ■ Retinal Exam Performed
- ■ Retinal Exam Not Performed

Group VIII
Pre-Expansion
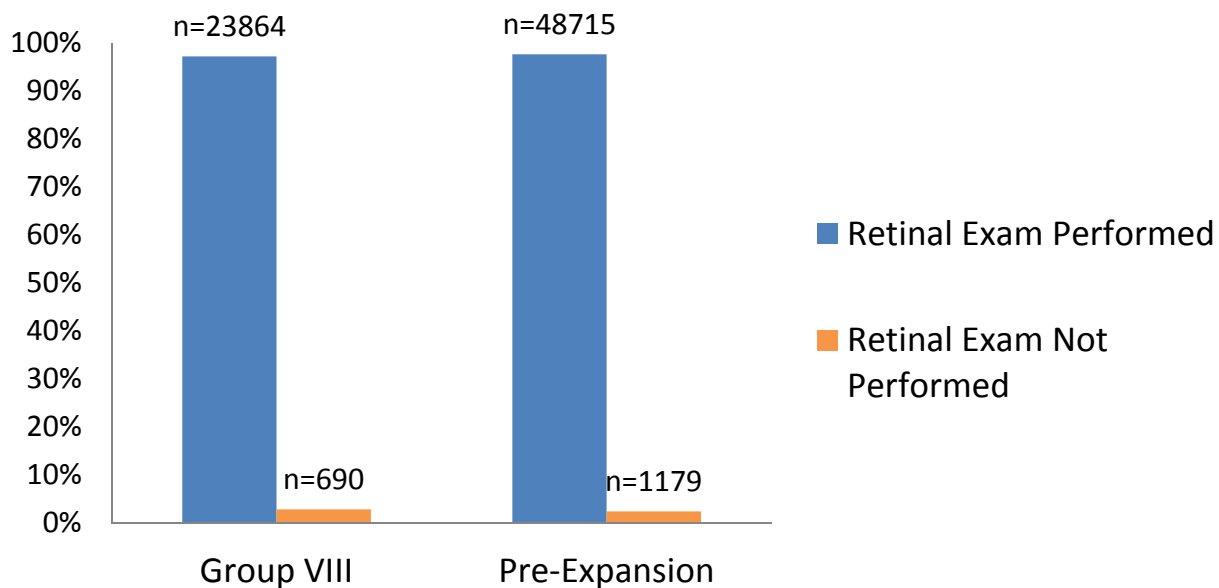
The proportion of Group VIII Diabetics who had a Retinal Eye Exam performed was 97.2%. The proportion of Pre-Expansion Diabetics who had a Retinal Eye Exam performed was 97.6%.

Exhibit N-13. Percentage of Diabetics that received medical attention for Nephropathy

The proportion of Group VIII Diabetics who received medical attention for Nephropathy was 73.8%. The proportion of Pre-Expansion Diabetics who received medical attention for Nephropathy was 75.9%.

Table N-9. Comprehensive Diabetes Care

	Group-VIII	Pre-Expansion
Diabetics with HbA1c test performed (n)	20,500	39,719
Diabetics with HbA1c test performed (%)	83.5	79.6
Diabetics with HbA1c levels under control (n)	157	359
Diabetics with HbA1c levels under control (%)	0.6	0.7
Diabetics with blood pressure tested (n)	268	1107
Diabetics with blood pressure tested (%)	1.1	2.2
Diabetics with blood pressure under control (n)	187	868
Diabetics with blood pressure under control (%)	0.8	1.6
Diabetics with LDL-cholesterol screen (n)	17,215	33,090
Diabetics with LDL-cholesterol screen (%)	70.1	66.3
Diabetics with LDL-cholesterol under control (n)	40	144
Diabetics with LDL-cholesterol under control (%)	0.2	0.3
Diabetics with retinal eye exam performed (n)	23,864	48,715
Diabetics with retinal eye exam performed (%)	97.2	97.6
Diabetics receiving medical attention for nephropathy (n)	18,122	37,851
Diabetics receiving medical attention for nephropathy (%)	73.8	75.9

Controlling High Blood Pressure

Description

The percentage of members 18–64 years of age as of December 31, 2015 who had a diagnosis of hypertension (HTN) and whose BP was adequately controlled during 2015 based on the following criteria:

- Members 18–64 years of age whose BP was <140/90 mm Hg.

- Members 18-64 years of age with a diagnosis of diabetes whose BP was <140/90 mm Hg.

Eligible participants must not have more than one gap in enrollment of up to one month during 2015.

Eligible Population

Event/diagnosis   Members are identified as hypertensive if there is at least one outpatient visit (Outpatient Without UBREV Value Set) with a diagnosis of hypertension (Essential Hypertension Value Set) during the first six months of 2015.

Diabetes Flag for Numerator Assessment   After the Eligible Population is identified, assign each member either a ***diabetic*** or ***not diabetic*** flag using only administrative data and the steps below. The flag is used to determine the appropriate BP threshold to use during numerator assessment.

Step 1   Assign a flag of ***diabetic*** to members identified as diabetic using claim/encounter data or pharmacy data. The organization must use both methods to assign the diabetes flag, but a member only needs to be identified by one method. Members may be identified as having diabetes during 2015.

Claim/encounter data. Members who met any of the following criteria during 2015:

- At least two outpatient visits (Outpatient Value Set), observation visits (Observation Value Set), ED visits (ED Value Set) or nonacute inpatient encounters (Nonacute Inpatient Value Set) on different dates of service, with a diagnosis of diabetes (Diabetes Value Set). Visit type need not be the same for the two visits.

- At least one acute inpatient encounter (Acute Inpatient Value Set) with a diagnosis of diabetes (Diabetes Value Set).

Pharmacy data. Members who were dispensed insulin or hypoglycemics/ antihyperglycemics on an ambulatory basis during 2015 (Table CDC-A).

Step 2   From the members identified in Step 1, assign a flag of ***not diabetic*** to members who do not have a diagnosis of diabetes (Diabetes Value Set), in any setting, during 2014 or 2015 ***and*** who had a diagnosis of gestational diabetes or steroid-induced diabetes (Diabetes Exclusions Value Set), in any setting, during 2015.

Step 3   For members who were not assigned a flag in step 1 or step 2, assign a flag of ***not diabetic***.

Exhibit N-14. Percentage with Hypertention Diagnosis and Well-Controlled Blood Pressure
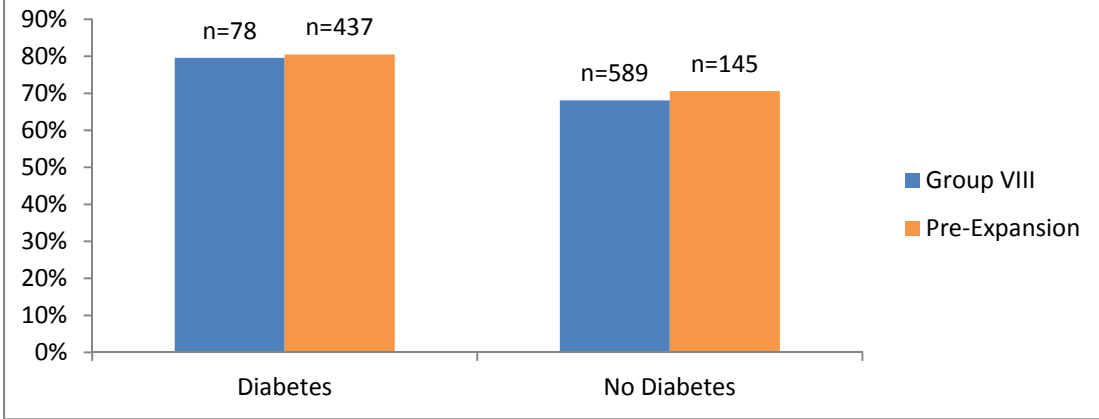
Table N-10. Controlled Blood Pressure by Diabetic Status

	Group-VIII	Pre-Expansion
Diabetes (n)	78	437
Diabetes (%)	79.6	80.5
No Diabetes (n)	589	145
No Diabetes (%)	68.1	70.6

Statin Therapy for Patients With Cardiovascular Disease

4.   Description

The percentage of males 21–64 years of age and females 40–64 years of age during 2015, who were identified as having clinical atherosclerotic cardiovascular disease (ASCVD) and met the following criteria. Eligible participants must not have more than one gap in enrollment of up to one month during 2015. The following rates are reported:

1. *Received Statin Therapy.* Members who were dispensed at least one high or moderate-intensity statin medication during 2015.

2. *Statin Adherence 80%.* Members who remained on a high or moderate-intensity statin medication for at least 80% of the treatment period.

5.   Eligible Population: Rate 1—Received Statin Therapy

Step 1: Members are identified for the eligible population in two ways: by event or by diagnosis. A member only needs to be identified by one method to be included in the measure.

Event. Any of the following during 2015 meet criteria:

- ANY MI DIAGNOSIS (MI Value Set).
- ANY CABG DIAGNOSIS (CABG Value Set).
- *ANY* PCI DIAGNOSIS (PCI Value Set) in any setting.
- *Other revascularization*. Members who had any other revascularization procedures (Other Revascularization Value Set) in any setting.

Diagnosis. Identify members as having ischemic vascular disease (IVD) who met at least one of the following criteria during 2015.

- ANY IVD diagnosis (IVD Value Set),

Step 2: Exclude members who meet any of the following criteria:

Required exclusions

- Pregnancy (Pregnancy Value Set) during 2015.
- In vitro fertilization (IVF Value Set) in 2015.
- Dispensed at least one prescription for clomiphene (Table SPC-A) during 2015.
- ESRD (ESRD Value Set) during 2015.
- Cirrhosis (Cirrhosis Value Set) during 2015.
- Myalgia, myositis, myopathy, or rhabdomyolysis (Muscular Pain and Disease Value Set) during 2015.

6.   Measure Specification: Rate 1—Received Statin Therapy

Denominator   The Rate 1 eligible population.

Numerator   The number of members who had at least one dispensing event for a high or moderate-intensity statin medication (Table SPC-B) during 2015.

Table N-11: High and Moderate-Intensity Statin Medications

Description	Prescription	
High-intensity statin therapy	• Atorvastatin 40–80 mg • Amlodipine-atorvastatin 40-80 mg • Ezetimibe-atorvastatin 40-80 mg	• Rosuvastatin 20–40 mg • Simvastatin 80 mg • Ezetimibe-simvastatin 80 mg
Moderate-intensity statin therapy	• Atorvastatin 10–20 mg • Amlodipine-atorvastatin 10-20 mg • Ezetimibe-atorvastatin 10-20 mg • Rosuvastatin 5–10 mg • Simvastatin 20–40 mg • Ezetimibe-simvastatin 20-40 mg • Niacin-simvastatin 20-40 mg • Sitagliptin-simvastatin 20-40 mg	• Pravastatin 40–80 mg • Aspirin-pravastatin 40-80 mg • Lovastatin 40 mg • Niacin-lovastatin 40 mg • Fluvastatin XL 80 mg • Fluvastatin 40 mg bid • Pitavastatin 2–4 mg

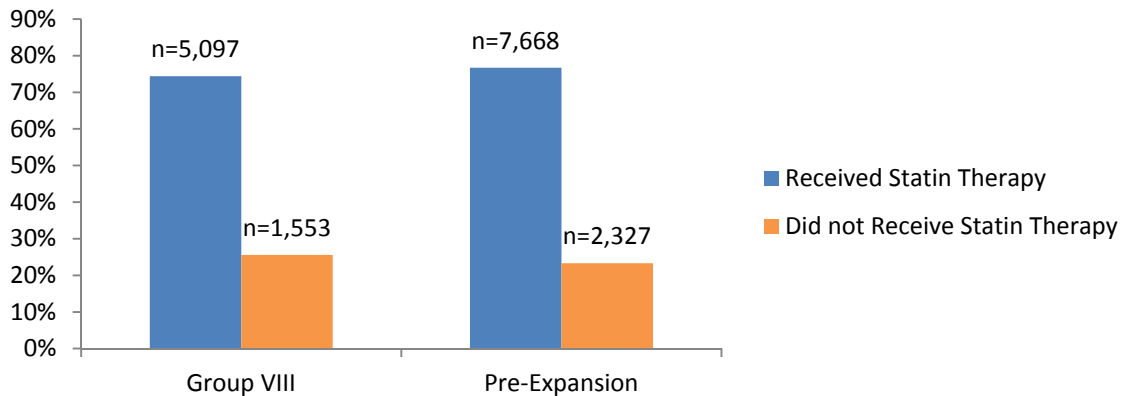## Exhibit N-15. Percent of Individuals with Cardiovascular Disease Receiving Statin Therapy

Table N-12. Statin Therapy by Enrollee Type

	Group-VIII	Pre-Expansion
Statin Therapy (n)	5,097	7,668
Statin Therapy (%)	74.4	76.7
No Statin Therapy (n)	1,553	2,327
No Statin Therapy (%)	25.6	23.3

7. Measure Specification: Rate 2—Statin Adherence 80%

Denominator   The Rate 2 eligible population.

Numerator   The number of members who achieved a PDC of at least 80% during the treatment period.

Follow the steps below to identify numerator compliance.

Step 1   Identify the IPSD. The IPSD is the earliest dispensing event for any high or moderate-intensity statin medication (Table SPC-B) during 2015.

Step 2   To determine the treatment period, calculate the number of days from the IPSD (inclusive) to the end of 2015.

Step 3   Count the days covered by at least one prescription for statin medication (Table SPC-B) during the treatment period. To ensure that days supply that extends beyond 2015 is not counted, subtract any days supply that extends beyond December 31, 2015.

Step 4   Calculate the member's PDC using the following equation.

$$\frac{\text{Total Days Covered by a Statin Medication in the Treatment Period (step 3)}}{\text{Total Days in Treatment Period (step 2)}}$$

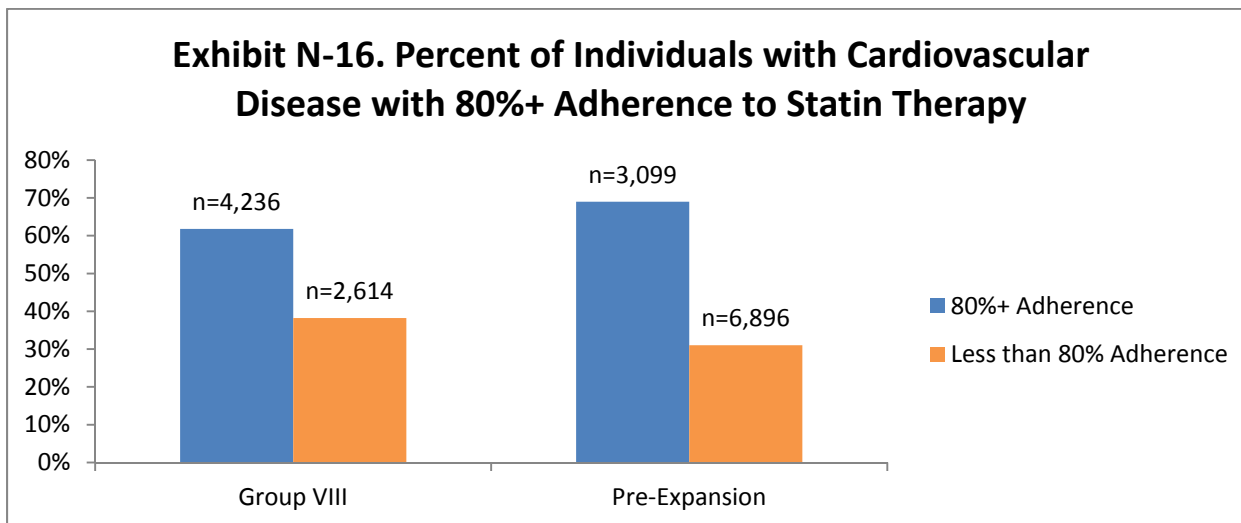***Step 5***   Sum the number of members whose PDC is ≥80% for the treatment period.

Exhibit N-16. Percent of Individuals with Cardiovascular Disease with 80%+ Adherence to Statin Therapy

Table N-13. Adherence to Statin Therapy by Enrollee Type

	Group-VIII	Pre-Expansion
80%+ Adherence (n)	4,236	3,099
80%+ Adherence (%)	61.8	69.0
Less than 80% Adherence (n)	2,614	6,896
Less than 80% Adherence (%)	38.2	31.0

Statin Therapy for Patients With Diabetes

8. Description

The percentage of members 40–64 years of age during 2015 with diabetes who do not have clinical atherosclerotic cardiovascular disease (ASCVD) who met the following criteria. Two rates are reported:

1. *Received Statin Therapy.* Members who were dispensed at least one statin medication of any intensity during 2015.

2. *Statin Adherence 80%.* Members who remained on a statin medication of any intensity for at least 80% of the treatment period.

Eligible participants must not have more than one gap in enrollment of up to one month during 2015.

9. Eligible Population: *Rate 1*—Received Statin Therapy

Step 1 There are two ways to identify members with diabetes: by claim/encounter data and by pharmacy data. A member only needs to be identified by one method to be included in the measure. Members may be identified as having diabetes during 2015.

Claim/encounter data. Members who met any of the following criteria during 2015):

- At least two outpatient visits (Outpatient Value Set), observation visits (Observation Value Set), ED visits (ED Value Set) or non-acute inpatient encounters (Nonacute Inpatient Value Set) on different dates of service, with a diagnosis of diabetes (Diabetes Value Set). Visit type need not be the same for the two visits.

- At least one acute inpatient encounter (Acute Inpatient Value Set) with a diagnosis of diabetes (Diabetes Value Set).

Pharmacy data. Members who were dispensed insulin or hypoglycemics/ anti-hyperglycemics on an ambulatory basis during 2015 (Table CDC-A).

Step 2: Required exclusions Exclude members who meet any of the following criteria:

- Members with cardiovascular disease are identified in two ways: by event or by diagnosis. A member only needs to be identified by one method to be excluded from the measure.

    – *Event.* Any of the following during 2015 meet criteria:

  - MI. Discharged from an inpatient setting with an MI (MI Value Set). To identify discharges:
    1. Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set).

  - CABG. Discharged from an inpatient setting with a CABG (CABG Value Set). To identify discharges:
    1. Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set)

  - PCI. Members who had PCI (PCI Value Set) in any setting.

  - Other revascularization. Members who had any other revascularization procedure (Other Revascularization Value Set) in any setting.

    – *Diagnosis.* Identify members as having ischemic vascular disease (IVD) who met at least one of the following criteria during 2015.

- At least one outpatient visit (<u>Outpatient Value Set</u>) with an IVD diagnosis (<u>IVD Value Set</u>), ***or***
- At least one acute inpatient encounter (<u>Acute Inpatient Value Set</u>) with an IVD diagnosis (<u>IVD Value Set</u>).

- Pregnancy (<u>Pregnancy Value Set</u>) during 2015.
- In vitro fertilization (<u>IVF Value Set</u>) in 2015.
- Dispensed at least one prescription for clomiphene (Table SPC-A) during 2015.
- ESRD (<u>ESRD Value Set</u>) during 2015.
- Cirrhosis (<u>Cirrhosis Value Set</u>) during 2015.
- Myalgia, myositis, myopathy, or rhabdomyolysis (<u>Muscular Pain and Disease Value Set</u>) during 2015.

10. Measure Specification: *Rate 1*—Received Statin Therapy

Denominator   The Rate 1 eligible population.

Numerator   The number of members who had at least one dispensing event for a statin medication of any intensity (Table SPD-A) during 2015.

Table N-14. High, Moderate and Low-Intensity Statin Prescriptions

Description	Prescription	
High-intensity statin therapy	• Atorvastatin 40–80 mg • Amlodipine-atorvastatin 40–80 mg • Ezetimibe-atorvastatin 40–80 mg	• Rosuvastatin 20–40 mg • Simvastatin 80 mg • Ezetimibe-simvastatin 80 mg
Moderate-intensity statin therapy	• Atorvastatin 10–20 mg • Amlodipine-atorvastatin 10–20 mg • Ezetimibe-atorvastatin 10–20 mg • Rosuvastatin 5–10 mg • Simvastatin 20–40 mg • Ezetimibe-simvastatin 20–40 mg • Niacin-simvastatin 20–40 mg • Sitagliptin-simvastatin 20–40 mg	• Pravastatin 40–80 mg • Aspirin-pravastatin 40–80 mg • Lovastatin 40 mg • Niacin-lovastatin 40 mg • Fluvastatin XL 80 mg • Fluvastatin 40 mg bid • Pitavastatin 2–4 mg
Low-intensity statin therapy	• Simvastatin 10 mg • Ezetimibe-simvastatin 10 mg • Sitagliptin-simvastatin 10 mg • Pravastatin 10–20 mg • Aspirin-pravastatin 20 mg	• Lovastatin 20 mg • Niacin-lovastatin 20 mg • Fluvastatin 20–40 mg • Pitavastatin 1 mg

11. Eligible Population: *Rate 2*—Statin Adherence 80%

Event/diagnosis   All members who meet the numerator criteria for Rate 1.

12. Measure Specification: *Rate 2*—Statin Adherence 80%

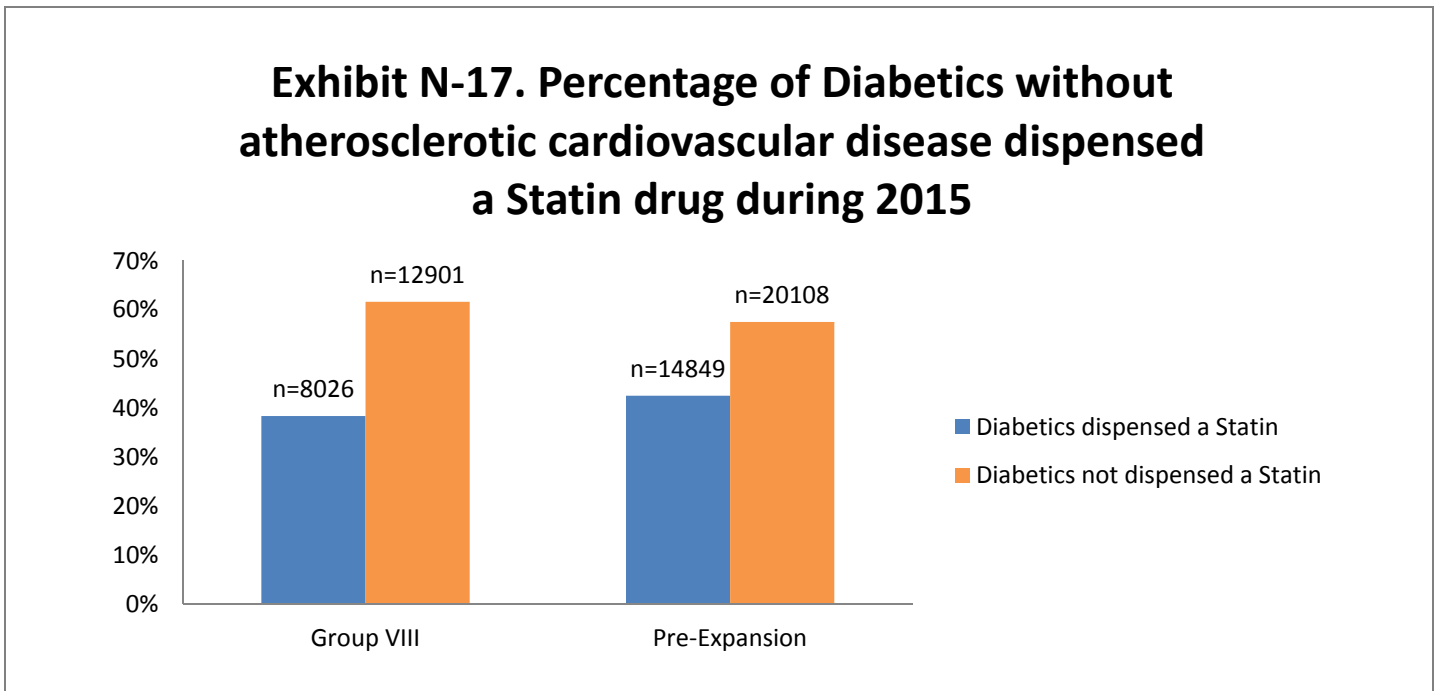**Denominator**   The Rate 2 eligible population.

Numerator   The number of members who achieved a PDC of at least 80% during the treatment period.

Follow the steps below to identify numerator compliance.

Step 1   Identify the IPSD. The IPSD is the earliest dispensing event for any intensity statin medication (Table SPD-A) during the measurement year.

Step 2   To determine the treatment period, calculate the number of days from the IPSD (inclusive) to the end of 2015.

Step 3   Count the days covered by at least one prescription for statin medication during the treatment period. To ensure the measure does not give credit for supply that extends beyond 2015, subtract any days supply that extends beyond December 31, 2015.

Step 4   Calculate the member's PDC using the following equation.

$$\frac{\text{Total Days Covered by a Statin Medication in the Treatment Period (step 3)}}{\text{Total Days in Treatment Period (step 2)}}$$
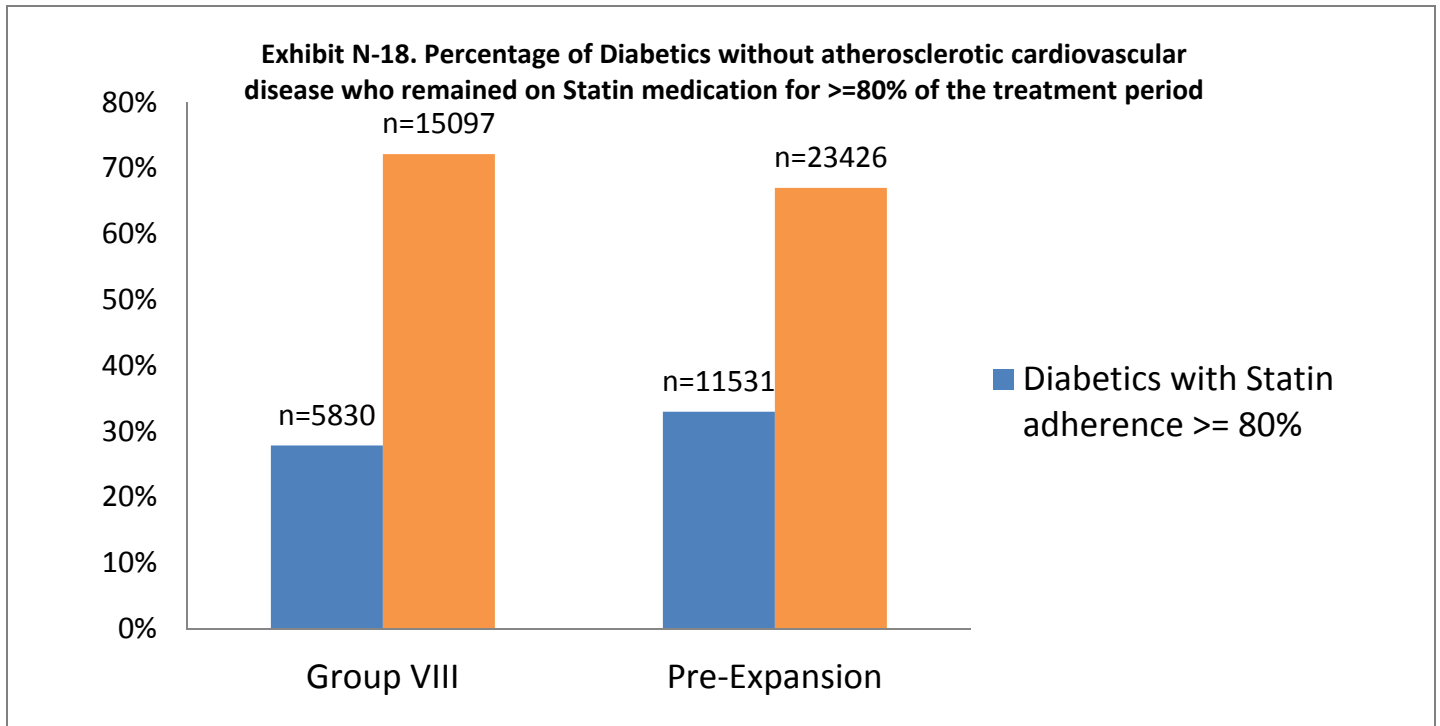
Step 5   Sum the number of members whose PDC is ≥80% for the treatment period.

Exhibit N-17. Percentage of Diabetics without atherosclerotic cardiovascular disease dispensed a Statin drug during 2015

The compliance rate for statin treatment of diabetic Group VIII patients was 38.4%. The compliance rate for statin treatment of pre-expansion diabetic patients was 42.5%.

Table N-15. Compliance rates for statin treatment by diabetic group

	Group-VIII	Pre-Expansion
Diabetics dispensed Statin (n)	8,026	14,849
Diabetics dispensed a Statin (%)	27.9	33.0
Diabetics not dispensed a Statin (n)	12,901	20,108
Diabetics not dispensed a Statin (%)	61.6	57.5

Exhibit N-18. Percentage of Diabetics without atherosclerotic cardiovascular disease who remained on Statin medication for >=80% of the treatment period

The compliance rate for remaining on statin treatment by diabetic Group VIII patients was 27.9%. The compliance rate for remaining on statin treatment by pre-expansion diabetic patients was 33.0%.

Antidepressant Medication Management (AMM)

Description

The percentage of members 18 years of age and older who were treated with antidepressant medication, had a diagnosis of major depression and who remained on an antidepressant medication treatment during 2014 and 2015. Two rates are reported.

1. *Effective Acute Phase Treatment.* The percentage of members who remained on an antidepressant medication for at least 84 days (12 weeks).

2. *Effective Continuation Phase Treatment.* The percentage of members who remained on an antidepressant medication for at least 180 days (6 months).

Eligible participants must not have more than one gap in enrollment of up to one month during 2015.

Definitions

Intake Period	The 12-month window starting on May 1, 2014 and ending on April 30, 2015.
IPSD	Index Prescription Start Date. The earliest prescription dispensing date for an antidepressant medication during the Intake Period.
Negative Medication History	A period of 105 days prior to the IPSD when the member had no pharmacy claims for either new or refill prescriptions for an antidepressant medication.
Treatment days	The actual number of calendar days covered with prescriptions within the specified 180-day (6-month) measurement interval. For Effective Continuation Phase Treatment, a prescription of 90 days (3 months) supply dispensed on the 151st day will have 80 days counted in the 231-day interval.

Eligible Population

Event/diagnosis	Follow the steps below to identify the eligible population, which is used for both rates.
Step 1	Determine the IPSD. Identify the date of the earliest dispensing event for an antidepressant medication (Table AMM-C) during the Intake Period.
Step 2: Required exclusion	Exclude members who did not have a diagnosis of major depression in an inpatient, outpatient, ED, intensive outpatient or partial hospitalization setting during the 121-day period from 60 days prior to the IPSD, through the IPSD and the 60 days after the IPSD. Members who meet any of the following criteria remain in the eligible population:

- An outpatient visit, intensive outpatient encounter or partial hospitalization with any diagnosis of major depression. Either of the following code combinations meets criteria:
  - AMM Stand Alone Visits Value Set with Major Depression Value Set.

– AMM Visits Value Set with AMM POS Value Set and Major Depression Value Set.

- An ED visit (ED Value Set) with any diagnosis of major depression (Major Depression Value Set).

- An acute or nonacute inpatient stay (Inpatient Stay Value Set) with any diagnosis of major depression (Major Depression Value Set).

Step 3 Test for Negative Medication History. Exclude members who filled a prescription for an antidepressant medication 105 days prior to the IPSD.

Step 4 Calculate continuous enrollment. Members must be continuously enrolled for 105 days prior to the IPSD to 231 days after the IPSD.

Administrative Specification

Denominator The eligible population.

Numerators

Effective Acute Phase Treatment At least 84 days (12 weeks) of continuous treatment with antidepressant medication (Table AMM-C) beginning on the IPSD through 114 days after the IPSD (115 total days). Continuous treatment allows gaps in medication treatment up to a total of 30 days during the 115-day period. Gaps can include either washout period gaps to change medication or treatment gaps to refill the same medication.

Regardless of the number of gaps, there may be no more than 30 gap days. Count any combination of gaps (e.g., two washout gaps of 15 days each, or two washout gaps of 10 days each and one treatment gap of 10 days).

Table N-16. Antidepressant Medications

Description	Prescription		
Miscellaneous antidepressants	• Bupropion	• Vilazodone	• Vortioxetine
Monoamine oxidase inhibitors	• Isocarboxazid • Phenelzine	• Selegiline • Tranylcypromine	
Phenylpiperazine antidepressants	• Nefazodone	• Trazodone	
Psychotherapeutic combinations	• Amitriptyline-chlordiazepoxide • Amitriptyline-perphenazine		• Fluoxetine-olanzapine
SNRI antidepressants	• Desvenlafaxine • Duloxetine	• Levomilnacipran • Venlafaxine	
SSRI antidepressants	• Citalopram • Escitalopram	• Fluoxetine • Fluvoxamine	• Paroxetine • Sertraline
Tetracyclic antidepressants	• Maprotiline	• Mirtazapine	

Tricyclic antidepressants	• Amitriptyline	• Desipramine	• Nortriptyline
	• Amoxapine	• Doxepin (>6 mg)	• Protriptyline
	• Clomipramine	• Imipramine	• Trimipramine

Effective Continuation Phase Treatment
At least 180 days (6 months) of continuous treatment with antidepressant medication (Table AMM-C) beginning on the IPSD through 231 days after the IPSD (232 total days).

Continuous treatment allows gaps in medication treatment up to a total of 51 days during the 232-day period. Gaps can include either washout period gaps to change medication or treatment gaps to refill the same medication.

Regardless of the number of gaps, there may be no more than 51 gap days. Count any combination of gaps (e.g., two washout gaps of 25 days each, or two washout gaps of 10 days each and one treatment gap of 10 days).
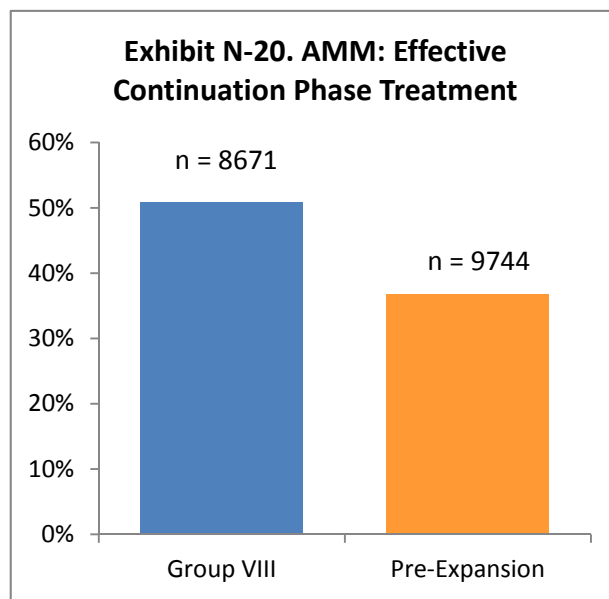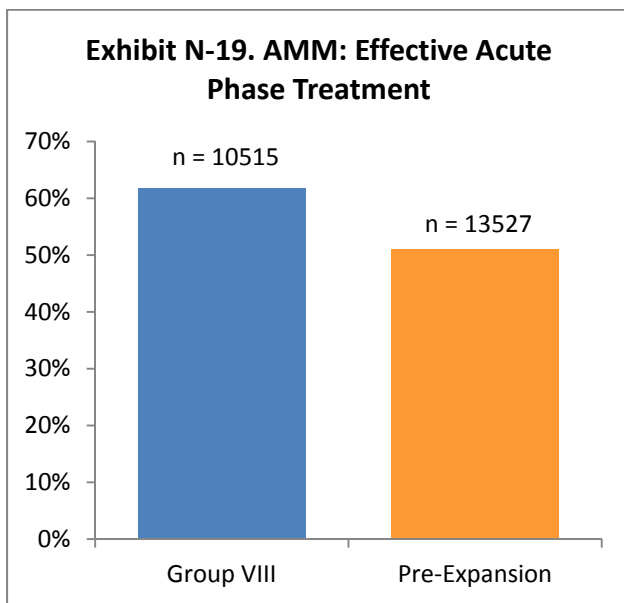

Exhibit N-19. AMM: Effective Acute Phase Treatment

Exhibit N-20. AMM: Effective Continuation Phase Treatment

Table N-17. Antidepressant Medication Management by Enrollee Type

	Group-VIII	Pre-Expansion
Effective Acute Phase Treatment (n)	10,515	13,527
Effective Acute Phase Treatment (%)	61.7	51.0
Effective Continuation Phase Treatment (n)	8,671	9,744
Effective Continuation Phase Treatment (%)	50.9	36.7

Telephone & Biometric Screening Analyses

To assess whether observed differences in the biometric screening between Group VIII enrollees and pre-expansion enrollees were due to demographic differences, the research team estimated a series of logistic regression models which predicted the likelihood of biometric risk indicators with controls for age, gender, race, marital status, and whether there were children in the household. The models employed sample weights and were adjusted for the fact that the sample selection process was over-weighted towards Group VIII enrollees. These results are depicted in Exhibit N-21.

The research team found that the differences in the estimated probability of Group VIII enrollees and pre-expansion enrollees having high blood pressure, A1C levels consistent with diabetes, and high cholesterol were not significantly different after accounting for demographic differences in these subpopulations. The key differences were that Group VIII enrollees were older and more likely to be male; these characteristics are associated with higher blood pressure, diabetes, and high cholesterol.

Exhibit N-21.   Predicted probabilities of biometric risk indicators with demographic adjustments, Group VIII and pre-expansion enrollees*
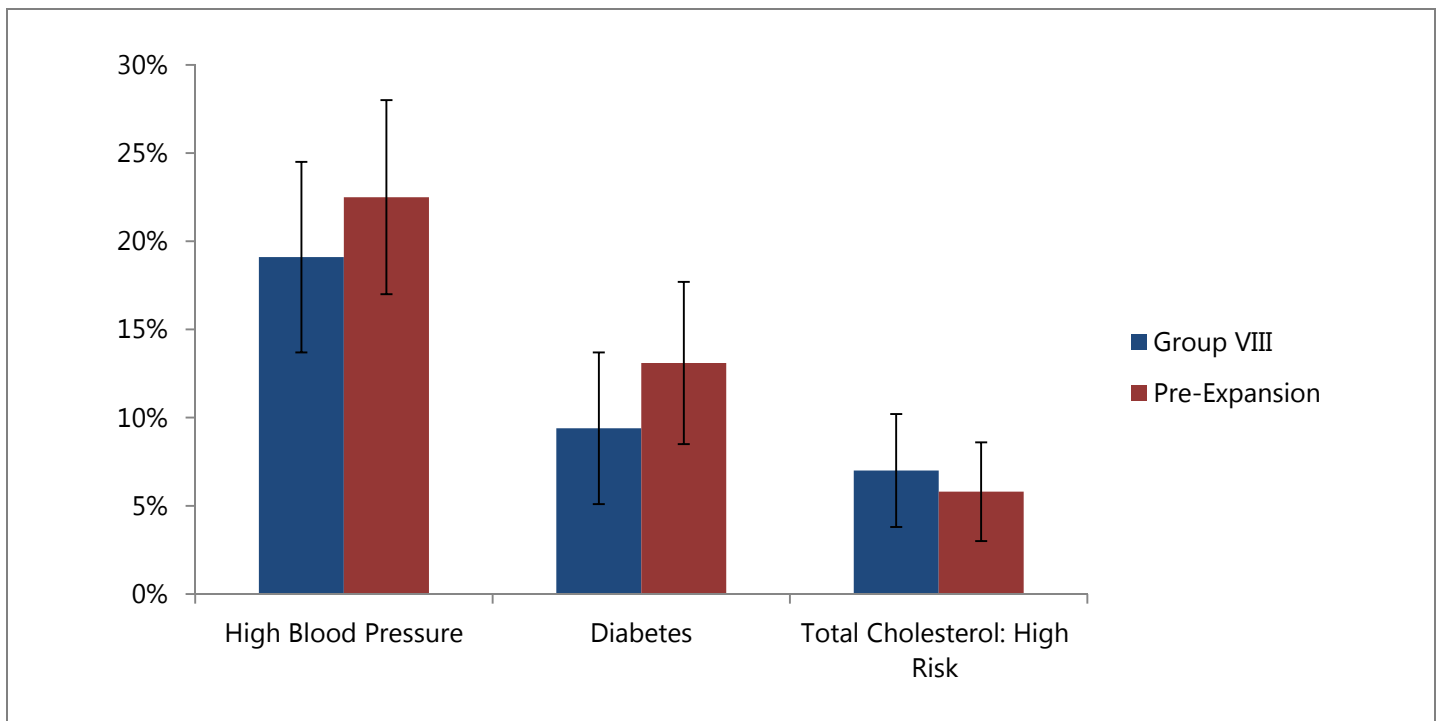
*Derived from logistic regression models with controls for race, age, gender, education, marital status, and parental status.

Source: Group VIII Biometric Screening (n=886).

Exhibit N-22. Prevalence of high cardiovascular risk scores using biometric data, Group VIII and pre-expansion enrollees
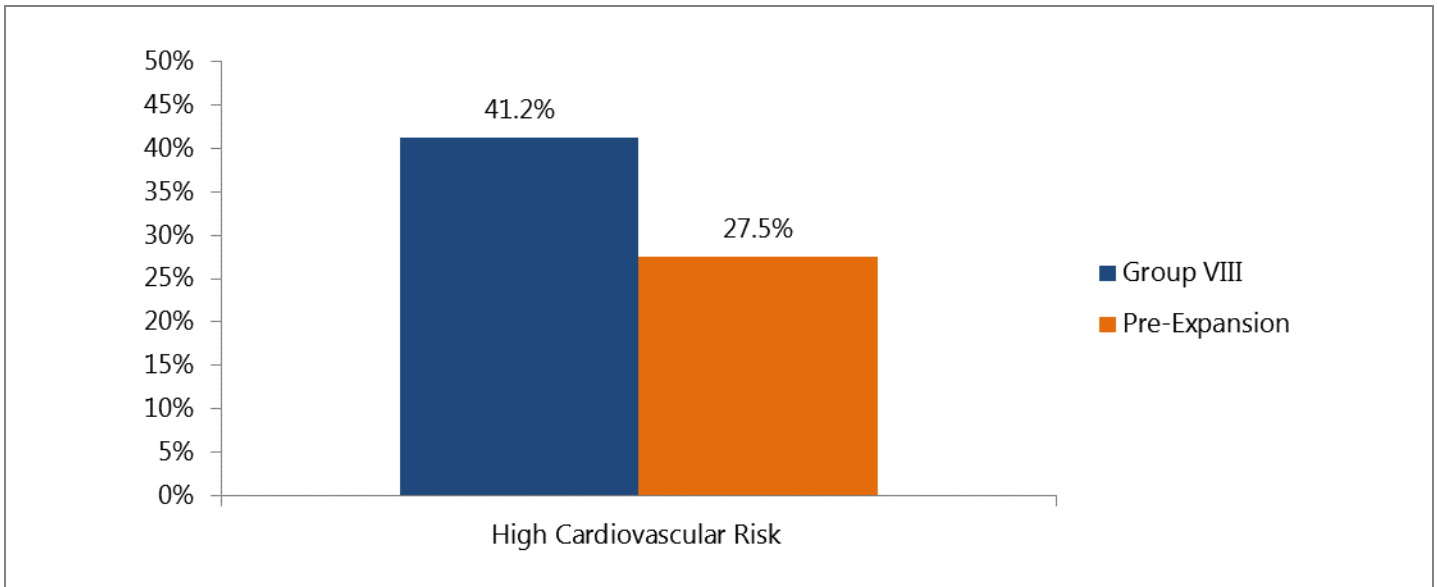
Source: Group VIII Biometric Screening (n=886).

Cardiovascular risk is defined as a combination of risk factors (age, sex, blood pressure, and cholesterol) that produce an estimate for an individual's risk over the next 10 years. High cardiovascular risk is defined as greater than a 7.5% risk over the next 10 years. The larger proportion of individuals at high cardiovascular risk in the Group VIII population, shown in Exhibit N-22, is expected given the demographic differences in the population (larger proportion of older males).