



Institute for Health Policy and Practice

# Access to Care in the New Hampshire Medicaid Program

**Pre-Managed Care Experience, Opportunities for Improvement and Early Experiences under Medicaid Managed Care**

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# Access to Care in the New Hampshire Medicaid Program

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## Background

Before the implementation of the Affordable Care Act (ACA) Medicaid expansion in New Hampshire in August 2014, the New Hampshire Medicaid program covered populations categorically eligible for Medicaid including children, pregnant women, parents, elders and people with disabilities. Each group was subject to its own income eligibility rules with children and pregnant women experiencing the most generous eligibility (300% of the federal poverty level (FPL) and 185% FPL, respectively) and parents facing more limited eligibility (38% FPL for jobless and 47% for working parents in 2013).<sup>1</sup> The program was administered by the New Hampshire Department of Health and Human Services (hereafter, “the Department”) and covered nearly 175,000 individuals in full or in part at some point during state fiscal year 2012.<sup>2</sup>

In the fourth quarter of calendar year 2012, there were just over 110,000 Medicaid enrollees, excluding Medicare-Medicaid dual eligibles. Approximately 86,000 were children and 24,000 were adults. Among the adults, about 14,000 were low-income parents or pregnant women, while disabled and elderly enrollees made up the remainder of the Medicaid population.

While 34 states and DC had developed comprehensive risk-based Medicaid managed care programs by 2009<sup>3</sup>, New Hampshire had maintained a fee-for-service program. In June 2011, however, the New Hampshire legislature passed SB 147, which directed the Department to develop a comprehensive statewide Medicaid managed care program for all Medicaid enrollees. The transition to Medicaid managed care was expected to improve quality and budget predictability and ultimately reduce costs for the Medicaid population. In order to achieve these goals, the Department developed a set of guiding principles for the design of the Medicaid Care Management (MCM) program.<sup>4</sup> These included an emphasis on a “whole person” approach to care coordination with efforts to integrate not only primary care and behavioral health, for example,

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<sup>1</sup> Heberlein M, Brooks T, Artiga S, Stephens J. Getting into Gear for 2014: Shifting New Medicaid Eligibility and Enrollment Policies into Drive. Washington DC: Kaiser Commission on Medicaid and the Uninsured, November 2013. Available at: <https://kaiserfamilyfoundation.files.wordpress.com/2013/11/8516-getting-into-gear-for-2014-shifting-new-medicare-eligibility-appendix-tables.pdf>

<sup>2</sup> Toumpas NA, Dunn KA, Nihan M, Chalsma A. Monitoring Access to Care in New Hampshire’s Medicaid Program. Office of Medicaid Business and Policy, New Hampshire Department of Health and Human Services, February 2013. Available at: <http://www.dhhs.nh.gov/ombp/documents/medicaid-report-feb2013.pdf>

<sup>3</sup> Howell EM, Palmer A, Adams F. Medicaid and CHIP Risk Based Managed Care in 20 States. Washington DC: Urban Institute, September 2012. Available at: <http://www.urban.org/research/publication/medicaid-and-chip-risk-based-managed-care-20-states>

<sup>4</sup> Toumpas N. MCM Commission. Presentation to the Governor’s Commission on Medicaid Care Management, September 4, 2014. Available at: <http://governor.nh.gov/commissions-task-forces/medicaid-care/documents/mm-09-04-2014-toumpas.pdf>

but to go further to incorporate psychosocial and other needs. The program's primary goal was to deliver the right care, at the right time, in the right place to Medicaid enrollees. Some of the critical elements aimed at achieving that goal were care coordination, supporting a patient-centered medical home, chronic care and high risk management, and a focus on wellness and prevention.

At its conception, the program was designed to be implemented in three steps, beginning in July 2012. Step 1 was to include a transition to managed care coverage of state plan services for the majority of beneficiaries. One year later, Step 2 would require enrollment of the populations for whom managed care had been optional under Step 1 and the addition of coverage for long-term services and supports (LTSS). Step 3 would bring in the ACA Medicaid expansion population in 2014. In late 2011, the state signed contracts with three managed care organizations (MCOs). Well Sense Health Plan (operated by Boston Medical Center Health Plan), Meridian Health Plan, and New Hampshire Healthy Families (operated by Centene) were contracted to provide health care services for the New Hampshire Medicaid population on a capitated basis. However, in 2012, implementation of the MCM program stalled in New Hampshire because of the health plans' difficulty establishing adequate provider networks. This was caused in large part by a preexisting conflict between the hospitals and the state regarding payment for Medicaid services.

Ultimately, the hospitals agreed to contract with at least one of the health plans in exchange for improved disproportionate share hospital payments and beneficiaries began enrolling with managed care plans in September 2013 and coverage of state plan services for all non-optional populations began December 1, 2013. Populations permitted to opt out of Step 1 included children in foster care, "Katie Beckett kids" (e.g., children with severe disabilities receiving home care services), children receiving supplemental security income (SSI), and Medicare-Medicaid dual eligibles.<sup>5</sup> Though the state initially contracted with three health plans to serve the Medicaid market in New Hampshire, Meridian Health Plan announced their withdrawal on June 30, 2014, and the plan ended all services in New Hampshire on July 31, 2014. The remaining two plans began serving all former Meridian enrollees as of August 1, 2014.

Also in July 2014, New Hampshire opted into the ACA Medicaid expansion with the creation of the New Hampshire Health Protection Program (NHHPP). Enrollment in the NHHPP began on July 1, 2014 with FFS coverage beginning August 15 and MCO coverage beginning September 1, 2014, effectively implementing what was originally known as Step 3 of the transition to managed care. The state ultimately decided to rely heavily on the private market to provide coverage for the expansion population, however. Eligible individuals with access to employer coverage were required to take that coverage, with the state providing premium support, if it was deemed cost-effective. And in January 2016, the state required NHHPP enrollees to select a plan in the private health insurance Marketplace with premium assistance from the state. As of October 2016, there

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<sup>5</sup> Even at full phase-in the following populations will remain in FFS Medicaid: those with VA benefits, those with only family planning benefits, Qualified Medicare Beneficiaries (QMBs), Specified Low-Income Medicare Beneficiaries (SLMBs), Qualified Working Disabled Individuals (QWDIs), and spend-down populations.

were about 41,000 individuals receiving premium assistance to purchase coverage in the Marketplace.<sup>6</sup>

In late 2015, implementation of Step 2 began when the optional populations were required to enroll with a managed care plan for coverage of acute care services that began February 1, 2016. Coverage of long-term services and supports including waiver services (Choices for Independence, Developmental Disabilities, Acquired Brain Disorder, and In-Home Supports) and nursing facility services by the MCOs is still pending.

## **Urban Institute and University of New Hampshire Evaluation**

Within this context of a rapidly changing health insurance and delivery system environment, the Urban Institute is performing an evaluation of New Hampshire's transition to Medicaid managed care. With support from the Endowment for Health, and joined by colleagues from the University of New Hampshire Institute for Health Policy and Practice (IHPP), the evaluation team is conducting qualitative and quantitative analysis to assess both the MCM implementation process and the effects of the transition on access to and quality of care.

In our early qualitative analysis of the transition to managed care, we found that implementation went relatively smoothly and that the state was taking an active oversight role. This was in contrast to the experience in Kentucky, for example, where Medicaid managed care implementation occurred very quickly and caused communication problems among major stakeholders and challenged the state's ability to oversee the transition.<sup>7</sup> Like Kentucky, however, significant problems were reported with regard to prior authorization in New Hampshire, particularly for pharmacy services. In addition, case management programs in New Hampshire were found to be somewhat underdeveloped in year 1, though both MCOs were focused on case management for pregnant women given their large numbers in the Medicaid program. Finally, the state's community mental health centers (CMHCs) did not sign contracts with the MCOs in year 1 and instead operated under letters of agreement, leading to some concerns about the stability of the provider network over time.<sup>8</sup>

Our quantitative analysis builds upon our qualitative findings and seeks to complement the robust data collection effort being conducted by the Department to monitor the transition to managed care. The state's plans for assessing the effects of the transition are detailed in the Quality

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<sup>6</sup> Meyers JA. MCM Commission. Presentation to the Governor's Commission on Medicaid Care Management, October 13, 2016. Available at: <http://governor.nh.gov/commissions-task-forces/medicaid-care/documents/mm-10-13-2016-dhhs-presentation.pdf>

<sup>7</sup> Palmer A, Howell EM, Costich J, Kenney GM. Evaluation of Statewide Risk Based Managed Care in Kentucky: A First Year Implementation Report. Washington DC: Urban Institute, November 2012. Available at: <http://www.urban.org/sites/default/files/alfresco/publication-pdfs/412702-Evaluation-of-Statewide-Risk-Based-Managed-Care-in-Kentucky-A-First-Year-Implementation-Report.PDF>

<sup>8</sup> More details available in: Palmer A, McMorro S, Kenney GM. Risk Based Managed Care in New Hampshire's Medicaid Program. Washington DC: Urban Institute, February 2015. Available at: <http://www.urban.org/research/publication/risk-based-managed-care-new-hampshires-medicaid-program>

Strategy for the New Hampshire MCM Program.<sup>9</sup> The strategy includes monitoring of over 400 quality indicators on the New Hampshire Medicaid Quality Information System (MQIS) website; annual Quality Improvement Projects (QIPs), chosen by the Department; and Performance Improvement Projects (PIPs), chosen by each health plan; as well as a host of other activities (further details are available in the state's quality strategy).

In August 2014, the Department released its first quality performance report.<sup>10</sup> This report provided a set of key indicators in 10 domains that have been used to track the performance of the care management program over time. The report was released monthly from August 2014 to July 2015 and is now integrated into the online Medicaid Quality Information System (MQIS). The MQIS provides access to many of the measures being tracked by the Department for the Medicaid population over time.<sup>11</sup> Some MQIS measures also provide information for comparator populations, including the pre-managed care New Hampshire Medicaid population, the New England average for Medicaid managed care, and the national average for Medicaid managed care.

With such an extensive evaluation effort already underway by the state, the quantitative component of the Urban Institute/UNH evaluation focuses on a subset of access-related outcomes and uses these to anchor an analysis of how access to care for Medicaid beneficiaries has changed since the transition to managed care. While we focus our detailed analysis on a limited set of outcomes, we also attempt to synthesize additional quantitative and qualitative findings by our own team and others to inform and interpret the data on these outcomes.

In this report, we describe the selection of our outcomes of interest as well as the data sources used to analyze specific measures. We then examine our selected measures of access to care for the New Hampshire Medicaid program in the years prior to the managed care transition, with an emphasis on where opportunities for improvement existed, and describe how these measures have changed since the transition. Finally, we assess our ability to draw broad conclusions on how managed care has affected access to care for the Medicaid population in New Hampshire thus far and propose additional analysis that could prove useful.

## **Outcome Selection, Data and Methods**

Our approach to identifying a core set of outcomes involved two steps: a literature review and a data assessment. First, we conducted a literature review to identify a large set of potential outcome measures. We focused on both published and grey literature related to Medicaid access to care, service utilization, quality and efficiency of care, and health care costs, with a specific

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<sup>9</sup> Quality Strategy for the New Hampshire Medicaid Care Management Program. August 3, 2015. Available at: <http://www.dhhs.nh.gov/ombp/quality/documents/quality-strategy.pdf>

<sup>10</sup> New Hampshire Medicaid Care Management Quality Performance Report. Key Indicators-August 2014. A Report Prepared by the Medicaid Quality Program, Office of Medicaid Business and Policy, New Hampshire Department of Health and Human Services, July 31, 2014. Available at: <http://www.governor.nh.gov/commissions-task-forces/medicaid-care/documents/mm-08-07-2014-dhhs-data-report.pdf>

<sup>11</sup> New Hampshire Department of Health and Human Services. NH Medicaid Quality. Available at: <http://medicaidquality.nh.gov/>

interest in prior examinations of Medicaid managed care. We identified a list of outcomes used in various studies and considered their reliability in capturing the desired concept, as indicated by consistency in measurement and findings across studies, and their potential to be affected by the transition to managed care, as indicated by both theoretical and empirical work on Medicaid managed care. We also noted any apparent gaps in the previously studied outcomes, informed by our own qualitative findings in New Hampshire as well as early evidence from the Department and other sources, and compiled a list of other potential outcome measures for the evaluation.

Second, we assessed the availability of various outcomes on each of six potential New Hampshire data sources: the Behavioral Risk Factor Surveillance System (BRFSS), the Consumer Assessment of Healthcare Providers and Systems (CAHPS), the Pregnancy Risk Assessment and Monitoring System (PRAMS), vital records birth data, the Uniform Health Facility Discharge Data Set (UHFDDS), and Medicaid claims and encounter data. Then, we considered several factors that would influence our ability to analyze these data sources in a timely way. We considered whether data reflecting the post-implementation time period (e.g., 2014 and beyond) would be available for analysis within the evaluation timeframe (approximately early 2014 through 2017). Next, we assessed whether any changes to the content or format of the each data source would prevent constructing consistent measures using pre- and post-implementation data. Finally, we examined the ability to identify Medicaid enrollees in various subgroups using the selected data sources and considered whether the available sample sizes were likely to allow for meaningful analysis. This was particularly important for a small state like New Hampshire, with a relatively small Medicaid program.

More details on the literature review and data assessment are available in a separate document upon request from the authors, but based on these two exercises we chose a core set of outcome measures for our quantitative evaluation relying on data from five of the six potential data sources.<sup>12</sup> We chose some outcomes that have been widely studied (e.g., access to primary care, use of preventive care) so that we can compare our results to prior analyses of the effects of Medicaid managed care nationally or in specific states. We also incorporated our qualitative findings, as well as Department and external quality review organization (EQRO) reports, to focus on some outcomes that seem particularly relevant in New Hampshire's transition to Medicaid managed care (e.g., pharmacy, prenatal). We have avoided outcomes that may require a longer timeframe to respond, such as body-mass index and mortality rates. At this point, we have not proposed any cost-specific outcomes because we need to further assess whether we can add any value in this area above and beyond analysis planned by the Department.

We classify our outcomes into three domains based on the Anderson model of access to care.<sup>13</sup>

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<sup>12</sup> We excluded the New Hampshire hospital discharge data because of multiple data availability and consistency limitations.

<sup>13</sup> Anderson RM. Revisiting the Behavioral Model and Access to Medical Care: Does It Matter? *Journal of Health and Social Behavior* 36: 1-10, March 1995.

1. **Potential and Realized Access.** Potential access reflects enabling factors like having a usual source of care, while realized access reflects actual service use such as visiting a primary care doctor.
2. **Efficient access** reflects high-value service use such as recommended preventive care and appropriate prenatal care.
3. **Effective access** reflects service use that ultimately results in improved health behaviors, health outcomes or patient satisfaction.

**Table 1. Selected Outcomes for Quantitative Evaluation of New Hampshire Transition to Medicaid Managed Care**

Domain	Outcome	Specific Measures	Data Source(s)
Potential and Realized Access	Primary care access	Usual source of care, any/number of primary care visits	BRFSS, CAHPS. Claims/encounter data
	Pharmacy use	TBD	Claims/encounter data
	Mental health and substance use services	TBD	Claims/encounter data
Efficient Access	Appropriate ED and inpatient use	ACS admission, Primary care treatable ED use	Claims/encounter data
	Use of recommended preventive services/immunizations	Pap test, mammogram, colonoscopy, flu vaccine	BRFSS, claims/encounter data
	Appropriate prenatal care	Kotelchuck index	Claims/encounter data, PRAMS, vital records birth data
Effective Access	Patient satisfaction	With healthcare, with personal doctor, with health plan	CAHPS
	Substance use during pregnancy	Smoking/drinking before, during, after pregnancy;	PRAMS
	Infant health	Birthweight, breastfeeding	Vital records birth data, PRAMS
	Health status	Self-reported general health status, days in poor physical health, days in poor mental health	BRFSS, CAHPS

Notes: ACS is ambulatory care sensitive; ED is emergency department, TBD is to be determined.

Using this framework allows us to consider the broader themes that are emerging under New Hampshire's transition to managed care in addition to changes in the specific measures and is relatively consistent with both the MACPAC access monitoring framework<sup>14</sup> and New Hampshire's guiding principles for managed care.<sup>15</sup> Predictions and existing evidence on the effects of Medicaid managed care on these domains and outcomes are generally mixed. Some evidence suggests that Medicaid managed care improves access to care,<sup>16 17</sup> while others show no improvement,<sup>18</sup> or even reduced access for disabled enrollees.<sup>19</sup> Results have also been mixed on the effects of care management on preventable hospitalizations,<sup>20 21</sup> and the quality of prenatal care.<sup>22 23 24 25</sup>

Table 1 reflects all of our selected outcomes and associated data sources, but we do not address the complete list in this report. Because the most recent full year of Medicaid claims data available to the evaluation team was 2012, we did not perform our own analysis of this data. This limits our ability to estimate measures of appropriate ED and inpatient use, pharmacy use, and mental health and SUD treatment services. Both pharmacy use and mental health service use were deemed important to monitor under the managed care transition, but additional analysis will be required to select a subset of appropriate measures for these outcomes if we obtain access to claims and encounter data. Moreover, SUD treatment services represent a special interest because these services were not covered by traditional Medicaid or by the managed care plans in the initial transition. However, these services were required under the ACA Medicaid expansion to be covered in the NHHPP and were added to the standard Medicaid benefit package in July 2016. Thus, future analyses may examine these services for specific populations or time periods.

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<sup>14</sup> Medicaid and CHIP Payment and Access Commission. Report to Congress on Medicaid and CHIP, March 2011. Available at: [https://www.macpac.gov/wp-content/uploads/2015/01/MACPAC\\_March2011\\_web.pdf](https://www.macpac.gov/wp-content/uploads/2015/01/MACPAC_March2011_web.pdf)

<sup>15</sup> Toumpas N. MCM Commission. Presentation to the Governor's Commission on Medicaid Care Management, September 4, 2014. Available at: <http://governor.nh.gov/commissions-task-forces/medicaid-care/documents/mm-09-04-2014-toumpas.pdf>

<sup>16</sup> Coughlin TA, Long SK, Graves JA. "Does Managed Care Improve Access to Care for Medicaid Beneficiaries With Disabilities? A National Study." *Inquiry*, vol. 45, no. 4, 2008.

<sup>17</sup> Garrett B, Davidoff A, Yemane A. "Effects of Medicaid Managed Care Programs on Health Services Access and Use." *Health Services Research*, vol. 38, no. 2, 2003

<sup>18</sup> Herring B, Adams EK. "Using HMOs to Serve the Medicaid Population: What Are the Effects on Utilization and Does the Type of HMO Matter?" *Health Economics*, vol. 20, no. 4, 2010.

<sup>19</sup> Burns ME. "Medicaid Managed Care and Cost Containment in the Adult Disabled Population." *Medical Care*, vol. 47, no. 10, 2009b

<sup>20</sup> Bindman AB, Chattopadhyay A, Osmond DH, Huen W, Bacchetti P. "The Impact of Medicaid Managed Care on Hospitalizations for Ambulatory Care Sensitive Conditions." *Health Services Research*, vol. 40, no. 1, 2005

<sup>21</sup> Basu J, Friedman B, Burstin H. "Managed Care and Preventable Hospitalization Among Medicaid Adults." *Health Services Research*, vol. 39, no. 3, 2004

<sup>22</sup> Aizer A, Currie J, Moretti E. "Does Managed Care Hurt Health? Evidence from Medicaid Mothers." *The Review of Economics and Statistics*, vol. 89, no. 3, 2007.

<sup>23</sup> Kaestner R, Dubay L, Kenney G. "Managed Care and Infant Health: An Evaluation of Medicaid in the U.S." *Social Science and Medicine*, vol. 60, no. 8, 2005

<sup>24</sup> Howell EM, Dubay L, Kenney G, Sommers AS. "The Impact of Medicaid Managed Care on Pregnant Women in Ohio: A Cohort Analysis." *Health Services Research*, vol. 39, no. 4 (part 1), 2004

<sup>25</sup> Levinson A, Ullman F. "Medicaid Managed Care and Infant Health." *Journal of Health Economics*, vol. 17, no. 3, 1998

We also do not report on the measures of health status from the effective access domain. While health status is clearly an important outcome, several data limitations make appropriate comparisons of health status challenging.<sup>26</sup> Furthermore, changes in health status will require a longer time horizon to be affected by the move to managed care. Finally, in addition to excluding these specific measures, this report does not include any access measures for children. While children represent a majority of Medicaid enrollees in New Hampshire, the non-claims/encounter data sources including BRFSS, PRAMS, and vital records are richer for adults, so we have limited our analysis to adults at this time.

In this report, we present estimates of the specific access measures listed in Table 1 from four data sources: BRFSS, CAHPS, PRAMS and New Hampshire vital records birth data.

From the BRFSS, we estimate access to primary care and use of recommended preventive care for nonelderly adults reporting Medicaid coverage. Pre-managed care data is from 2012/2013 and we compare estimates for Medicaid enrollees to estimates for other nonelderly adults with insurance coverage other than Medicaid (excluding the uninsured). Sample sizes for Medicaid enrollees on the BRFSS are small, so we focus on a limited number of measures with sufficient sample size. For example, we examine receipt of Papanicolaou (pap) tests but not other cancer screenings because sample sizes for breast and colon cancer were too small to produce meaningful comparisons. Moreover, we cannot exclude NHHPP enrollees from the Medicaid sample in 2014 so differences in the sample will likely contribute to unadjusted changes over time in specific measures.

From the CAHPS data, we estimate access to primary care, as well as satisfaction with providers, health plans and overall health care for adults in Medicaid in 2012 and 2014. Because the CAHPS is a targeted survey for New Hampshire Medicaid enrollees, the sample sizes are larger than for the BRFSS. In addition, the 2014 CAHPS survey was completed by late April 2014, so the NHHPP had not yet been implemented and thus samples are likely to be more comparable over time. One drawback to the CAHPS is the lack of access to data on a New Hampshire comparison group, so we present national comparisons from the 2014 CAHPS Health Plan Survey Database which includes estimates based on responses from over 60,000 adult Medicaid enrollees in 22 states in 2013.<sup>27</sup>

We use the first available year of New Hampshire PRAMS data (2013) for our analysis of substance use by pregnant women with Medicaid as well as information on breastfeeding patterns post-delivery. We compare PRAMS estimates for women with Medicaid coverage to estimates for

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<sup>26</sup> Comparing the health status of the Medicaid population to the non-Medicaid population in an effort to identify opportunities for improvement under managed care may not be appropriate given that disability was a major criterion for eligibility prior to implementation of the ACA Medicaid expansion. Also, looking at changes in health status over time without being able to exclude the NHHPP from the post-managed care sample may result in misleading results.

<sup>27</sup> Shaller D, Ricketts J, Harris L, Dodson T. 2014 CAHPS Health Plan Survey Database. AHRQ Publication No. 15-CAHPS001-EF, October 2014. Available at: <https://www.cahpsdatabase.ahrq.gov/files/2014CAHPSHealthPlanChartbook.htm>

women without Medicaid coverage (including the uninsured).<sup>28</sup> We also use 2013 and 2014 New Hampshire vital records data for Medicaid covered births linked to Medicaid claims to assess adequacy of prenatal care using the Kotelchuck Index.<sup>29</sup> The Kotelchuck Index breaks the adequacy of prenatal care into 4 categories (inadequate, intermediate, adequate and intensive) based on the timing of initiation of prenatal care and the receipt of the recommended volume of visits.<sup>30</sup> We also use the vital records data to examine birthweight statistics for Medicaid-covered births. We compare Medicaid births to non-Medicaid births in 2013 to assess opportunities for improvement. Additional information on all of these analyses, including sample sizes, is provided in the appendix.

We supplement our own analysis using a variety of published estimates of related access measures for the New Hampshire Medicaid population. We do not present these estimates in the tables below, but instead use them to synthesize and interpret the evidence from our own data analysis. Our main source of published pre-managed care data is a May 2013 Department report on “Monitoring Access to Care in New Hampshire’s Medicaid Program”<sup>31</sup>, but we also take advantage of a 2009 report on adult preventive care<sup>32</sup> that also used New Hampshire claims data. In addition, we examine the detailed report on the 2012 CAHPS survey to provide additional context for our own CAHPS analysis.<sup>33</sup> For additional data on post-managed care experiences, we rely on the Department’s key indicator reports, the MQIS, and several quality updates presented by the Department.<sup>34</sup> Finally, we incorporate the findings from our own interviews with various New Hampshire stakeholders between July 2014 and April 2016.

## **Access to Care in New Hampshire Medicaid on the Eve of Managed Care**

The following sections describe selected measures of potential and realized access, efficient access and effective access for adult Medicaid enrollees in the years prior to the implementation

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<sup>28</sup> NH PRAMS 2013 Databook: Stratified by Medicaid participation; NH PRAMS Maternal and Child Health Section, Division of Public Health Services, Department of Health and Human Services, August 2016. Available at: <http://www.dhhs.nh.gov/dphs/bchs/mch/prams/documents/medicaid-databook2013.pdf>

<sup>29</sup> The Vital Records data was processed and compiled by David Laflamme, PhD, Maternal and Child Health Epidemiologist at the New Hampshire Division of Public Health Services.

<sup>30</sup> Kotelchuck M. 1994. The Adequacy of Prenatal Care Utilization Index: its US distribution and association with low birthweight. *American Journal of Public Health* 84(9): 1486-89.

<sup>31</sup> Toumpas NA, Dunn KA, Nihan M, Chalsma A. Monitoring Access to Care in New Hampshire’s Medicaid Program. Office of Medicaid Business and Policy, New Hampshire Department of Health and Human Services, February 2013. Available at: <http://www.dhhs.nh.gov/ombp/documents/medicaid-report-feb2013.pdf>

<sup>32</sup> Perry W. Preventive Health Care Services Provided to the New Hampshire Medicaid Adult Population – with Comparisons to the Commercially Insured Population. A report prepared for the New Hampshire Department of Health and Human Services by the Maine Health Information Center, June 2009. Available at: <http://www.dhhs.nh.gov/ombp/documents/adultpreventive.pdf>

<sup>33</sup> Toumpas NA, Dunn KA. Assessment of the New Hampshire Medicaid Program and Providers. CAHPS Core Child and Adult Survey Results Summer 2012. A Report Prepared by ICF International for the Office of Medicaid Business and Policy New Hampshire Department of Health and Human Services, May 2013. Available at: <http://www.dhhs.nh.gov/ombp/documents/nhmedicaidcahpsreporsummer2012final.pdf>

<sup>34</sup> New Hampshire Department of Health and Human Services. NH Medicaid Quality: Standard Reports. Available at: <https://medicaidquality.nh.gov/standard-reports>

of managed care. We compare estimates for New Hampshire Medicaid enrollees to New Hampshire adults with coverage other than Medicaid or to national benchmarks. While these comparisons allow us to identify some access measures where the Medicaid population had room for improvement, it is important to note that the comparisons are not adjusted for other differences in the characteristics of the populations. Thus, we may overstate or understate the potential for improvement on specific measures.

### Pre-Managed Care Potential and Realized Access

Table 2 describes several measures of potential and realized access to primary care for New Hampshire Medicaid enrollees in 2012 and 2013, prior to the managed care transition.

**Table 2. Pre-Managed Care Potential and Realized Access for Adults**

Outcome	Measure	Source/ Year	NH Medicaid	Comparison
Potential Access to Primary Care	Has a personal doctor or healthcare provider	CAHPS 2013	84.8% (81.9 – 87.7)	See BRFSS comparison
	Has one or more personal doctors or healthcare providers	BRFSS 2013	89.8% (83.6 – 96.1)	89.4% (87.7 – 91.1)
Realized Access to Primary Care	Had a routine checkup within the last year	BRFSS 2013	75.3% (63.0 – 88.0)	69.7% (66.3 – 73.1)

Notes: BRFSS estimates are for nonelderly adults (18-64) and CAHPS estimates are all adults (18+). Comparison for BRFSS is non-Medicaid insured adults in New Hampshire. 95% confidence intervals are in parentheses.

In Table 2, we report the estimated share of adult Medicaid beneficiaries who had a usual source of care in 2013 from both the BRFSS (nonelderly) and CAHPS (all adults). In both surveys, respondents were asked if they could identify an individual personal doctor or healthcare provider responsible for their care. Approximately 85% of adult CAHPS Medicaid respondents reported having a personal doctor or healthcare provider in 2013, compared to approximately 90% of BRFSS respondents who had one or more than one. Despite different goals and sampling designs of the two surveys, the results are quite consistent and suggest access to care that is comparable to New Hampshire adults with insurance other than Medicaid, among whom about 89% reported having a usual source of care in 2013.

With regard to realized access to primary care, about 75% of nonelderly Medicaid enrollees on the BRFSS reported having a routine checkup in the past year, compared to 70% of non-Medicaid insured adults. The higher rate for Medicaid enrollees likely reflects the composition of the population, which includes more women and those with greater health needs.

In summary, on these measures of potential and realized access to primary care, access for New Hampshire beneficiaries was comparable to other insured adults in the years leading up to the transition to managed care. Thus, there do not appear to be major opportunities for improvement under managed care. But this is a limited set of measures and concerns exist that the introduction of provider networks and extensive utilization management by the Medicaid MCOs could result in access problems for Medicaid beneficiaries.

## Pre-Managed Care Efficient Access

Table 3 presents estimated measures of efficient access, including use of recommended preventive services and receipt of appropriate prenatal care, in 2012 and 2013.

**Table 3. Pre-Managed Care Efficient Access for Nonelderly Adults and Pregnant Women**

Outcome	Measure	Source/Year	NH Medicaid	Comparison
Use of recommended preventive services/immunizations	Flu vaccine in past 12 months	BRFSS 2012	40.1% (27.6 - 52.2)	39.7% (37.5 – 41.8)
	Pap test in past three years	BRFSS 2012	84.1% (70.0 - 98.2)	90.1% (87.9 – 92.3)
Appropriate prenatal care (Kotelchuck Index)	Inadequate prenatal care: begun after the 4th month or less than 50% of recommended visits received	Vital records 2013	16.1% (14.8 – 17.4)	8.1% (7.5 – 8.7)
	Intermediate prenatal care: begun by the 4th month and 50%-79% of recommended visits received	Vital records 2013	5.3% (4.5 – 6.1)	3.8% (3.4 – 4.2)
	Adequate prenatal care: begun by the 4th month and 80%-109% of recommended visits received	Vital records 2013	31.2% (29.6 – 32.8)	36.1% (35.0 – 37.2)
	Intensive prenatal care: begun by the 4th month and 110% or more of recommended visits received	Vital records 2013	47.4% (45.7 – 49.1)	52.0% (50.9 – 53.1)

Notes: Comparisons on the BRFSS are to non-Medicaid insured adults and for vital records are to births not linked to a Medicaid maternal delivery claim. 95% confidence intervals are in parentheses. Vital records measures include the entire population of Medicaid-covered births in New Hampshire and thus have no sampling error, but may include other non-sampling error represented in the confidence intervals.

Analysis of BRFSS data for nonelderly adults with Medicaid showed that approximately 2 out of every 5 Medicaid enrollees received a flu vaccine (40.1%) in the past 12 months in 2012, compared to a similar share of non-Medicaid insured adults (39.7%). About 84% of female Medicaid enrollees had a pap test within the past 3 years in 2012, which was somewhat lower than the rate of receipt for non-Medicaid insured women in New Hampshire (90%). But the small sample size for Medicaid women results in a wide confidence interval for the Medicaid rate that does not exclude the non-Medicaid rate.

Using data from the New Hampshire vital records system linked to Medicaid claims, we found that in 2013 about 79% of Medicaid births were associated with adequate (31.2%) or intensive (47.4%) use of prenatal care (e.g., receiving at least 80% of recommended visits) as calculated using the Kotelchuck index. This compares to about 88% of non-Medicaid births. Moreover, a higher percentage of Medicaid births were associated with inadequate prenatal care compared to the percentage of non-Medicaid births (16.1% versus 8.1%).

In summary, the above measures of efficient access suggest that adult Medicaid enrollees had similar levels of preventive care receipt to non-Medicaid insured adults in the pre-managed care

period, but small sample sizes for women limit the precision of these estimates. However, the rate of flu vaccine receipt is relatively low for both Medicaid and non-Medicaid insured adults—only about 40%—which indicates room for improvement. Furthermore, while most Medicaid births were associated with receipt of at least 80% of recommended prenatal care, 16% were associated with inadequate care, which was nearly twice as large as the rate for non-Medicaid births. This suggests another area that could be improved under managed care.

### Pre-Managed Care Effective Access

Table 4 reports estimates of effective access as reflected by patient satisfaction, health behaviors during pregnancy, and infant health in 2012 and 2013.

**Table 4. Pre-Managed Care Effective Access for Adults and Pregnant Women**

Outcome	Measure	Source/ Year	NH Medicaid	Comparison
Patient satisfaction	Rating of personal doctor 9-10/10	CAHPS 2012	54.4% (47.6 – 61.2)	64%
	Rating of health plan 9-10/10	CAHPS 2012	49.5% (43.1 – 55.9)	56%
	Rating of overall healthcare 9-10/10	CAHPS 2012	43.2% (36.4 – 49.9)	51%
Substance use during pregnancy	Smoked in past 2 years	PRAMS 2013	53.2% (44.5 - 61.7)	20.4 (16.1—25.4)
	Smoked 3m before pregnancy (If yes to smoked in past 2 years)	PRAMS 2013	88.9% (77.8 - 94.8)	82.5% (71.3 – 90.0)
	Smoked during last trimester of pregnancy (If yes to smoked in past 2 years)	PRAMS 2013	57.2% (45.1 - 68.6)	23.2% (13.7 – 36.4)
	Smoke now (If yes to smoked in past 2 years)	PRAMS 2013	66.2% (53.9 - 76.7)	39.6% (27.8 – 52.7)
	Drank alcohol in past 2 years	PRAMS 2013	69.7% (61.2 - 77.1)	87.7% (83.5—90.9)
	Drank alcohol 3m before pregnancy (If yes to alcohol in past 2 years)	PRAMS 2013	82.5% (73.1 - 89.1)	89.1% (84.8 – 92.3)
	Drank alcohol during last trimester of pregnancy (If yes to alcohol in past 2 years)	PRAMS 2013	12.0% (6.7 – 20.5)	17.4 (13.3 – 22.5)
Infant health	Very low birth weight (<1500 grams)	Vital records 2013	1.5% (1.1 – 1.9)	1.0% (0.8 – 1.2)
	Moderately low birth weight (1500-2499 grams)	Vital records 2013	6.7% (5.9 – 7.5)	5.1% (4.6 – 5.6)
	Normal birth weight (2500-3999 grams)	Vital records 2013	82.2% (81.0 – 83.4)	82.4% (81.6 – 83.2)
	High birth weight (At least 4000 grams)	Vital records 2013	9.7% (8.8 – 10.6)	11.5% (10.8 – 12.2)
	Breastfeeding ever	PRAMS 2013	80.4% (72.9 - 86.3)	90.3% (86.2—93.3)
	Still breastfeeding at time of survey, if ever?	PRAMS 2013	45.9% (36.3 - 55.8)	64.3% (58.4—69.7)

Notes: All CAHPS measures refer to the past 6 months. Comparisons for CAHPS are 2013 adult Medicaid estimates from the 2014 CAHPS health plan survey database. Comparisons for PRAMS are to women without Medicaid coverage while vital records comparison is births not linked to a Medicaid maternal delivery claim. 95% confidence intervals are in parentheses. Vital records measures include the entire population of Medicaid-covered births in New Hampshire and thus have no sampling error, but may include other non-sampling error represented in the confidence intervals.

In 2012, roughly 54% or less of Medicaid recipients indicated being extremely satisfied with their healthcare, provider, or health plan. Only 43% rated their overall healthcare at least a 9 out of 10 (on 10 point scale), compared to 51% nationally. About 54% rated their doctor a 9 or higher and 50% rated their health plan a 9 or higher, compared to 64% and 56%, respectively, at the national level.

Reducing substance use during pregnancy can improve infant health outcomes and may respond to efforts to improve provider advice and counseling and medication assistance for tobacco cessation under managed care. Using estimates from the 2013 PRAMS, we examined self-reported substance use before, during, and after pregnancy among women with a Medicaid covered birth. We found that more than half of Medicaid mothers drank or smoked 2 years prior to their pregnancy. Of those that smoked or drank alcohol in the last two years, 57% of Medicaid-insured mothers smoked, and 12% drank alcohol in the last trimester of their pregnancies, and 66% of mothers were smoking 2-6 months following their delivery. Compared to a group of women without Medicaid, smoking rates were much higher for Medicaid women, while alcohol use was somewhat higher for women without Medicaid.

Using vital records data, we also examined birth weight statistics for Medicaid deliveries in 2013. While most Medicaid births were normal to high birth weight; approximately 8% of Medicaid births were moderately to very low birth weight (under 2500 grams). This compares to approximately 6% of non-Medicaid covered births in 2013. Additional data from the PRAMS on infant health indicates that 80% of Medicaid-covered mothers breastfed their babies for some period of time, but only 46% were still breastfeeding 2 to 6 months after delivery in 2013. This compares to 64% of mothers without Medicaid. While birth weights look quite similar between Medicaid and non-Medicaid births, Medicaid mothers appear less likely to be breastfeeding 2-6 months following delivery.

In summary, there seem to be some opportunities for improvement in the measures of effective access presented above for the Medicaid population. Specifically, half or less than half of the population reported the highest levels of patient satisfaction with their healthcare, their provider and their plan, nearly 30% of pregnant women smoked in their third trimester, and less than half of Medicaid mothers were still breastfeeding 2-6 months after delivery.

### **Synthesis: Pre-Managed Care Access to Care in New Hampshire Medicaid**

The data analysis described above suggests that access to primary care for adult Medicaid beneficiaries in the years leading up to the managed care transition was generally adequate, as compared to non-Medicaid insured adults in New Hampshire. Receipt of recommended preventive services for adult Medicaid enrollees was also comparable to non-Medicaid insured adults, but sample sizes were small, making comparisons less meaningful, and flu vaccine receipt was low for both Medicaid and non-Medicaid adults. Women with a Medicaid-covered delivery in 2013 generally received adequate prenatal care (79%), but the rate of inadequate prenatal care for Medicaid enrollees was twice that for non-Medicaid pregnant women (16% vs 8%). Satisfaction with care, providers, and health plans among Medicaid enrollees was also modest in the pre-managed care period compared to a national benchmark. Infant health as measured by

percent of low birth weight within Medicaid deliveries was approximately one third higher than the percent of non-Medicaid births. Medicaid-insured mothers were more likely to have smoked in the third trimester, and less likely to be breastfeeding 2-6 months after delivery than a population of mothers without Medicaid coverage. Overall, the data suggest that Medicaid enrollees were able to access primary care and that they often received appropriate care. However, some potential opportunities for improvement on preventive and prenatal care exist. Additional improvement is also possible on patient satisfaction with their provider, plan, and overall healthcare.

These data are generally consistent with other examinations of access to care in the Medicaid program, going beyond these specific measures or examining additional years of pre-managed care data. In the most recent comprehensive access report prior to the implementation of managed care, the Department found that potential and realized access to primary care, as measured by provider capacity, visits to primary care providers, and perceived ability to access care, was adequate.<sup>35</sup> The number of active primary care physicians per Medicaid enrollee and the number of visits to primary care providers per member per month were within control limits established by the Department.<sup>36</sup> About 87% of continuously enrolled adult Medicaid beneficiaries ages 20-44 had a preventive or ambulatory care visit in 2011, and about 85% of CAHPS respondents reported getting care as soon as needed “usually” or “always”.

With regard to efficient access to care, the report found that the use of inpatient hospitals for ambulatory care sensitive conditions was about 0.5 admissions per 1,000 Medicaid beneficiaries in 2012. This was below the identified control limit of 0.8 per 1,000 Medicaid beneficiaries. Similarly, the report finds that in 2012 the seasonally adjusted rate of ED use for preventable conditions was about 16 visits per 1,000 beneficiaries, with a control limit of 22 per 1,000. While both measures are within control limits established by the state, and both rates were declining gradually throughout 2012, having an additional national or New Hampshire benchmark would lend more credibility to the conclusions that these reflect efficient access to primary care.

Our analysis of BRFSS data found rates of flu vaccines and pap tests that were similar to rates for the non-Medicaid insured population in New Hampshire, but these comparisons were hampered by small sample sizes for the Medicaid population. A 2009 report on adult preventive service use in the Medicaid program used Medicaid claims data and found that breast and cervical cancer screening rates were increasing over the period 2004 to 2006, but were significantly below rates for the commercially insured population in New Hampshire, most notably for breast cancer screening.<sup>37</sup> Rates of colorectal cancer screening were also low for both Medicaid and the

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<sup>35</sup> Toumpas NA, Dunn KA, Nihan M, Chalsma A. Monitoring Access to Care in New Hampshire’s Medicaid Program. Office of Medicaid Business and Policy, New Hampshire Department of Health and Human Services, February 2013. Available at: <http://www.dhhs.nh.gov/ombp/documents/medicaid-report-feb2013.pdf>

<sup>36</sup> Control limits are set as three standard deviations from the mean based on Quarter 1 2007 to Quarter 3 2011 data.

<sup>37</sup> Perry W. Preventive Health Care Services Provided to the New Hampshire Medicaid Adult Population – with Comparisons to the Commercially Insured Population. A report prepared for the New Hampshire Department of

commercially insured population in New Hampshire. Combined with our BRFSS estimates, this suggests potential room for improvement in receipt of recommended preventive services under managed care.

Additional evidence from the 2013 PRAMS also confirms the above findings that pregnant women with Medicaid show room for improvement in access to care. When comparing Medicaid insured women to those without Medicaid, the proportion of Medicaid insured women starting prenatal care after the first trimester was more than twice the percentage for non-Medicaid women (17.8% vs 7.1%).<sup>38</sup>

Our 2012 CAHPS estimates suggest that satisfaction with care was modest for adult Medicaid enrollees in 2012. The more detailed CAHPS report confirms that adults were less satisfied with their overall healthcare than children (as reported by parents); 64% reported a score of 8-10 compared to 86% for children.<sup>39</sup> Adult satisfaction was also lower than the US median of 70%. Similar patterns emerged for ratings of personal doctors, specialists, and health plans, in which adults were less satisfied with their care than children, and adult satisfaction was lower than the US median.

## Early Experiences under New Hampshire Medicaid Managed Care

The following sections describe changes in selected measures of potential and realized access, efficient access and effective access for adult Medicaid enrollees before and after the implementation of managed care. We compare estimates for New Hampshire Medicaid enrollees in 2012 or 2013 to Medicaid enrollees in 2014. While these comparisons allow us to observe some changes in access to care following the managed care transition, we cannot necessarily attribute these changes to the implementation of managed care. Economic recovery and other health system changes could be contributing to observed changes in access to care, and changes in the Medicaid population over this period also make it difficult to assess the causal effect of managed care. Thus, the unadjusted changes described below should be considered evidence of experiences under managed care, but should not be interpreted as the isolated impact of managed care.

## Potential and Realized Access under Managed Care

In Table 5, we report several estimates of access to primary care for Medicaid enrolled adults in 2014 and compare them to estimates for 2012-2013, prior to the transition to managed care.

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Health and Human Services by the Maine Health Information Center, June 2009. Available at:

<http://www.dhhs.nh.gov/ombp/documents/adultpreventive.pdf>

<sup>38</sup> NH PRAMS 2013 Databook: Stratified by Medicaid participation; NH PRAMS Maternal and Child Health Section, Division of Public Health Services, Department of Health and Human Services, August 2016. Available at: <http://www.dhhs.nh.gov/dphs/bchs/mch/prams/documents/medicaid-databook2013.pdf>

<sup>39</sup> Toumpas NA, Dunn KA. Assessment of the New Hampshire Medicaid Program and Providers. CAHPS Core Child and Adult Survey Results Summer 2012. A Report Prepared by ICF International for the Office of Medicaid Business and Policy New Hampshire Department of Health and Human Services, May 2013. Available at:

<http://www.dhhs.nh.gov/ombp/documents/nhmedicaidcahpsreporsummer2012final.pdf>

**Table 5. Changes in Potential and Realized Access for Medicaid Adults under Managed Care**

Outcome	Measure	Source (Pre/Post)	Pre-managed care Medicaid	Post- managed care Medicaid
Potential access to primary care	Has a personal doctor or healthcare provider	CAHPS (2013/2014)	84.8% (81.9 – 87.7)	88.8% ( 87.1 - 90.5)
	Has one or more personal doctors or healthcare providers	BRFSS (2013/2014)	90.7% (85.8 - 95.7)	66.8% (59.6 - 74.0)
Realized access to primary care	Had a routine checkup within the last year	BRFSS (2013/2014)	75.3% (63.0 – 88.0)	52.9% (41.3 – 64.4)

Notes: BRFSS estimates are for nonelderly adults (18-64) and CAHPS estimates are for all adults (18+). BRFSS estimates in 2014 likely include NHHPP members. 95% confidence intervals are in parentheses.

Using data from New Hampshire’s 2014 CAHPS survey, we found that about 89% of Medicaid-enrolled adults reported having a personal doctor or healthcare provider in the post-managed care period. This reflects a slight increase since 2013 (85%), but it is not statistically significant. In contrast, data from the 2014 BRFSS suggest a drop in the share of Medicaid-insured adults reporting a personal doctor since 2013, and a drop in the share with a routine checkup, but this likely reflects differences in the sample between 2013 and 2014 due to the introduction of the healthier NHHPP population. There were also structural changes to insurance questions in the BRFSS that might explain some of the change in the BRFSS measures between 2013 and 2014. The 2014 CAHPS survey was completed before the NHHPP was implemented and therefore represents a more appropriate comparison over time. Based only on the CAHPS measure we don’t see a significant change in access to primary care in 2014, but additional analysis will be necessary to confirm this finding.

### Efficient Access under Managed Care

In Table 6, we report changes in use of recommended preventive services by adults in Medicaid between 2012 and 2014, as well as changes in receipt of appropriate prenatal care for pregnant women covered by Medicaid between 2013 and 2014.

**Table 6. Changes in Efficient Access for Medicaid Adults and Pregnant Women under Managed Care**

Outcome	Measure	Source (Pre/Post)	Pre-managed care Medicaid	Post-managed care Medicaid
Use of recommended preventive services/ immunizations	Flu vaccine in past 12 months	BRFSS (2012/2014)	40.1% (27.6 - 52.2)	33.9% (26.7 - 41.1)
	Pap test in past three years	BRFSS (2012/2014)	84.1% (70.0 - 98.2)	76.0% (67.2 - 84.8)
Appropriate prenatal care (Kotelchuck Index)	Inadequate Prenatal care: begun after the 4th month or less than 50% of recommended visits received	Vital Records (2013/2014)	16.1% (14.8 – 17.4)	14.6% (13.4 – 15.8)
	Intermediate Prenatal care: begun by the 4th month and 50%-79% of recommended visits received	Vital Records (2013/2014)	5.3% (4.5 – 6.1)	5.7% (4.9 – 6.5)

Outcome	Measure	Source (Pre/Post)	Pre-managed care Medicaid	Post-managed care Medicaid
	Adequate Prenatal care: begun by the 4th month and 80%-109% of recommended visits received	Vital Records (2013/2014)	31.2% (29.6 – 32.8)	33.0% (31.4 – 34.6)
	Intensive Prenatal care: begun by the 4th month and 110% or more of recommended visits received	Vital Records (2013/2014)	47.4% (45.7 – 49.1)	46.7% (45.0 – 48.4)

Notes: BRFSS estimates in 2014 likely include NHHPP members. 95% confidence intervals are in parentheses. Vital records measures include the entire population of Medicaid-covered births in New Hampshire and thus have no sampling error, but may include other non-sampling error represented in the confidence intervals.

Evidence from the 2014 BRFSS suggests that adult Medicaid enrollees were less likely to receive flu vaccines and appropriate cervical cancer screening in 2014 compared to 2012, but small sample sizes reduce precision, and these declines are not statistically significant. Moreover, as noted earlier, the population in Medicaid is changing over this period, and we cannot exclude the healthier NHHPP members from 2014 BRFSS estimates. In addition, changes to screening recommendations over time may contribute to observed changes (e.g., less screening for cervical cancer may be related to changes in clinical practice, not simply a gap in care).

Between 2013 and 2014, vital records data linked to Medicaid claims suggest a small decline of about 1.5 percentage points (16.1% to 14.6%) in the share of Medicaid covered births associated with inadequate prenatal care, and an increase of about 2 percentage points (31.2% to 33.0%) in the share receiving adequate care.

In summary, the data above do not suggest any improvements in receipt of flu vaccine or pap tests in Medicaid after managed care, but data limitations including small sample sizes and changing composition of the Medicaid population over time prevent us from drawing strong conclusions. With respect to prenatal care, however, the evidence suggests a potential improvement in receipt of appropriate levels of prenatal care for women with Medicaid in 2014.

### Effective Access under Managed Care

In Table 7, we report changes in patient satisfaction for adult Medicaid beneficiaries between 2012 and 2014, as well as changes in birth weight statistics for Medicaid covered births between 2013 and 2014.

**Table 7. Changes in Effective Access for Medicaid Adults and Pregnant Women under Managed Care**

Outcome	Measure	Source (Pre/Post)	Pre-managed care Medicaid	Post-managed care Medicaid
Patient satisfaction	Rating of Personal Doctor 9-10/10	CAHPS (2012/2014)	54.4% (47.6 – 61.2)	65.2% (62.4 - 68.0)
	Rating of health plan 9-10/10	CAHPS (2012/2014)	49.5% (43.1 – 55.9)	46.6% (43.9 - 49.3)
	Rating of Overall Healthcare 9-10/10	CAHPS (2012/2014)	43.2% (36.4 – 49.9)	48.3% (45.3 - 51.3)

Outcome	Measure	Source (Pre/Post)	Pre-managed care Medicaid	Post- managed care Medicaid
Infant Health	Very low birth weight (<1500 grams)	Vital Records (2013/2014)	1.5% (1.1 – 1.9)	0.9% (0.6 – 1.2)
	Moderately low birth weight (1500-2499 grams)	Vital Records (2013/2014)	6.7% (5.9 – 7.5)	7.0% (6.2 – 7.8)
	Normal birth weight (2500-3999 grams)	Vital Records (2013/2014)	82.2% (81.0 – 83.4)	82.6% (81.4 – 83.8)
	High birth weight (At least 4000 grams)	Vital Records (2013/2014)	9.7% (8.8 – 10.6)	9.5% (8.5 – 10.5)

Notes: 95% confidence intervals are in parentheses. Vital records measures include the entire population of Medicaid-covered births in New Hampshire and thus have no sampling error, but may include other non-sampling error represented in the confidence intervals.

According to data from CAHPS surveys of adult Medicaid beneficiaries, approximately 65% rated their personal doctor a 9 or 10 in 2014, compared to 54% in 2012. The confidence intervals on these estimates do not overlap, suggesting a statistically significant improvement in enrollee satisfaction with their personal doctor. Enrollee satisfaction with their health plan did not appear to improve or decline, and while reported satisfaction (rating of 9 or 10) with overall healthcare increased from 43% to 48%, this change does not appear to be statistically significant based on overlapping confidence intervals.

Using data from vital records linked to Medicaid claims, we found few meaningful changes in birth weight statistics between 2013 and 2014 for Medicaid-covered births. However, given preliminary findings on changes in receipt of adequate prenatal care shown in Table 6, this will be a useful measure to track going forward.

### Synthesis: Changes in Access to Care under Managed Care

The data described above do not suggest any significant declines in access to care and may indicate some improvements in access to care for New Hampshire Medicaid enrollees in 2014. While the share of Medicaid adults with a usual source of care remained stable between 2013 and 2014, data limitations including small sample sizes and changing composition of the Medicaid population over time prevented meaningful comparisons of the share with a routine checkup, a flu vaccine, or a pap test from the BRFSS. Vital records data suggest a small decline in the share of Medicaid covered births associated with inadequate prenatal care between 2013 and 2014, and 2014 CAHPS data finds that adult Medicaid enrollees were more satisfied with their personal doctor than in 2012. There is also suggestive, though not statistically significant, evidence of improved satisfaction with overall health.

Our analysis is supported and enhanced by the Department’s extensive monitoring of access to care through the MQIS and other avenues. We saw no significant change in the share of Medicaid adults reporting a usual source of care between 2013 and 2014, but the Department reported a small increase in the share of Medicaid adults with an outpatient or preventive visit in the past year in 2014 compared to 2010, and otherwise stable rates of ambulatory office visits.<sup>40</sup> These

<sup>40</sup> See p. 21-22 of: Medicaid Care Management 2015 Quality Update, September 10, 2015. Available at: <https://medicaidquality.nh.gov/sites/default/files/2015%20Q3%20MCM%20Quality%20Update.pdf>

additional estimates seem to confirm that potential and realized access to primary care has not declined under managed care and may have improved slightly.

Department estimates of changes over time in ambulatory care sensitive admissions and primary care treatable ED visits provide conflicting evidence on changes in efficient access to care in 2014, however. In Q4-2014, the rate of ACS admissions was 1.2 per 1,000 member months, up from a rate 0.5 per 1,000 member months in 2012.<sup>41</sup> This indicates a potential reduction in access to appropriate primary care. On the contrary, changes over time in emergency department visits potentially treatable by primary care (for example – colds, rashes, etc.) suggest a potential improvement in access to primary care. In Q4-2014, the rate for the New Hampshire Medicaid population was 11.4 visits per 1,000 member months, compared to 16 per 1,000 member months in 2012.<sup>42</sup> For both measures, however, inconsistencies in the populations or conditions measured over time could contribute to these differences.<sup>43</sup> Therefore, continued analysis of these measures will be useful.

Cervical cancer screening was identified by the Department as an area in need of improvement in Medicaid several years before managed care implementation, with only 63% of women appropriately screened for cervical cancer in 2006.<sup>44</sup> Our BRFSS estimate of the share of Medicaid women with a pap test in the past 3 years in 2013 was considerably higher (84%), but this may reflect measurement differences between survey and claims data.<sup>45</sup> In 2014, the rate reported on the BRFSS had fallen to 76% but small sample sizes reduce the precision of these estimates, and changes in the composition of the Medicaid population over time suggest that managed care may not be the driving force behind this reduction. In 2015, however, the Department reported a falling cervical cancer screening rate from 2013 (58%) to 2014 (55%).<sup>46</sup> While the decline was modest, it will be important to track this and other preventive service measures over time.

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<sup>41</sup> Inpatient Hospital Utilization for Ambulatory Care Sensitive Conditions for Adult Medicaid Members – Quarterly Rate – Excluding NHHPP Members. Available at: <https://medicaidquality.nh.gov/reports/inpatient-hospital-utilization-for-ambulatory-care-sensitive-conditions-for-adult-medicaid-members---quarterly-rate---excluding-nhhpp-members-1>

<sup>42</sup> Emergency Department Visits – Potentially Treatable in Primary Care by Geographic Region – Excluding NHHPP Members. Available at: <https://medicaidquality.nh.gov/reports/emergency-department-visits---potentially-treatable-in-primary-care-by-geographic-region---excluding-nhhpp-members-1>

<sup>43</sup> For example, populations that opted out of managed care who may be more likely to use the hospital/ED are not included in the 2014, while various changes to coding practices for the included ACS or preventable ED diagnoses over time could also make comparisons challenging.

<sup>44</sup> Perry W. Preventive Health Care Services Provided to the New Hampshire Medicaid Adult Population – with Comparisons to the Commercially Insured Population. A report prepared for the New Hampshire Department of Health and Human Services by the Maine Health Information Center, June 2009. Available at: <http://www.dhhs.nh.gov/ombp/documents/adultpreventive.pdf>

<sup>45</sup> The claims based measure estimates the share of women 21-64 who had one or more “cervical cancer tests” in past 2 years, while the BRFSS estimates specifically reflect receipt of a pap test in the past 3 years.

<sup>46</sup> Cervical Cancer Screening (CMS Adult Core Set) – Excluding NHHPP Members. Available at: <https://medicaidquality.nh.gov/reports/cervical-cancer-screening-cms-adult-core-set---excluding-nhhpp-members-1>. Note that the screening definition here estimates the share of women 21-64 with a pap test every 3 years OR women 30-64 with a pap test and HPV testing every 5 years.

Our estimates show a small but promising increase in the share of Medicaid covered births classified as having adequate prenatal care in 2014 compared to 2013. While the Department's monitoring of prenatal care in the early managed care period does not include comparisons to pre-managed care rates, they do find an improvement in timeliness of postpartum care in 2014, compared to 2010.<sup>47</sup> This is suggestive that there were improvements in efficient care for women in 2014, which could be related to the MCOs emphasis on case management for pregnant women.

Finally, our estimates from the CAHPS suggest some improvements in patient satisfaction in 2014 that are bolstered by data reported by the Department indicating additional improvements in adult satisfaction with their health plan between 2014 and 2015.<sup>48</sup>

## Conclusions

The transition to managed care in the New Hampshire Medicaid program beginning in December 2013 presented a number of opportunities and challenges that had the potential to affect access to care for Medicaid enrollees. In this report, we reviewed evidence on access to care for adults in the Medicaid program prior to managed care implementation and identified some specific opportunities for improvement. We then examined data on changes in access to care in 2014 to identify any early signs of access changes under managed care. We found that, prior to managed care implementation, potential and realized access to primary care were generally considered adequate, but identified some potential opportunities for improvement in efficient access to care with respect to receipt of recommended preventive screenings. For pregnant women, we found some gaps in adequacy of prenatal care compared to non-Medicaid covered births, high rates of smoking during pregnancy and low rates of breastfeeding among Medicaid mothers, suggesting room for improvement. Finally, we found relatively modest rates of satisfaction among adult Medicaid enrollees with their providers, plans, and overall health care.

In 2014, access to primary care appeared relatively stable, while some evidence suggested a potential decline in the receipt of recommended cervical cancer screenings. For pregnant women, however, there was a small but promising increase in the share of Medicaid births associated with adequate prenatal care. Finally, adult Medicaid enrollees generally reported higher satisfaction with their health plan and their providers in 2014 compared to 2012. These generally positive findings are especially encouraging given that the Medicaid expansion and other coverage gains under the ACA may have placed additional pressure on the delivery system that could have led to access problems.

## Limitations

The analysis presented here has a number of limitations as well as potential extensions. In our attempt to identify opportunities for improvement in the pre-managed care period, we compared

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<sup>47</sup> See p. 16 of: Medicaid Care Management 2015 Quality Update, September 10, 2015. Available at: <https://medicaidquality.nh.gov/sites/default/files/2015%20Q3%20MCM%20Quality%20Update.pdf>

<sup>48</sup> See p.70 of: Medicaid Care Management 2015 Quality Update, September 10, 2015. Available at: <https://medicaidquality.nh.gov/sites/default/files/2015%20Q3%20MCM%20Quality%20Update.pdf>

access for Medicaid to that for a comparison group of non-Medicaid enrollees in New Hampshire. However, we did not adjust for other differences in age, sex, health status or income, factors which could affect access and which differ across these populations. Thus, we could be either overstating or understating the potential room for improvement depending on the access measure of interest. For example, we identified potential room for improvement in adequate prenatal care for women covered by Medicaid compared to those not covered by Medicaid. But if we adjusted for income, this gap could be diminished. On the contrary, we found receipt of a routine checkup to be somewhat higher for adults with Medicaid compared to adults covered by other insurance. But if we adjusted for health needs, we might find that Medicaid enrollees are less likely to have a checkup than privately insured individuals with similar health needs.

Comparisons of the Medicaid population over time are also sensitive to changes in the composition of the population. Most pre-managed care estimates include the entire Medicaid population, sometimes with the exception of the elderly dual-eligibles. But post-managed care estimates may or may not include the populations that opted out of managed care in Step 1. For example, a reduction in primary care treatable ED use was found in 2014, but the 2014 estimate excluded Medicaid enrollees who opted out of managed care. Comparisons over time were also made more complex by the introduction of the NHHPP in August 2014. Where possible, we exclude the NHHPP from 2014 estimates when examining changes over time, but this is not always possible (e.g., BRFSS). Thus, future work will need to pay additional attention to the composition of the Medicaid population over time and make adjustments where possible.

Changes in the estimates over time are also sensitive to measure definitions. For example, cervical cancer screening measures varied across data sources and over time. In addition, screening recommendations themselves can change over time, so it will be important to verify that the recommendations and measures are being applied consistently in order to fully understand how receipt of recommended preventive services has changed under managed care.

## Extensions

Our analysis found some evidence of improvement in receipt of adequate prenatal care in 2014, but future work should examine the 2014 PRAMS data when it becomes available to understand whether these improvements are associated with reductions in smoking during pregnancy or any increases in breastfeeding in the postpartum period—two areas where room for improvement was noted. Additional outcomes from the PRAMS should also be investigated going forward, given the importance of the pregnant population in the Medicaid program and the emphasis on this population within the MCO case management programs. In particular, this data will allow us to better understand how the various components of the ACA, including the Medicaid and Marketplace expansions are affecting coverage patterns before, during, and after pregnancy for women in New Hampshire.

One of the major issues that surfaced during the early MCM implementation period was related to prior authorizations, specifically for pharmacy services. Without access to current claims data, we could not track pharmacy service use patterns over time for this report. However, as a part of our qualitative work, we performed a follow-up round of phone interviews in the fall of 2015 to ask

stakeholders how things had evolved since we spoke to them in July 2014. On the issue of prior authorizations, respondents reported improvements but it was still the most prominent concern, with continued emphasis on pharmacy, non-emergency medical transportation, and imaging. Data presented by the Department, however, suggests that denials are generally isolated incidents that are frustrating to members and providers, but not a systemic problem.<sup>49</sup> Otherwise, there were few perceived negative effects on access to primary care in the telephone interviews, which is consistent with the data presented above. Future work can also focus on more detailed quantitative analysis of pharmacy claims data to further investigate this issue.

Our qualitative work also surfaced concerns about access to and quality of mental health and substance use services under managed care, particularly given the contracting issues with the CMHCs and the opioid epidemic in the state. Given the implementation of a substance use benefit for the traditional Medicaid population in July 2016, we conducted targeted interviews with representatives from the health plans, provider groups, and the Department in April 2016 related to the availability of SUD benefits and services in the NHHPP. We found that the benefit array was deemed generous, and that while provider capacity improvements are needed, some could be addressed by ensuring that patients are directed to appropriate levels of care. Moreover, we found particular concerns about provider capacity for adolescents and pregnant women with substance use disorders. More details on our findings are available in a separate memo upon request from the authors, but some possible avenues for future work emerged as well. These included the importance of understanding the SUD benefit and treatment experiences for NHHPP enrollees in the Marketplace compared with enrollees who have remained in Medicaid managed care, as well as the need to investigate how pregnant women with SUD are navigating the system.

As the managed care program in New Hampshire continues to evolve alongside the many other insurance and delivery system reforms in the state, other critical areas to monitor will be changes in access to care for children, particularly those children with special healthcare needs who are enrolled in waiver programs that have not yet come under the control of the MCOs, and other Step 2 populations. It is important to note however, that because of the wide array of changes occurring simultaneously in New Hampshire's Medicaid program and its health care system more generally, it will likely be impossible to attribute any observed changes in access to care or other outcomes to any particular intervention, including the transition to managed care. Nonetheless, continued tracking of the outcomes presented here and further research into the areas described above will allow state officials and key stakeholders to identify areas where access to care is growing in Medicaid as well as areas where there remain opportunities for improvement.

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<sup>49</sup> See pp. 11-14 of: Toumpas N. MCM Commission. Presentation to the Governor's Commission on Medicaid Care Management, December 10, 2015. Available at: <http://governor.nh.gov/commissions-task-forces/medicaid-care/documents/mm-12-10-2015-commissioners-report.pdf>

## Data Source Appendix

### Behavioral Risk Factor Surveillance Survey (BRFSS) - <http://www.cdc.gov/brfss/>

The BRFSS is a telephone-based survey of New Hampshire adults supported by a grant from the Centers for Disease Control and Prevention. The survey collects a variety of information on health behaviors such as smoking, diet, and exercise as well as information on access to health care services. Some potentially useful content for the evaluation of the managed care transition includes information on the presence of a usual source of care and unmet needs for care due to cost, use of preventive services, as well as self-reported assessments of physical and mental health status. The included sample is respondents between ages 18 and 64 who indicate having health insurance in the last year and select Medicaid for that insurance.

The comparator population used in all BRFSS analyses is non-Medicaid respondents between ages 18 and 64. Non-Medicaid respondents indicate having health insurance in the last year and select an insurance other than Medicaid.

Limitations include small sample sizes and bias and/or inaccurate information related to the self-reported measures. Assessments of changes over time are limited because we cannot exclude NHHPP from the 2014 Medicaid sample. Moreover, there were some changes to the insurance question structure that may contribute to differences over time.

#### Sample sizes used in analysis

	2012	2013	2014
Medicaid respondents ages 18-64	n = 134 (Pap n = 72)	n = 90	n = 166 (Pap n = 90)
Non-Medicaid respondents ages 18 - 64	n = 3,504 (Pap n = 1,687)	n = 1,273	n = 3,130 (Pap n = 1,429)

\* Notes: Sample for pap tests is limited to women

### Consumer Assessment of Healthcare Providers and Systems - <http://www.ahrq.gov/cahps/index.html>

The CAHPS is a survey of Medicaid enrollees designed to assess their interaction with Medicaid services and providers. The survey includes questions on the accessibility of services and satisfaction with providers. The major advantages of the CAHPS are that it includes a variety of measures that are not available elsewhere, and that the survey is directly targeted to the Medicaid enrollees, with a much larger sample size of Medicaid enrollees than that available on other statewide surveys. The included sample is Medicaid respondents ages 18 and older.

We use estimates from the 2014 CAHPS Health Plan Survey Database as a benchmark comparison for the New Hampshire CAHPS estimates.<sup>50</sup> The database includes CAHPS data from over 60,000 adult Medicaid respondents in 22 states in 2013.

<sup>50</sup> <https://www.cahpsdatabase.ahrq.gov/files/2014CAHPSHealthPlanChartbook.htm>

Potential challenges with this data may involve low response rates, differences in sample design, survey administration and content over time. In addition, we do not have information on a New Hampshire specific comparison population. Only “national” comparisons (based on data from 22 states) are available.

#### Sample sizes used in analysis

	2012	2013	2014
Medicaid respondents – all ages	n = 442	n = 808	n = 1,507*

\* 2014 includes Medicaid fee-for-service and Medicaid Managed Care Organization respondents.

#### Vital Records – Births [http://sos.nh.gov/vital\\_records.aspx](http://sos.nh.gov/vital_records.aspx)

The New Hampshire Division of Vital Records Administration (DVRA) is the state resource for residents who wish to obtain records of birth, marriage, divorce and death events. Birth data used for this evaluation focuses on access to prenatal care and measures of birth weight for all deliveries in the state. The analysis includes all New Hampshire birth records linked to a Medicaid maternal delivery claim. Uncategorized records within the birthweight and Kotelchuck categories are not included. Vital records measures include the entire population of Medicaid-covered births in New Hampshire and thus have no sampling error, but may include other non-sampling error represented in the confidence intervals.<sup>51</sup>

The comparator used for the vital records analysis includes all New Hampshire birth records not linked to a Medicaid maternal delivery claim.

Limitations include the unknown influence of uncategorized records on results which warrants additional investigation. In addition, changes to the health care system under the ACA, including the expansion of Medicaid and the availability of subsidized Marketplace coverage, may alter the profile of women obtaining Medicaid pregnancy coverage over time. Vital records data are reported as crude stats unadjusted for demographic (age) and other factors (smoking). Additionally, birth data are based on when the birth occurred. For a full term pregnancy, the prenatal care will take place in the preceding 9 months. For example, for a January 2014 birth, most of the prenatal care would have been in 2013 and may have occurred before managed care implementation.

#### Population sizes used in analysis

	2013	2014
NH births linked to a Medicaid maternal delivery claim	Birthweight - n = 3,781 Kotelchuck - n = 3,269	Birthweight - n = 3,639 Kotelchuck - n = 3,202
NH births not linked to a Medicaid maternal delivery claim	Birthweight - n = 8,535 Kotelchuck - n = 7,754	Birthweight - n = 8,605 Kotelchuck - n = 7,982

<sup>51</sup> [ftp://ftp.cdc.gov/pub/Health\\_Statistics/NCHS/Dataset\\_Documentation/DVS/nativity/UserGuide2010.pdf](ftp://ftp.cdc.gov/pub/Health_Statistics/NCHS/Dataset_Documentation/DVS/nativity/UserGuide2010.pdf)

Pregnancy Risk Assessment and Monitoring System (PRAMS) - <https://www.cdc.gov/prams/>; <http://www.dhhs.nh.gov/dphs/bchs/mch/prams.htm>

The PRAMS is a state-specific survey on maternal attitudes, behaviors and experiences before, during and after pregnancy. New Hampshire began collecting this data under an agreement with the CDC in 2013. The survey contains information on barriers to and content of prenatal care, use of alcohol and tobacco during pregnancy, psychosocial support and stress, and infant care and breastfeeding that are not available from other sources. While the PRAMS only includes data related to a sample of births in a given year, the survey has been designed, and the data weighted, to be representative of women in New Hampshire who delivered a live infant.

We compare estimates for the Medicaid sample to published PRAMS estimates for a sample of women who did not report Medicaid.<sup>52</sup>

Currently, PRAMS data is only available for 2013, so analysis of the post-managed care period is not possible. In addition, our comparison estimates are based on a published report and the sample includes some Medicaid respondents.

Sample sizes used in analysis

	2013
Medicaid participants are defined as those who cited Medicaid as their insurance provider during pregnancy (to pay for their prenatal services) and/or at the time of their survey participation (2-6 months after giving birth). s	Smoking - n = 206 (119 answered yes to smoking in past 2 years) Alcohol - n = 206 (146 answered yes to drinking in last 2 years) Breastfeeding - n = 201
Non-Medicaid women are defined as those who cited anything other than Medicaid (including no insurance) during both these time periods.	Smoking - n = 428 (81 answered yes to smoking in past 2 years) Alcohol - n = 428 (376 answered yes to drinking in last 2 years) Breastfeeding - n = 421

<sup>52</sup> <http://www.dhhs.nh.gov/dphs/bchs/mch/prams/documents/medicaid-databook2013.pdf>