Results of Research on the Design of a Medicare Prospective Payment System for Federally Qualified Health Centers

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NOTICE

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I. Executive Summary

The Centers for Medicare and Medicaid Services (CMS) contracted with Arbor Research Collaborative for Health (Arbor Research) to conduct data analysis and modeling to support the development and implementation of a prospective payment system (PPS) for Medicare payments to Federally Qualified Health Centers (FQHCs), as required by the Patient Protection and Affordable Care Act (Affordable Care Act) of 2010.

Since the FQHC program was established in 1992, Medicare payments to FQHCs have been based on an all-inclusive rate (AIR) per-visit that includes all allowable costs associated with a visit (e.g. services, supplies, overhead, etc.) The payment rate is subject to upper payment limits (UPL), which differ for FQHCs in urban and rural areas, and productivity standards. The rate is adjusted yearly based on the Medicare Economic Index (MEI).

The Affordable Care Act mandates the implementation of a Medicare PPS for FQHCs that reflects FQHC reasonable costs in the absence of the UPL and the productivity standards. It also requires that the design of the PPS takes into account the "type, intensity, and duration of services" provided by FQHCs and "may include adjustments, including geographic adjustments." Payments under the PPS are required for FQHC cost reporting periods starting on October 1, 2014. There is no change to the FQHC benefit.

This report describes the analyses used to inform the proposed design for the FQHC PPS. Key design considerations included the unit of payment (i.e., per visit vs. per unit of time) and payment adjustments. This report also describes the relative advantages and disadvantages of other policy options that CMS considered for the proposed PPS.

Data Sources and Analytic Database

The analyses were based on two primary data sources. Medicare cost reports for free-standing FQHCs, with ending dates on or between June 30, 2011 and June 30, 2012, were obtained from the March 31, 2013 Healthcare Cost Report Information System (HCRIS) quarterly update. Medicare claims with dates of service between January 1, 2010 and December 2012 were obtained from the CMS Integrated Data Repository (IDR) on December 20, 2012. Claims with dates of service between January 1, 2011 and June 30, 2012, were linked to cost reports by FQHC delivery site.

We estimated the cost of FQHC services reported on claims to examine potential payment adjusters and to calculate a base rate amount for the PPS that is consistent with the Affordable Care Act requirements. FQHC costs for each encounter were estimated by multiplying the reported charges for each encounter in the claims by the cost-to-charge ratio (CCR) for the cost-reporting entity. The CCR was calculated as the cost-reporting entity's average cost per visit divided by the average charge per visit.

The analyses in this report were based on 5,245,961 paid encounters in the Medicare FQHC claims for 1,244,873 Medicare beneficiaries who visited a total of 3,509 delivery sites under 1,141 cost reporting entities. Combining these encounters into one visit per beneficiary per FQHC site per day yielded 5,223,512 per diem encounters.

Unit of Payment

A key design consideration for the PPS involved defining the unit of payment. Both the historical approach of a per-visit or per-encounter unit of payment and an alternative approach based on a unit of time were considered. Analyses of the Medicare claims indicated that beneficiaries tended to visit FQHCs relatively frequently, averaging an encounter slightly more often than once every three months. In addition, there was substantial variation in the frequency of encounters, with a relatively small proportion of beneficiaries accounting for a disproportionately large number of encounters A fixed payment per unit of time could present increased financial risk to FQHCs when treating at-risk patients that require more visits, and would require complex payment adjustment methods. A per-unit approach would also necessitate greater coordination across payment systems and for different providers to prevent duplicate payments for services expected to be provided by FQHCs within the specified unit of time.

Bundling all FQHC services occurring on the same day would avoid much of the complexity of bundling payment for services furnished over a longer period of time. This approach results in a single per diem encounter payment for a given beneficiary treated at a particular site on a particular day and is reflected in the proposed design for the PPS.

Payment Adjustment

To address the requirement that the type, intensity, and duration of services be considered when developing the PPS, several options for adjustment were considered for adjusting payment rates under the PPS to reflect differences in resource use for FQHC services. Potential adjustment factors included a range of patient, encounter, and FQHC characteristics. Other key issues that were considered in evaluating potential adjusters included the extent to which payments under the PPS would reflect the specific costs incurred by FQHCs (i.e., payment accuracy), the potential for adverse incentives related to either quality of care or access to care, the administrative burden associated with implementing the PPS, and the potential for upcoding.

Based on analyses of the estimated costs for FQHC services, adjustments for geographic location as well as for new patient and initial preventive office visits were developed as factors that can be applied to the PPS base rate. An adaption of the geographic practice cost index (GPCI), which is currently applied to Medicare payments to physicians under the Physician Fee Schedule (PFS), can also be applied to Medicare payments to FQHCs. For the FQHC PPS, a geographic adjustment factor (GAF) was calculated for each encounter based on the delivery site location using only the work and practice expense (PE) GPCIs, as currently proposed for the PFS for PY 2014, and their respective cost weights:

$$GAF = 0.53149 * Work\ GPCI + 0.46851 * PE\ GPCI$$

The resulting GAFs can be applied to the PPS base rate amount in determining the payment rate for each delivery site.

Encounter codes reported on the claims were used to estimate the costs associated with new patient encounters at FQHCs and initial preventive visits covered under the Medicare FQHC benefit. Using regression analysis, estimated FQHC costs were found to be 33.3 percent higher for a combined

category of new patient/initial preventive visits relative to other visits, yielding an adjustment factor of 1.3333 that can also be applied to the PPS base rate amount.

Other approaches to payment adjustment, such as patient and encounter characteristics, were also considered for the PPS. Regression analysis showed that potential adjustment factors, such as beneficiary age and sex, as well as mental health visits versus other medical office visits, had little to no effect on the estimated cost of services. In contrast, the reporting of certain clinical diagnoses on FQHC claims was found to be associated with estimated costs, suggesting the possibility of greater resource utilization related to the management of certain conditions. Duration of medical office visits, as defined by the number of minutes associated with the descriptions of the Evaluation and Management (E/M) encounter codes, was also found to be associated with estimated costs. However, the minutes attributed to E/M encounter codes are guidelines that reflect the face-to-face time between the FQHC practitioner and the beneficiary for that E/M service, and they would not indicate the total duration of the FQHC encounter.

Certain characteristics of FQHCs were also considered as options for payment adjustment. Lower overall FQHC volume was found to be associated with higher estimated costs, but as the basis for a payment adjustment could create an incentive for FQHCs to operate at a smaller, less efficient scale.

Base Payment Rate

This report presents the calculation of a base payment rate, which is the amount to which the GAF and new patient/initial preventive visit adjustment can be applied in determining the Medicare payment for a per diem encounter. The base payment rate represents the average estimated cost for a per diem encounter with a budget neutrality factor applied for the PPS adjustments. The linked claims and cost report data were used to calculate a base rate amount that is based on the average estimated cost for FQHC services in the absence of the current UPL and productivity standards, as required by the Affordable Care Act. An estimated base rate amount that did not include an adjustment for price inflation was calculated by multiplying the reciprocal of the average payment multiplier by the average estimated cost for a per diem encounter. Given an average estimated cost of $150.96 for a per diem encounter, an average payment adjustment of 1.0036 (reflecting application of both the GAF and the new patient/initial preventive visit adjustment), and an MEI adjustment factor of 1.0364, the estimated base rate amount for the PPS was calculated as shown below:

$$\textit{Estimated base rate} = \$150.96 * (1/\ 1.0036) * 1.0364 = \$155.90$$

Payment examples demonstrating how this estimated base rate amount can be used to calculate payments under the PPS are included in this report.

Impact Analysis

The impact of the proposed PPS was assessed for each of 3,509 FQHC delivery sites using the linked Medicare claims and cost reports. Projected Medicare payments to FQHCs based on the current AIR rate were compared with projected payments under the proposed PPS, reflecting the base rate amount and PPS adjustments described above. This analysis indicates an expected overall 30.2 percent increase in Medicare payments under the proposed PPS, compared to what payments would have been under

the current system in the absence of the PPS. This reflects an expected overall 28.0 percent increase in Medicare payments due to removing both the UPL and the productivity standards, and an additional 1.7 percent increase due to applying the MEI adjustment. The expected increase in Medicare payments under the PPS varied modestly among certain categories of FQHCs. Larger increases were observed for FQHCs located in rural areas as compared to those in urban areas, likely owing to their lower UPL under the current AIR. Additionally, somewhat larger increases were observed for FQHCs that are smaller with somewhat more modest increases for larger FQHCs. Variation in the degree of expected increase in Medicare payments was also noted among certain geographic regions.

II. Introduction

Federally Qualified Health Centers (FQHCs) are safety net providers, located in both urban and rural locations, that provide primary and preventive care services to patients regardless of their ability to pay. Three types of organizations are eligible to enroll in Medicare as FQHCs, with most organizations falling under the first type:

- Health Center Program grantees – organizations receiving grants under section 330 of the Public Health Service (PHS) Act. This includes Community Health Centers, Migrant Health Centers, Health Care for the Homeless Health Centers, and Public Housing Primary Care Centers.
- Health Center Program look-alikes – organizations identified by the Health Resources and Services Administration (HRSA) as meeting the definition of "Health Center" under section 330 of the PHS Act, but not receiving grant funding under section 330.
- Outpatient health programs/facilities operated by a tribe or tribal organization (under the Indian Self-Determination Act) or by an urban Indian organization (under Title V of the Indian Health Care Improvement Act).

Federally Qualified Health Centers play a vital role in providing primary and preventive health care to underserved population from Medically Underserved Areas and Populations (MUAs/MUPs), as well as those treated by Migrant Health Centers, Health Care for the Homeless Programs, and Public Housing Primary Care Programs. According to data from the HRSA Uniform Data System (UDS), in 2012 there were 1,198 FQHCs with more than 8,900 treatment sites located throughout the U.S., with approximately 21.1 million individuals received care at a FQHC, contributing to nearly 83.8 million clinic visits. The population served by FQHCs is also growing rapidly. Between 2007 and 2012, there was a 31 percent increase in the total number of patients treated at FQHCs [HRSA 2012, HRSA 2013]. Moreover, recent studies indicate this population also presents with higher acuity, in that FQHC patients are more likely to have a chronic condition compared to patients seen in a physician office or outpatient department [Medicare Payment Advisory Commission (MedPAC) 2011].

The UDS also shows that 8 percent of FQHC patients were Medicare beneficiaries, 41 percent were Medicaid recipients, 36 percent were uninsured, and 15 percent were covered by some other form of insurance. Medicare and Medicaid accounted for approximately 9 percent and 47 percent of their total billing, respectively.

The current Medicare payment system for FQHCs is based on an all-inclusive rate (AIR) per-visit that includes all allowable costs associated with a visit (e.g. services, supplies, overhead, etc.), subject to upper payment limits (UPLs), which differ for FQHCs in urban and rural areas, and productivity standards. The rate is adjusted yearly based on the Medicare Economic Index (MEI). The Patient Protection and Affordable Care Act (Affordable Care Act) of 2010 included a provision which mandated the development of a Medicare prospective payment system (PPS) for FQHCs to be implemented beginning October 1, 2014. The Affordable Care Act also broadened the scope of preventive services provided to Medicare beneficiaries treated in FQHCs by expanding payment to include all preventive services covered by Medicare.

The Affordable Care Act mandates the implementation of a PPS for FQHCs such that payment rates reflect FQHC reasonable costs in the absence of the UPL and the productivity standards. It also establishes other requirements for the design of the PPS, and provides a timeline for implementation starting on October 1, 2014. In this report, we present analyses used to inform the proposed design for the FQHC PPS and to examine the impact of implementing the proposed PPS. Key design considerations included the unit of payment (i.e., per visit vs. per unit of time) and the payment adjustments to be applied to the base rate. This report also describes the relative advantages and disadvantages of several policy options that the Centers for Medicare and Medicaid Services (CMS) considered for the proposed PPS.

Report Outline

This report describes analyses that were performed to support the development and implementation of a Medicare PPS for FQHCs as required by the Affordable Care Act. The report is composed of the following sections:

- ***PPS design framework.*** The guiding principles for the development of the PPS are described.
- ***Medicare FQHC payment policy***. Current Medicare FQHC payment policy is described in addition to key elements of the new PPS as mandated by the Affordable Care Act. Additionally, the set of services covered under the Medicare FQHC benefit are discussed.
- ***Data sources and analytic database.*** This section provides a brief overview of the data sources and the primary analytic database used in conducting the analyses presented in this report.
- ***Unit of payment.*** The unit of payment determines how FQHCs are paid by Medicare. This report evaluates two primary approaches for unit of payment under the PPS: the historical approach of a per-visit or per-encounter unit of payment versus a per-unit of time approach.
- ***Stratification/payment adjustment.*** Under a PPS, payments to FQHCs can be adjusted to account for variations in resource use based on a variety of characteristics, for example those of patients, encounters, or facilities. This report presents analyses in support of adjustment factors for new patient and initial preventive visit types as well as geographic location, both of which were incorporated into the proposed PPS. This report also describes analytic results from a series of investigations into other potential factors which were ultimately not adopted.
- ***PPS base payment rate.*** This section outlines an approach for calculating a base rate (i.e., the average cost per visit with a budget neutrality factor applied for the PPS adjustments) to which any payment adjustment factors would be applied. Examples are provided to demonstrate how the base rate and adjustments would be used to calculate payment under the PPS.
- ***Impact analyses.*** The report concludes with a detailed summary of the impacts on FQHCs of moving from the current Medicare FQHC payment system to the new PPS. Overall impacts as well as those stratified by characteristics such as urban/rural location, FQHC size, and geographic location are presented.

III. Medicare PPS Design Framework

In developing a PPS in accordance with the Affordable Care Act requirements, we sought to develop a system whereby FQHCs would be appropriately paid for the services they provide to Medicare beneficiaries in the least burdensome manner possible, so that they may continue to provide primary and preventive health services to the communities they serve.

Four key principles were established for developing the PPS:

Promote efficiency. A PPS has the potential to provide incentives for efficiency in resource use by basing payment rates on *typical* costs incurred by FQHCs, rather than on a FQHC's *own* costs. A PPS will cause FQHCs to be at risk financially for costs that exceed their payments, which no longer directly reflect their own costs, and can capture any cost savings relative to their payments under the PPS. An important consideration in developing specific features of the PPS was to avoid adjusting payments to providers in ways that would allocate greater resources to more inefficient providers, thereby creating disincentives for providers to be efficient.

Provide equity in payments. A PPS provides opportunities to establish payments to FQHCs that reflect accurately the costs incurred by an efficient provider for a particular visit. This is made possible by the variation in payment rates under the PPS to reflect differences in the level of resources needed during a visit. This is also consistent with the direction given in the Affordable Care Act that the PPS "take into account the type, intensity, and duration of services." In developing the PPS, an important consideration was to establish payment rates that reflect variation in the costs of an efficient provider.

Ensure access to care. Approaches under the PPS, such as a per-visit unit of payment and the inclusion of adjustment factors, can help to ensure equal access to care, particularly for patients who may require higher resources due to the nature of their visit. Moreover, payment adjustments could help avoid financial disincentives such that FQHCs would maintain their willingness to care for more resource intensive patients, thus promoting access to care for patients in underserved areas who may have limited opportunities for receiving care elsewhere.

Limit adverse incentives. Although FQHCs are required to see all patients regardless of ability to pay and are required to meet quality measures for clinical services, there may still be a risk under the PPS of establishing several types of adverse incentives relative to the current payment system for FQHCs. First, there will be financial disincentives for FQHCs to provide additional services or certain high cost services, potentially limiting quality of care. As with any PPS, this creates a risk of under-treatment that would suggest the importance of monitoring or otherwise promoting quality of care. There is also the risk of encouraging upcoding or "unbundling" (splitting services into multiple, shorter visits) to increase payments more than is warranted relative to the costs that are incurred during a visit. This may result when factors that determine eligibility for higher payments are not objective or are under the influence of the provider. This issue has the potential to result in significantly higher total Medicare payments than expected and would make payments less equitable.

Key Decisions

In designing a PPS to meet the statutory requirements of the Affordable Care Act and in accordance with the principles outlined above, the following key questions were addressed:

1. What services should be included in the payment bundle? Should there be a single "base" payment bundle or are service groupings sufficiently distinct that there should be multiple payment bundles?

2. What should be the unit of payment (e.g. a visit, a period of time, etc.)?

3. What adjustments should be applied to the payment bundle(s) (e.g. adjusters based on patient demographics or clinical conditions, type of encounter, provision of specific services, area wages or other input prices, type of provider, etc.)?

IV. Medicare FQHC Payment

Background

The statutory requirements that FQHCs must meet to qualify for the Medicare benefit are defined in section 1861(aa)(4) of the Social Security Act. In general, a FQHC must:

- Provide comprehensive services and have an ongoing quality assurance program
- Meet health and safety requirements
- Not be concurrently approved as a rural health clinic (RHC)
- Meet all requirements contained in section 330 of the PHS Act

Section 330 of the PHS Act further specifies that FQHCs must:

- Serve people from a designated MUA or MUP
- Offer a sliding fee scale to patients with incomes below 200 percent of the federal poverty level
- Be governed by a board of directors, a majority of whom receive their care at the FQHC

Payments for covered FQHC services furnished to Medicare beneficiaries are currently made on the basis of a single AIR per covered visit, which is subject to productivity standards and a UPL on the per visit payment, with rural and urban FQHCs being subject to specific UPLs, respectively. The result is a single payment for all covered services provided during the visit, with limits applied to ensure that FQHC costs are reasonable for the provision of services. Rates are updated annually by the MEI. Covered services are for primary and preventive care. The law generally defines Medicare-covered preventive services provided by a FQHC as those a FQHC is required to provide under section 330 of the PHS Act. However, Medicare may not cover some of the preventive services that FQHCs provide, such as dental services, which are specifically excluded. No Part B deductible is applied to expenses for services that are payable under the FQHC benefit. Medicare beneficiaries are responsible for a 20 percent coinsurance for services received.

Current Medicare FQHC Payment Methodology

The current AIR is calculated using Medicare FQHC cost reports. Table 1 provides a reference guide to several key cost report fields described in this section and relates them to their respective cost report worksheets.

Table 1. Key fields derived from FQHC Medicare cost reports.

Field	*Description*
Total Allowable Cost	Equals the total allowable cost of FQHC services (Worksheet B, Part 2, Line 16; transferred to Worksheet C, Part 1, Line 1).
Total Vaccine Cost	Equals the total cost of influenza and pneumococcal vaccinations (Worksheet C, Part 1, Line 2; transferred from Supplemental Worksheet B-1, Line 15).
Total Allowable Cost (excluding vaccines)	Equals *Total Allowable Cost* minus *Total Vaccine Cost* (Worksheet C, Part 1, Line 3).

Field	*Description*
Total Visits	Equals the reported Total Staff visits (Worksheet B, Part 1, Line 8, Column 2) plus the reported visits for Physician Services Under Agreements (Worksheet B, Part 1, Line 9, Column 2).
Total Adjusted Visits	Equals the total number of visits adjusted for the minimum productivity standards (Worksheet C, Part 1, Line 6). Equals the sum of total staff visits (Worksheet B, Part 1, Line 8, Column 5) plus the total visits for Physician Services Under Agreements (Worksheet B, Part 1, Line 9, Column 5).
Cost per Visit	Equals the average cost per visit without adjustment for the minimum productivity standards. Equals *Total Allowable Cost (excluding vaccines)* (Worksheet C, Part 1, Line 3) divided by *Total Visits*.
Adjusted Cost per Visit	Equals the average cost per visit adjusted for the minimum productivity standards (Worksheet C, Part 1, Line 7). Equals *Total Allowable Cost (excluding vaccines)* (Worksheet C, Part 1, Line 3) divided by *Total Adjusted Visits* (Worksheet C, Part 1, Line 6).
Upper Payment Limit (UPL)	Equals the maximum rate per visit that can be received by the FQHC based on the calendar year of the visits reported (Worksheet C, Part 1, Line 8).
Current Payment Rate (AIR)	Equals the payment rate for Medicare covered visits and consists of the minimum of the *Adjusted Cost per Visit* and the *Upper Payment Limit* (Worksheet C, Part 1, Line 9).
Total Medicare Visits	Equals the sum of Medicare Covered Visits Excluding Mental Health Services (Worksheet C, Part 2, Line 11) and Medicare Covered Visits for Mental Health Services (Worksheet C, Part 2, Line 13).
Total Medicare Cost (adjusted)	Equals the total Medicare cost in the presence of the UPL, minimum productivity standards, and outpatient mental health limitation (Worksheet C, Part 2, Line 16).
Total Medicare Cost (adjusted without the outpatient mental health limitation)	Equals the total Medicare cost in the presence of the UPL and minimum productivity standards, but without the mental health limitation. Equals the sum of Medicare Covered Cost Excluding Mental Health Services (Worksheet C, Part 2, Line 12) and Medicare Covered Cost for Mental Health Services (Worksheet C, Part 2, Line 14).
Total Medicare Cost (unadjusted)	Equals the total Medicare cost in the absence of the UPL, minimum productivity standards, and the outpatient mental health limitation. Equals *Cost per Visit* multiplied by *Total Medicare Visits*.

The Medicare payment rate for each FQHC is based on allowable costs (excluding vaccine costs) divided by the number of total visits, subject to the UPLs and productivity limits. The productivity standards are to ensure that the rate reflects reasonable costs, since a clinic with fewer visits would have higher costs

per visit. Allowable costs are defined as those that are "reasonable in amount and necessary and proper to the efficient delivery of services". These include practitioner compensation, overhead, supplies, and other costs incident to delivery of the Medicare FQHC benefit. Costs for services provided that are not covered by Medicare are excluded, as are costs associated with items that are not part of the FQHC benefit. Medicare payment is 80 percent of the FQHC's AIR, subject to the UPL, except as noted below. Beneficiary coinsurance is calculated based on 20 percent of the FQHC's charge, and is subject to a sliding fee scale for patients at or below 200 percent of the federal poverty level. The exceptions to this are 1) pneumococcal and influenza vaccination, which is paid at 100 percent of cost, and 2) mental health services that are subject to the outpatient mental health treatment limitation. The cost reports provide the cost of pneumococcal and influenza vaccine administration separately. This amount is subtracted from the total allowable costs. Total allowable costs excluding vaccine costs are what are ultimately used in the calculation of the adjusted cost per visit.

A FQHC visit is a medically-necessary in-person (face-to-face) encounter with a physician, physician assistant (PA), nurse practitioner (NP), certified nurse midwife (CNM), clinical psychologist (CP), or clinical social worker (CSW), during which time a FQHC service is rendered. An Initial Preventive Physical Examination (IPPE), an Annual Wellness Visit (AWV), or Transitional Care Management (TCM) services can also be considered a FQHC visit. Under certain circumstances, FQHC visits can also include a visiting nurse service, individual diabetes self-management training (DSMT) and individual medical nutrition therapy (MNT).

Federally Qualified Health Centers may bill for only one visit per patient per day, unless the patient, subsequent to the first visit, suffers an illness or injury that requires additional diagnosis or treatment on the same day. Health centers may also bill for more than one visit per patient per day if the patient has a medical visit and a mental health visit on the same day, or if the patient has an IPPE, AWV, or DSMT/MNT visit on the same day as an otherwise billable visit. It should be noted that an AWV is a billable visit only if there are no other encounters identified for the same date of service on a claim.

Total visits are determined by summing the number of visits during the cost reporting period for each type of FQHC practitioner. If the total number of visits falls below the minimum productivity requirements, Medicare applies an adjustment to equal 4,200 visits for each full-time physician and 2,100 visits for each full-time PA, NP, or CNM. This produces the total adjusted visits, which is used in the calculation of adjusted cost per visit.

According to a 2010 report by the U.S. Government Accountability Office (GAO), 38 percent of FQHCs had fewer visits than the minimum number indicated by the productivity standards. These FQHCs were required to use the minimum productivity standard in calculating the denominator for their calculations of cost per visit, resulting in a lower reported cost per visit.

The FQHC AIR is defined as the lesser of the adjusted cost per visit and the UPL. Adjusted cost per visit is determined by dividing total allowable costs excluding vaccine costs by the total adjusted visits. Updated annually, the UPL is defined separately for urban and rural FQHCs, where urban FQHCs are those located in a Metropolitan Statistical Area (MSA) or New England County Metropolitan Area (NECMA). In 2013,

the per-visit UPL was equal to $110.78 for rural FQHCs and $128.00 for urban FQHCs. According to the 2010 GAO report, in 2007, 72 percent of FQHCs had costs per visit exceeding their respective UPLs. Of those, more than 50 percent had costs per visit that exceeded the UPL by $20 or more.

Statutory Requirements for the PPS

The Affordable Care Act mandates the development of a PPS, and removes the current UPLs and productivity standards. Beginning on or after October 1, 2014, the estimated aggregate amount of payment rates should be equal to 100 percent of the estimated amount of reasonable costs that would have occurred in the absence of the PPS, without the application of the UPLs or productivity standards. In the first year following implementation, payment increases are to be determined by the MEI. In subsequent years, payment increases are to be determined either by the MEI or by changes in the costs for a market basket of FQHC goods and services.

The PPS is required to take into account the type, intensity, and duration of services furnished by FQHCs and may include adjustments, such as for geographic location, to reflect variation in resource intensity. Additionally, the PPS is specifically required to include a process for describing the services furnished by FQHCs and establish payment rates for specific payment codes based on such descriptions of services. In anticipation of the development of the PPS, the Affordable Care Act mandated that, starting in 2011, FQHCs must report on the specific services they provide to Medicare beneficiaries using the Healthcare Common Procedure Coding System (HCPCS) code set. The Affordable Care Act also expanded the definition of Medicare-covered preventive services provided by FQHCs, described further below.

Medicare FQHC Bundle of Services

Federally Qualified Health Centers are facilities primarily engaged in providing outpatient primary and preventive care services that are typically furnished in an outpatient clinic. Chapter 13 of the Medicare Benefit Policy Manual defines FQHC services as:

- Physician services
- Services and supplies furnished incident to a physician's services
- NP, PA, CNM, CP, and CSW services
- Services and supplies furnished incident to a NP, PA, CNM, CP, or CSW services
- Outpatient diabetes self-management training and medical nutrition therapy for beneficiaries with diabetes or renal disease

Effective January 1, 2011, the Affordable Care Act also revised the list of Medicare-covered preventive services payable in the FQHC setting. Payment adjustment and base payment rate analyses for this report were performed using the current bundle of services.

The Medicare FQHC AIR includes payment for the professional component of allowable services, as well as for services and supplies incident to those services. It should be noted that FQHCs provide a number of additional services not paid under the AIR. Some services are generally outside the FQHC benefit and separately billable under Part B, such as ambulance services, clinical laboratory services (i.e., tests paid under the Clinical Laboratory Fee Schedule), diagnostic services, and durable medical equipment [CMS

HHS 2010]. Some covered preventive services may have a technical component, such as a laboratory service or the use of diagnostic testing equipment, which are also billed separately under Part B. Services that are separately billable under Part B are excluded from the allowable costs reported on the Medicare cost reports and are thus not incorporated in the determination of a FQHC's reasonable costs.

In contrast, the allowable costs of influenza and pneumococcal vaccinations for Medicare beneficiaries are reported on the Medicare cost reports. However, payment for these services is through the cost report, and the allowable costs of these vaccines are not included in the calculation of reasonable costs used to determine the FQHC's AIR. Health Center Program grantees and Health Center Program look-alikes are required by the PHS to provide additional services that are not payable by Medicare either under the AIR or a Part B fee schedule. These include case management services (excluding TCM services), transportation assistance, translation/interpretation services, and preventive dental care [Public Health Services Act 1975].

V. Data Sources and Analytic Database

Assessing existing resource use for the care of Medicare beneficiaries at FQHCs and modeling different options for calculating the payment rate under a PPS required the use of two important sources of data: Medicare FQHC cost reports and Medicare FQHC claims. Cost reports currently serve as the primary source of information for calculating the AIR for FQHCs, and it is proposed that they also be used in establishing payment rates for the initial implementation of the PPS. Claims data are also valuable in informing the design of the PPS, as they are the source of individual patient- and encounter-level data on resource use, which is particularly important when evaluating options for stratification or payment adjustment (Section VII). Accordingly, Arbor Research obtained recent historic cost report and claims data for the purposes of the analyses presented in this report.

Medicare FQHC Cost Reports

Medicare cost reports for free-standing FQHCs (Form 222-92) were obtained from the March 31, 2013, Healthcare Cost Report Information System (HCRIS) quarterly update. There were 3,108 reports from fiscal years 2009 to 2013 for 1,323 unique cost reporting entities. Of these, 1,616 reports for 1,259 cost reporting entities ended between June 30, 2011 and June 30, 2012, the most recent one-year period for which FQHC cost report data and claims data were relatively complete. Only cost reports that had reported allowable costs (excluding pneumococcal and influenza vaccines) and Medicare visits were considered for analysis (1,511 reports for 1,179 cost reporting entities).

Cost Report Selection

One cost report was used for each cost reporting entity. For 69 percent of cost reporting entities (n=819), the only available cost report covered one full year (ending between June 30, 2011, and June 30, 2012). For the remaining 31 percent of cost reporting entities (n=360), there were multiple cost reports available and/or the cost reporting period was not exactly one year.

Among cost reporting entities with multiple cost reports, the following steps were used to select cost reports for analysis:

- If a cost reporting entity had two cost reports that covered less than one full year (i.e., a partial year report), the most recent cost report was selected.
- If a cost reporting entity had two reports that covered at least one full year, then the most recent cost report was selected.
- If a cost reporting entity had one full year report that began in 2011 and one partial year report, then the full year report was selected.
- If a cost reporting entity had one full year report that began in 2010 and one partial year report, then the more recent report was selected.

Statistical Outliers

Statistical outliers were identified based on each cost reporting entity's average cost per visit as calculated from the cost reports. Following a conventional approach for excluding statistical outliers, a cost reporting entity was excluded if its average cost per visit exceeded ±3 standard deviations from the

geometric mean of the overall average cost per visit among cost reporting entities (n= 20 cost reporting entities). This resulted in a total of 1,159 remaining cost reports.

Delivery Site Assignment

Because FQHCs can file consolidated cost reports, we checked for the appearance of individual delivery sites on more than one cost report. In order to assure a unique match of the cost report data with claims, it was necessary to select one cost report for each delivery site. For the 11 delivery sites that were listed on two separate cost reports, we used the following steps to select a cost report for linking with claims data:

- If both reports indicating a delivery site had different reporting periods covering a full year, then the site was assigned to the most recent cost report.
- If one cost report was a full year report that began in 2011 and one report was a partial year report, then the site was assigned to the full year report.
- If one cost report was a full year report that began in 2010 and one report was a partial year report, then the site was assigned to the most recent report.
- If both cost reports covered the same time period, then the site was assigned to the most precise version of the cost report as indicated by the higher report status code.

In one occurrence, a site's Medicare Certification Number (CCN) was found on cost reports submitted by cost reporting entities in different states. This was determined to be a typographical error in the site's CCN on one of the cost reports. Due to this selection process, five cost reports were excluded (n=1,154 cost reports).

Final Cost Report Data Set

This process yielded a final set of 1,154 cost reports representing 4,687 delivery sites to be linked to the claims data (Table 2).

Medicare FQHC Claims Data

All final action FQHC claims between January 2010 and December 2012 on type of bill 73x/77x were obtained from the CMS Integrated Data Repository (IDR) on December 20, 2012 (n=16,674,314). Of these claims, only those with dates of service between January 1, 2011 and June 30, 2012 were retained for analysis (n=8,951,106). Unpaid claims, which were identified as those that were of claim type 770 (n=188,554) or that otherwise were associated with a Medicare payment of zero for the claim (n=288,119) were excluded, leaving 8,474,433 claims corresponding to 18,430,951 claim lines.

Claim Line Exclusions

Claim lines were excluded if they contained any of the following:

- A revenue center code equal to 0001, which corresponds to the sum across individual revenue center codes on the claim (n=8,474,432).
- A revenue center code (002x-024x, 029x, 045x, 054x, 056x, 060x, 065x, 067x-072x, 080x-088x, 093x, or 096x-310x) which do not correspond to FQHC services (n=58).
- A blank or "~" revenue center code (n=1).

- A blank or "~" HCPCS code (n=81,254).

This process resulted in a dataset that included 8,401,273 claims encompassing 9,875,206 claim lines.

Identification of Valid Encounters

Valid FQHC encounters were identified by a combination of revenue center codes and HCPCS codes reported on a claim line that, in at least some circumstances, are the basis for Medicare payments to a FQHC:

- Medical visits were defined as having a 0519 revenue center code (i.e., Medicare Advantage) or a 052x revenue center code and one of the following HCPCS codes: 99201-99239, 99241-99245, 99281-99288, 99291-99292, 99304-99374, 99377-99380, 99381-99387, 99391-99397, 99401-99404, 99406-99407, 99455-99499 or 99605-99607. Valid 052x revenue center codes included 0520, 0521, 0522, 0524, 0525, 0527, and 0528.
- Mental health encounters were defined as having a 0519 or 052x revenue center code and one of the following HCPCS codes: 90801, 90802, 90862, or M0064; or having a 0900 revenue center code and any HCPCS code.
- Preventive encounters were divided into four distinct types:
    - IPPE was defined as having a 0519 or 052x revenue center code and HCPCS code G0402.
    - DSMT encounters were defined as having a 0519 or 052x revenue center code and HCPCS code G0108.
    - MNT encounters were defined as having a 0519 or 052x revenue center code and one of the following HCPCS codes: 97802, 97803, 97804, G0270, or G0271.
    - AWV were defined as having a 0519 or 052x revenue center code and HCPCS code G0438 or G0439. Additionally, for an AWV to count as a payable encounter, it had to be the only encounter identified on a date of service on a single claim.

If a claim did not include a valid encounter line as defined above, then it was excluded (n=126,622).

Final Claims Data Set

The above process yielded 8,286,882 encounters identified on 8,274,651 distinct claims encompassing 9,668,473 claim lines (Table 3). The encounter charge was defined as the line charge where the encounter HCPCS code was identified. All other claim lines not identified as an encounter were considered to represent ancillary services associated with the encounter.

Identification of Per Diem Encounters

All separately payable encounters for the same beneficiary at the same clinic on the same date of service were combined into a single per diem encounter, regardless of whether the encounters were on the same claim. The per diem encounter charge was calculated by summing the individual encounter charges that were included in the per diem encounter. This summation created 8,250,244 per diem encounters.

Linking Cost Reports and Claims

Claims were linked to cost reports by delivery site, as determined by the reported CCN. For cost reports beginning on or after January 1, 2011, which accounted for 81 percent of the total 1,154 cost reports, all claims that occurred within the cost report fiscal year were linked. For cost reports that were at least one full year in length and began in 2010 (n=215), all paid claims for valid encounters in 2011 were linked. No claims from 2010 were used, because the HCPCS code reporting requirement on claims did not go into effect until January 1, 2011.

Only cost reporting entities that linked to at least one claims encounter were retained for analysis (n=1,144). Similarly, only claims encounters with a service date that mapped to a cost report's reporting period were retained for analysis (n=5,324,645).

Cost-to-Charge Ratio

The linked cost report and claims data were used to calculate a cost-to-charge ratio (CCR) for each cost reporting entity. An average cost per visit was calculated by dividing the total allowable costs (excluding pneumococcal and influenza vaccinations) by the total number of visits reported on the cost report. An average charge per encounter was calculated by summing the encounter line charges across all encounters for the sites under a cost reporting entity and dividing that sum by the total number of encounters for that cost reporting entity. The cost reporting entity-specific CCR was calculated by dividing the average cost per visit by the average charge per encounter. The CCR could not be calculated using the total charges for both Medicare and non-Medicare patients because this information is not currently available on the free-standing FQHC cost report. Adjusted charges were calculated by multiplying the CCR by the submitted charges for each encounter in the claims to estimate FQHC costs for each encounter. For per diem encounters, adjusted charges were calculated by multiplying the CCR by the summed encounter charges for each per diem encounter in the claims.

Statistical Outliers

Statistical outliers were identified in the linked data set based on the CCR-adjusted charge for each encounter in the claims. Following the same approach used for cost reporting entities, an individual encounter was excluded if its adjusted charge exceeded ±3 standard deviations from the geometric mean of the overall average adjusted charge per encounter (n=78,684 encounter outliers).

Final Data Set for Analysis

The final data set for analysis included 5,245,961 encounters from 5,236,607 distinct claims encompassing 6,135,830 claim lines. Encounters were combined into one visit per beneficiary per FQHC site per day, yielding 5,223,512 per diem encounters from 1,244,873 beneficiaries that visited 3,509 delivery sites under 1,141 cost reporting entities. The processes that were used to identify cost reports and claims for analysis are summarized in Tables 2 and 3.

Table 2. Summary of data processing steps leading to the final cost report data set.

Cost Report (CR) Data Processing Step	*N Cost Reports*	*N Cost reporting entities*	*N Sites*
CRs with cost reporting periods ending between June 30, 2011 and June 30, 2012	1,616	1,259	-
CRs with allowable costs (excluding vaccines) and Medicare costs	1,511	1,179	-
Only one CR per cost reporting entity	1,179	1,179	4,726
Exclude statistical outliers (average cost per visit)	1,159	1,159	4,687
Each site assigned to one unique CR	1,154	1,154	4,687
Linked to claims encounters (must have at least one encounter)	1,144	1,144	3,512
Exclude statistical outliers (adjusted charge per encounter)	1,141	1,141	3,509

Table 3. Summary of data processing steps leading to the final claims data set.

Claims Data Processing Step	*N Claims*	*N Claim Lines*	*N Encounters*	*N Per Diem Encounters*
Final action 73x/77x claims between January 1, 2011 and June 30, 2012	8,951,106	19,470,677	-	-
Exclude unpaid claims of type 770	8,762,552	19,055,197	-	-
Exclude all other unpaid claims	8,474,433	18,430,951	-	-
Exclude claim lines with revenue center code 0001	8,474,433	9,956,519	-	-
Exclude claim lines where revenue center code does not correspond to FQHC service	8,474,433	9,956,461	-	-
Exclude claim lines where revenue center code is blank or "~"	8,474,433	9,956,460	-	-
Exclude claim lines where HCPCS code is blank or "~"	8,401,273	9,875,206	-	-
Exclude claims without a valid encounter line	8,274,651	9,668,473	8,286,882	8,250,244
Exclude claims that did not link to a cost report	5,314,889	6,260,472	5,324,645	5,301,273
Exclude statistical outliers (adjusted charge per encounter)	5,236,607	6,135,830	5,245,961	5,223,512

VI. Unit of Payment

A fundamental step in developing the PPS is determining the unit of payment. This report focuses on two major options, comparing the historical approach of a per visit or per encounter unit of payment with an alternative per unit of time approach.

Per Visit

Historically, Medicare payments to FQHCs have been based on an approach that uses a FQHC visit as the unit of payment. This approach has the advantage of making additional resources available as needed for patients who may require multiple visits within a limited time period. For example, some patients may have clinical conditions that require frequent monitoring. A per-visit payment approach supports access to care for patients who would benefit from more regular contact with a FQHC practitioner. The principles of a PPS can be applied within the context of a per visit payment by bundling multiple services delivered during a given visit. This approach requires monitoring to ensure that these services are not "unbundled" through the substitution of multiple, less comprehensive visits for a single comprehensive visit.

One potential limitation of a per visit unit of payment, however, is that there remains no incentive to limit the number of visits or avoid unnecessary visits, which may hinder improvements in efficiency and quality of care under the PPS or impair quality to the extent that it encourages the provision of inappropriate care.

Per Unit of Time

An alternative unit of payment that is based on a unit of time could help address this limitation by encouraging a FQHC to serve as a patient's primary point of care, which may in turn facilitate greater continuity of care. In this model, a single payment to a FQHC would cover the cost of providing primary and preventive care services to a patient for a given time period (30 days, 60 days, 1 year, etc.), which might be fixed or based on a defined episode of care. To encourage continuity of care, one or more visits for a patient during a specified time period could be required for the FQHC to receive payment. Such a model could prove more effective in promoting longitudinal tracking of patients with chronic conditions.

A possible disadvantage of a per unit of time approach is that by increasing the level of financial risk to FQHCs, it may adversely affect access to care. FQHCs would be "at risk" for all services covered under the PPS that may be needed during a given time period, rather than during a particular visit. This could be mitigated by the use of strong payment adjusters that are able to account for expected and appropriate variation in resource use over time (e.g., such as the number of visits). However, inadequate adjustment could create adverse incentives for FQHCs to avoid sicker patients or withhold appropriate services, undermining attempts to encourage patients to use FQHCs as their center of care.

An approach that bases payment on a unit of time also requires decisions about what services are included in the FQHC payment for a given time period. This would be necessary to prevent providers in other care settings from being paid for the same services during that time period (e.g., under both the FQHC PPS and through separate billing of services in other settings such as physician offices or hospital outpatient departments). Therefore, implementing such a system would require coordination across

care settings and payment systems to prevent duplicate payment for services expected to be delivered by FQHCs. These issues are likely to dramatically increase the complexity of the PPS design and implementation relative to a per visit payment approach.

Comparison of per-visit and per-unit of time payment approaches.

Unit of Payment	*Advantages*	*Disadvantages*
Per Visit	▪ Provides more equitable payments for patients who require more frequent visits ▪ Promotes access to care, accommodating the need for multiple visits	▪ Could lead to unnecessary visits and limit efficiency
Per Unit of Time	▪ Facilitates greater continuity of care, such as longitudinal tracking of patients with chronic conditions ▪ Could encourage more efficient management of patients	▪ Increased need for payment adjustment (resources per visit and number of visits) ▪ May increase level of financial risk to FQHCs ▪ May incentivize avoidance of resource intensive patients and limit their access to care ▪ May discourage the provision of appropriate covered services ▪ Requires coordination across payment systems for similar services provided in other settings

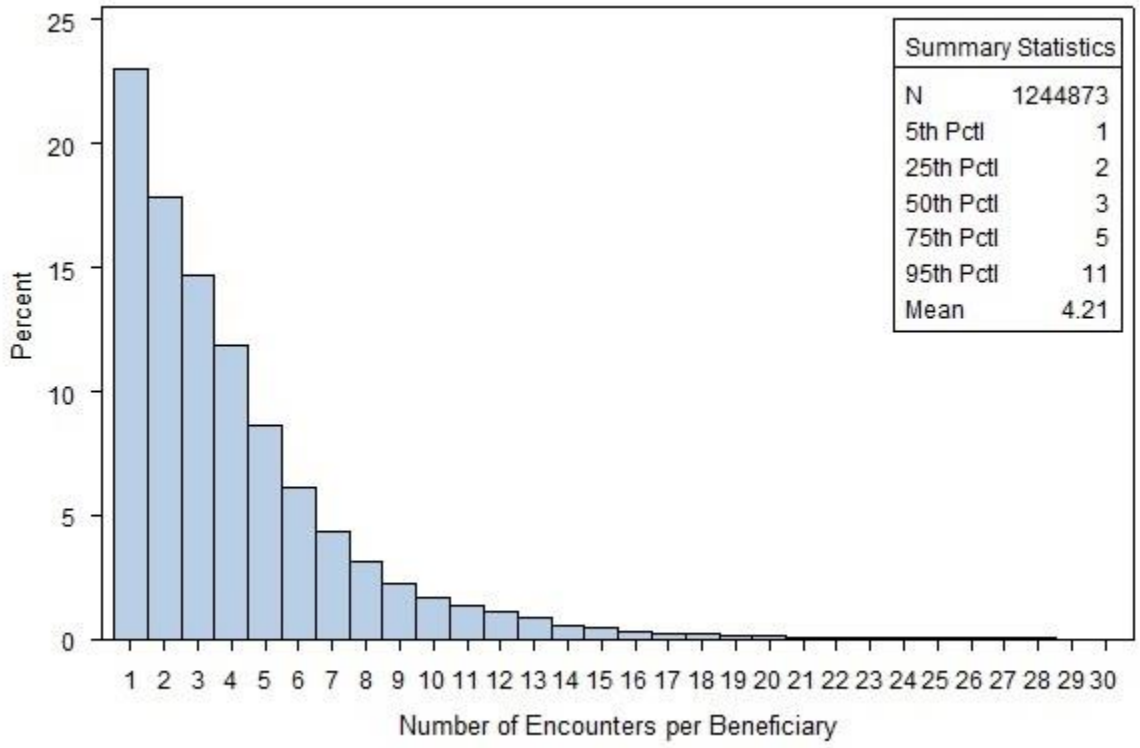
Analysis of Encounter Frequency

To inform decisions about the unit of payment, we examined the frequency with which patients are currently seen at FQHCs. Patients had an average of 3.6 encounters at a FQHC over a nine-month period (Figure 1). That is, on average, patients had an encounter slightly more often than once every three months. There is also significant variation among patients; 25 percent of patients had at least five encounters, or slightly more than one encounter every two months, while five percent of patients had at least 10 encounters, or more than one encounter per month. Similar patterns were observed for both office and mental health visits, with a relatively small proportion of patients accounting for a disproportionately large number of visits.

Based on these patterns, it is not possible to determine whether the care of patients at FQHCs could have been managed more efficiently with fewer visits (which might have been encouraged by a per unit of time payment approach compared to the existing per visit approach). However, given the substantial variation in the number of visits per patient, concerns regarding the increased financial risk to FQHCs

and potential for limiting access to care for especially vulnerable patients who FQHCs are intended to serve could be significant with a per unit of time approach that bundles services provided over a longer period of time.

Figure 1. Distribution of number of encounters per beneficiary



Per Diem Encounter

A unit of time payment approach that would bundle all FQHC encounters occurring on the same day would serve to prevent the unbundling of services provided at the same time into multiple encounter-based payments. Currently, paid claims for multiple encounters for the same patient at the same FQHC on the same day occur infrequently. Therefore, a payment rate established using a per diem approach would not differ substantially from a payment rate based on a per encounter approach.

The analysis of multiple encounters used all paid claims linked to the FQHC cost reports. There were 5,223,512 distinct beneficiary/FQHC/ day of service combinations. These combinations accounted for 5,245,961 encounters. As shown in Table 4, 99.56 percent of beneficiary/FQHC/day of service combinations (i.e., "per diem encounters") identified in the claims represent a single encounter. When multiple encounters were present for a beneficiary/FQHC/day (i.e., for the remaining 0.44 percent), they were often of different types (e.g., medical and mental health). In other cases, however, the multiple encounters reported for the same beneficiary/FQHC/day were of the same type (e.g., two medical or two mental health visits).

Table 4. Frequency of types of encounters on the same date of service at the same center for a beneficiary.

Encounter Type	*Number of Per Diem Encounters*	*Percent of Per Diem Encounters*
Single encounter per beneficiary/FQHC/day (subtotal)	5,201,462	99.58%
Medical	4,800,340	99.90%
Mental Health	379,482	7.26%
IPPE	1,095	0.02%
AWV	15,083	0.29%
MNT	1,641	0.03%
DSMT	3,821	0.07%
Multiple encounters per beneficiary/FQHC/day (subtotal)*	22,050	0.42%
Medical visit and mental health visit	14,286	0.27%
Two mental health visits	3,017	0.06%
Two medical visits (without modifier 59)	2,171	0.04%
Medical visit and DSMT	1,239	0.02%
Other	1,337	0.03%
Total	5,223,512	100.00

*Includes claims with multiple encounters as well as separate claims on the same date of service at the same clinic for a beneficiary.

The remainder of this report considers a per diem encounter approach rather than any involving a longer unit of time than one day of service, due to 1) the concerns of increased financial risk to FQHCs with an approach that bundles services over a longer period of time, 2) the degree to which designing such an approach would rely on more complex bundling definitions and payment adjustments, and 3) the difficulty of building a payment system that crosses provider settings (e.g., disallowing payment to other providers for services included in the FQHC bundle during that period of time).

VII. Payment Adjustment

Several options for payment adjustments were considered for adjusting payment rates under the PPS to reflect differences in resource use among FQHC encounters. Adjustments to the PPS base rate can be used to increase payments for services furnished to beneficiaries who require more resources than average in order to protect beneficiary access to care and ensure equitable payments to providers. Similarly, adjustments to the PPS base rate can be used to lower payments for beneficiaries who are expected to use fewer resources and avoid creating financial incentives for providers to favor these beneficiaries. Several criteria were used to evaluate potential payment adjustment methods for the PPS.

Evaluation Criteria

As required by the Affordable Care Act, CMS must take into account the type, intensity, and duration of services when developing the PPS, and may include other adjustments, such as geographic adjustments. Potential adjustment factors included a range of patient, encounter, and FQHC characteristics. In addition to the criteria outlined by the Affordable Care Act, other key issues that were considered in evaluating potential adjusters included the extent to which payments under the PPS would reflect the specific costs incurred by FQHCs (i.e., payment accuracy), the potential for adverse incentives related to either quality of care or access to care, the administrative burden associated with implementing the PPS, and the potential for upcoding.

Payment accuracy: An important evaluation criterion involves the accuracy of payments, or the extent to which payments under the PPS will reflect the specific costs incurred by FQHCs. There will be greater payment accuracy if payment categories or adjustments capture differences in the levels of resources typically required for certain types of visits. This can be accomplished by defining payment categories or adjustments using factors that strongly reflect FQHC costs. A related consideration is to define a sufficient number of payment categories so that the heterogeneity in resource use can be limited within each category. The challenge is to identify sufficient categories to produce accurate payments while balancing the increasing administrative complexity of payment category tracking and reporting.

Potential for adverse incentives: When applying a payment adjustment, there is the potential for creating adverse incentives regarding quality of care or access to care. For example, this could occur when establishing higher payments for clinical conditions that may potentially result from poor quality of care by FQHCs (e.g., for diabetes with complications). In contrast, the absence of a payment adjustment could also limit access to care, because FQHCs may be discouraged from managing clinical conditions that are very costly to treat.

Administrative burden: An additional criterion is the complexity of the system, which may be relevant to both the implementation of the system by CMS and the resulting administrative burden to FQHCs. The impact on FQHCs will depend on the amount of additional information that they are required to report under the PPS.

Potential for upcoding: Another factor to consider is the potential for "upcoding," or the reporting of longer or more intense visits than necessary to receive additional payment. Opportunities for upcoding can be limited by establishing payment categories that are clinically distinct and objectively defined. However, careful consideration must be given to the quality of information that is available to support the development of specific payment categories or adjustments.

Analysis of Potential Payment Adjustment Methods

To inform the development of an approach for adjustment for the PPS, we performed analyses that assess the degree to which individual factors explain variation in FQHC costs. Such analyses are an important tool for establishing payment rates under the PPS that reflect variation in the cost of providing FQHC services. The factors that were examined include characteristics of encounters, beneficiaries, and FQHCs. Both the results of these analyses and other considerations, including the criteria discussed above, were used below in evaluating potential payment adjustment methods.

Estimated Cost for a Per Diem Encounter

Because data on the costs incurred by FQHCs for individual encounters are not currently available, we approximated encounter-level FQHC costs by adjusting the encounter-level charge (available from the claims data) using a CCR. As described in Section V, the CCR was calculated at the FQHC cost reporting entity level by taking the ratio of the average cost per visit from the cost reports and the average charge per encounter from the claims. If a FQHC's costs are generally lower than its reported charges, then the CCR would be less than one. Conversely, if the FQHC's costs are generally higher than its reported charges, then the CCR would be greater than one. Multiplying the CCR by the individual encounter-level charges increases or decreases the charges for each encounter within a FQHC by a constant factor, thus yielding an adjusted charge amount that represents an estimate of the cost to the FQHC of the encounter.

$$CCR = \text{Average cost per encounter for FQHC} / \text{Average charge per encounter for FQHC}$$

$$\text{Adjusted charge per encounter (estimated cost)} = \text{Reported charge for encounter} \times CCR$$

Adjusted charges across all encounters for the same beneficiary at the same clinic on the same date of service were summed to obtain the adjusted charge (estimated cost) for the per diem encounter. One inherent limitation of this approach is that it assumes that the CCR is the same for all types of encounters within the facility.

Modeling Approach

Linear regression models were used to examine the association of potential adjustment factors with estimates of the cost for a per diem encounter (i.e., based on the adjusted charge amount). Statistical cost outliers were identified and excluded from these analyses. See Section V for a discussion of the methods used to identify statistical outliers and the impact of their exclusion.

One assumption of linear regression is that the outcome variable is normally distributed. Since the distribution of the estimated cost for a per diem encounter was found to be somewhat skewed, a log

transformation was applied to the estimated cost for a per diem encounter in defining the dependent variable for analysis. This statistical approach also yields adjustment factors for the PPS that can be multiplied by a base rate amount, such that future price updates can be applied to the base rate and do not need to involve the individual payment adjustments. All analyses were therefore based on regression models of the log estimated cost for a per diem encounter.

Geography

A payment adjustment based on geography was considered to account for geographic variation in the cost of providing services. Given the similar focus on services provided by physicians and other health care professionals during outpatient office visits, the types of geographic adjustments currently being used under the Medicare PFS, which are based on the geographic practice cost index (GPCI), were also assessed for use with the FQHC PPS. A geographic adjustment factor (GAF) was calculated for each per diem encounter based on the delivery site zip code using only the work and practice expense GPCIs, as currently proposed for the PFS for FY 2014, and their respective cost weights. Because the malpractice GPCI is not being applied in this context, the work and practice expense cost weights (0.50866 and 0.44839, respectively) were rescaled to sum to 1.00.

$$GAF = 0.53149 * Work\ GPCI + 0.46851 * PE\ GPCI$$

Based on log-linear regression analysis, the GAF was found to be strongly associated with estimated FQHC costs for per diem encounters. A regression model that included the GAF as the only independent (predictor) variable accounted for 6.9 percent of the overall variation in measured resource use for providing FQHC services (based on the model R-squared value). The GAF therefore represents a potential adjustment factor that can account for geographic variation in resource use by FQHCs, and can be applied to the PPS base rate amount in determining the payment rate for each delivery site.

New Patient Visit, Initial Preventive Visit

Both new patient visits at FQHCs and initial preventive visits covered under the Medicare FQHC benefit were examined as types of encounters that may require higher levels of resource use. Indicators of a new patient visit and an initial visit were defined using the encounter codes reported on the claims. New patient visits were identified based on the use of one of the following HCPCS codes: 92002, 92004, 99201-99205, 99324-99328, 99341-99345, 99381-99387. Initial preventive visits were defined to include HCPCS codes G0402 (IPPE) and G0438 (initial AWV). If any encounter included in a per diem encounter was identified as a new patient visit or initial preventive visit then the per diem encounter was also identified as a new patient visit or initial preventive visit, respectively. Among all per diem encounters, 2.64 percent included a new patient visits, while 0.14 percent included an initial preventive visit.

Both new patient visits and initial preventive visits were found to be associated with estimated FQHC costs based on log-linear regression analysis. Estimated costs were 31.3 percent higher for new patient visits, and 61.7 percent higher for initial preventive visits, relative to other visits. Based on the observed pattern of costs being elevated for both types of visits, and the relatively low frequency of initial preventive visits, a combined indicator for new patient visit or initial preventive visit was examined in a separate analysis. If any encounter included in a per diem encounter was identified as a new patient visit

or initial visit then the per diem encounter was also identified as a new patient visit/initial preventive visit. Per diem encounters that were identified as including a new patient or for an initial visit accounted for 2.8 percent of all per diem encounters included in the analysis (see Table 5).

Table 5. Characteristics of encounters, beneficiaries, and FQHCs (n=5,223,512 encounters)

Characteristic	*Mean or Percent*	*Characteristic*	*Percent*
Geographic adjustment factor	0.9944	Clinical conditions, continued (CCS group)	
New patient visit	2.6%	Chronic obstructive pulmonary disease and bronchiectasis (127)	5.5%
Initial preventive visit	0.1%	Other non-traumatic joint disorders (204)	5.2%
New patient visit/Initial preventive visit (composite)	2.8%	Other upper respiratory infections (126)	3.8%
Type of encounter		Other connective tissue disease (211)	4.5%
Office visit	91.9%	Schizophrenia and other psychotic disorders (659)	2.5%
Mental health visit	7.6%	Anxiety disorders (651)	5.2%
Preventive visit	0.5%	Other nervous system disorders (95)	4.4%
Female	59.9%	Cardiac dysrhythmias (106)	3.2%
Age		Other lower respiratory disease (133)	2.8%
< 55 years	27.2%	Delirium dementia and amnesia and other cognitive disorders (653)	2.3%
55-65 years	19.4%	Thyroid disorders (48)	4.9%
65-75 years	30.4%	Skin and subcutaneous tissue infections (197)	1.7%
75-80 years	9.3%	Urinary tract infections (159)	1.9%
>= 80 years	13.7%	Osteoarthritis (203)	3.9%
Office visit duration		Acute bronchitis (125)	1.6%
Short (5, 10, or 15 minutes)	64.1%	Abdominal pain (251)	1.8%
Medium (20, 25, or 30 minutes)	22.3%	Other skin disorders (200)	2.4%
Long (40, 45, 60, or 80 minutes)	1.1%	Other aftercare (257)	3.2%
No Time Specified	4.5%	Coronary atherosclerosis and other heart disease (101)	3.1%
FQHC size		Other upper respiratory disease (134)	2.4%
Low total visit volume (< 17,369 visits)	8.4%	Genitourinary symptoms and ill-defined conditions (163)	2.3%
Medium total visit volume (17,369-42,711 visits)	24.6%	HIV infection (5)	1.0%
High total visit volume (> 42,711 visits)	67.0%	Deficiency and other anemia (59)	2.7%
Location of FQHC sites		Other gastrointestinal disorders (155)	2.3%
All urban sites	48.0%	Asthma (128)	2.1%
All rural sites	26.4%	Esophageal disorders (138)	3.8%
Mixed urban-rural sites	25.6%	Other nutritional; endocrine; and metabolic disorders (58)	4.2%
Clinical conditions (CCS group)		Congestive heart failure; nonhypertensive (108)	1.8%
Essential hypertension (98)	32.1%	Other ear and sense organ disorders (94)	1.4%
Diabetes mellitus without complication (49)	16.1%	Allergic reactions (253)	1.2%
Mood disorders (657)	10.3%	Headache; including migraine (84)	1.3%
Diabetes mellitus with complications (50)	6.4%	Malaise and fatigue (252)	1.7%
Disorders of lipid metabolism (53)	16.7%	Mycoses (4)	1.6%
Spondylosis intervertebral disc disorders other back problems (205)	8.2%	Nonspecific chest pain (102)	0.9%

Using multivariate regression analysis that also controlled for the GAF, estimated FQHC costs were found to be 33.3 percent higher for a combined category of new patient/initial preventive visits relative to other visits (see Table 6). This result corresponds to an adjustment factor of 1.3333 that can be applied to the PPS base rate amount, and has been proposed for the PPS.

Table 6. Estimated FQHC costs for new patient visit/initial preventive visit

Characteristic	*Estimated Multiplier*	*P-value*	*Model R-squared*
New patient visit / initial preventive visit	1.3333	<0.0001	0.084

*Total number of per diem encounters=5,223,512

In addition to adjustments for the GAF and new patient visit/initial preventive visit which are being proposed by CMS for the PPS, other types of adjustment factors were also considered. Analyses of these other potential payment adjustments are presented below.

Type of Encounter

Consideration was given to the potential for differences in resource use for different types of encounters, including preventive, mental health, and other medical office visits. Preventive care encounters were defined to include the IPPE, AWV, DSMT, and MNT. Based on an analysis that was limited to the type of encounter, preventive care encounters were found to be associated with approximately 18 percent higher estimated costs per visit relative to other medical office visits (see Table 7). The estimate for preventive visits was smaller when controlling for both the GAF and new patient visit/initial preventive visit, indicating that estimated costs are lower for preventive visits not captured by the new patient visit/initial patient visit category compared to preventive visits included in that category.

Table 7. Estimated FQHC costs by type of encounter

	Unadjusted model R-squared = 0.001		**Adjusted for GAF and new/initial visit R-squared = 0.085**	
Type of encounter	***Estimated multiplier***	***P-value***	***Estimated multiplier***	***P-value***
Office visit (reference)	1.000	--	1.000	--
Mental health visit	1.006	<.0001	0.989	<.0001
Preventive visit	1.183	<.0001	1.076	<.0001

N=5,245,961 encounters.

These results suggest that the adjustment that is being proposed for new patient visit/initial preventive visit recognizes the higher costs associated with certain preventive visits, namely the IPPE and initial AWV, relative to other preventive visits. Any further adjustment for other preventive visits (i.e., other than the IPPE and initial AWV) would need to consider how to determine the adjustment(s) that would apply for a per diem encounter that includes two or more different types of visits. The difference in the

estimated costs for mental health encounters relative to other medical office visits was found to be relatively small (approximately one percent, as shown in Table 7) and therefore was not considered further as the basis for a payment adjustment.

Patient Demographics (Age and Gender)

Patient age and gender were also examined as potential adjustment factors. These demographic characteristics have the advantage of being objectively defined. However, both of these characteristics had a limited association with estimated costs, with estimated costs for per diem encounters differing by less than one percent by gender and by up to four to six percent between the lowest and high cost age groups (ranging from age <55 to age >80), with differences by age somewhat smaller when adjusting for the GAF and new patient visit/initial preventive visit. As shown in Table 8, results were similar when including age and gender in the same model. The relatively small differences in estimated costs by patient age and gender did not support the use of these demographic characteristics as adjustment factors for the PPS.

Table 8. Estimated FQHC costs by patient demographics

	Unadjusted model - age only R-squared = 0.003		**Unadjusted model - gender only R-squared = <0.001**		**Unadjusted model - age and gender R-squared = 0.003**		**Adjusted for GAF and new/initial visit R-squared = 0.086**	
Characteristic	***Estimated multiplier***	***P-value***	***Estimated multiplier***	***P-value***	***Estimated multiplier***	***P-value***	***Estimated multiplier***	***P-value***
Age								
< 55 years	1.021	<.0001	--	--	1.021	<.0001	1.019	<.0001
55-65 years	1.017	<.0001	--	--	1.018	<.0001	1.020	<.0001
65-75 years (ref.)	1.000	--	--	--	1.000	--	1.000	--
75-80 years	0.985	<.0001	--	--	0.985	<.0001	0.991	<.0001
>= 80 years	0.965	<.0001	--	--	0.965	<.0001	0.979	<.0001
Male (ref: female)	--	--	1.001	0.0002	0.998	<.0001	0.994	<.0001

N=5,223,512 per diem encounters.

Clinical Conditions

The presence of certain clinical conditions was also considered as a potential source of variation in estimated costs for per diem encounters. Clinical conditions were identified using the ICD-9 diagnosis codes reported by FQHCs on the claims. In an exploratory analysis, diagnosis codes representing either the reported primary diagnosis or one of up to 10 secondary diagnoses on the claim were grouped into more clinically meaningful categories using the Clinical Classifications Software for Services and Procedures (CCS-Services and Procedures), which was developed as part of the Agency for Healthcare Research and Quality (AHRQ) Healthcare Cost and Utilization Project (HCUP). If any encounter included in a per diem encounter was associated with a particular diagnosis code, then the per diem encounter was associated with that diagnosis code. The most commonly reported clinical conditions (e.g., hypertension and diabetes, among others) were tested for an association with the estimated cost for the per diem encounter.

Several of the identified clinical conditions were found to be associated with approximately 5 to 10 percent higher costs for per diem encounters (see Table 9). Results were similar based on a model that also controlled for the GAF and new patient visit/initial preventive visit. These results suggest that the care of certain chronic or other clinical conditions contributes to the resources used by FQHCs during a per diem encounter. However, further consideration should be given to the identification of valid and appropriate clinical groupings as the basis for potential payment adjustment factors in the context of outpatient services provided by FQHCs. In addition, further analyses should consider the potential importance of diagnoses reported on other claim types in addition to FQHC claims, which always include a primary diagnosis but may not include all potentially relevant secondary diagnoses. Likewise, factors such as objectivity of the diagnoses and potential variation in severity should be considered.

Table 9. Estimated FQHC costs by clinical condition

Clinical condition (CCS group)	Unadjusted model R-squared = 0.032 *Estimated multiplier*	*P-value*	Adjusted for GAF and new/initial visit R-squared = 0.117 *Estimated multiplier*	*P-value*
Essential hypertension (98)	1.039	<.0001	1.044	<.0001
Diabetes mellitus without complication (49)	1.068	<.0001	1.067	<.0001
Mood disorders (657)	1.081	<.0001	1.078	<.0001
Diabetes mellitus with complications (50)	1.081	<.0001	1.080	<.0001
Spondylosis intervertebral disc disorders other back problems (205)	1.029	<.0001	1.034	<.0001
Disorders of lipid metabolism (53)	1.036	<.0001	1.043	<.0001
Chronic obstructive pulmonary disease and bronchiectasis (127)	1.040	<.0001	1.063	<.0001
Other non-traumatic joint disorders (204)	1.039	<.0001	1.044	<.0001
Other upper respiratory infections (126)	0.990	<.0001	1.018	<.0001
Other connective tissue disease (211)	1.051	<.0001	1.053	<.0001
Schizophrenia and other psychotic disorders (659)	1.099	<.0001	1.081	<.0001
Anxiety disorders (651)	1.051	<.0001	1.058	<.0001
Other nervous system disorders (95)	1.062	<.0001	1.063	<.0001
Cardiac dysrhythmias (106)	1.004	<.0001	1.012	<.0001
Other lower respiratory disease (133)	1.078	<.0001	1.077	<.0001
Delirium dementia and amnesia and other cognitive disorders (653)	0.980	<.0001	1.005	<.0001
Thyroid disorders (48)	1.037	<.0001	1.048	<.0001
Skin and subcutaneous tissue infections (197)	1.002	0.2013	1.014	<.0001
Urinary tract infections (159)	1.001	0.4335	1.021	<.0001
Osteoarthritis (203)	1.031	<.0001	1.042	<.0001
Acute bronchitis (125)	0.989	<.0001	1.019	<.0001
Abdominal pain (251)	1.061	<.0001	1.066	<.0001
Other skin disorders (200)	1.057	<.0001	1.046	<.0001
Other aftercare (257)	0.905	<.0001	0.937	<.0001
Coronary atherosclerosis and other heart disease (101)	1.037	<.0001	1.055	<.0001
Other upper respiratory disease (134)	1.014	<.0001	1.021	<.0001
Genitourinary symptoms and ill-defined conditions (163)	1.065	<.0001	1.066	<.0001
HIV infection (5)	1.197	<.0001	1.151	<.0001
Deficiency and other anemia (59)	1.048	<.0001	1.058	<.0001
Other gastrointestinal disorders (155)	1.066	<.0001	1.065	<.0001
Asthma (128)	1.095	<.0001	1.078	<.0001
Esophageal disorders (138)	1.015	<.0001	1.034	<.0001
Other nutritional; endocrine; and metabolic disorders (58)	1.052	<.0001	1.046	<.0001
Congestive heart failure; nonhypertensive (108)	1.067	<.0001	1.080	<.0001
Other ear and sense organ disorders (94)	1.092	<.0001	1.084	<.0001
Allergic reactions (253)	1.011	<.0001	1.009	<.0001
Headache; including migraine (84)	1.061	<.0001	1.063	<.0001
Malaise and fatigue (252)	1.041	<.0001	1.065	<.0001
Mycoses (4)	1.033	<.0001	1.021	<.0001
Nonspecific chest pain (102)	1.103	<.0001	1.106	<.0001

N=5,223,512 per diem encounters.

Encounter Duration

The duration of encounters (in minutes) was considered as another potential adjustment factor. Such an adjustment might encourage access to care for patients who require more time with practitioners. While the duration of each encounter is not reported by FQHCs on each claim, an approximate length of time associated with an encounter can be inferred for many of the most commonly used E/M codes for medical office visits (e.g., 15 minute office visit for code 99213). One limitation of this approach is that information about an approximate length of visit is not widely captured in the coding of mental health and preventive care encounters on the FQHC claims. Among medical office visits, the duration of the visit, approximated using the reported E/M code, was found to be strongly associated with the estimated cost per visit. For example, relative to office visits lasting 5-15 minutes, costs were estimated to be approximately 42 percent higher for 20-30 minute visits and approximately 89 percent higher for visits of at least 40 minutes (see Table 10).

Table 10. Estimated FQHC costs by duration of office visit

	Unadjusted model R-squared= 0.169		**Adjusted for GAF and new/initial visit R-squared = 0.245**	
Characteristic	***Estimated multiplier***	***P-value***	***Estimated multiplier***	***P-value***
Office visit duration				
Short (5, 10, or 15 minutes; reference)	1.000	--	1.000	--
Medium (20, 25, or 30 minutes)	1.418	<.0001	1.426	<.0001
Long (40, 45, 60, or 80 minutes)	1.887	<.0001	1.895	<.0001
No time specified	1.223	<.0001	1.255	<.0001
Mental health visit	1.114	<.0001	1.088	<.0001
Preventive visit	1.310	<.0001	1.290	<.0001

N=5,245,961 encounters.

There are potentially important disadvantages to using the duration of encounters as a payment adjustment factor, however. The minutes attributed to Evaluation and Management (E/M) encounter codes are guidelines that reflect the face-to-face time between the FQHC practitioner and the beneficiary for that E/M service, and they would not indicate the total duration of the FQHC encounter. In addition, there is potential for upcoding, given the potentially large increase in payment that would result from a relatively small increase in the duration of the encounter (e.g., from 15 minutes to 20 minutes).

Type of Service

Another approach for a payment adjustment that was considered for the PPS involved the use of different payment categories or adjustments based on the delivery of specific types of services during a patient visit. A potential advantage of using such an approach for the PPS would be to help ensure access to care and sufficient payments to FQHCs for services that are more resource intensive. Since January 2011, FQHCs have been required to include details regarding the Medicare FQHC services provided during an encounter, through the reporting of relevant HCPCS codes for each encounter on

claims. These data were analyzed to evaluate a payment adjustment based on type(s) of Medicare service provided during a FQHC encounter.

Based on an analysis of FQHC claims during 2011 and the first half of 2012, additional information regarding specific types of services provided by FQHCs was reported for approximately 11 percent of encounters (see Table 11). That is, for these encounters, both an encounter code (which is required for payment) and at least one additional HCPCS code were reported on the claim. The remaining 89 percent of FQHC encounters during this time period included only one HCPCS code, which corresponded to the encounter. As shown in Table 12, the reporting of both an encounter code and at least one additional HCPCS code was relatively uncommon for mental health encounters (0.2 percent), and relatively more common for initial preventive encounters (17.9 percent for IPPE/AWV). The claims reporting requirement therefore did appear to yield sufficient information to support an adjustment by type of service.

Table 11. Distribution of the number of HCPCS associated with an encounter - overall

Number of HCPCS	*# of Encounters*	*Percent*
1	4,653,055	88.70
2	376,374	7.17
3	163,581	3.12
4	33,847	0.65
5	14,095	0.27
6	3,180	0.06
7	1,136	0.02
8	362	0.01
9	134	0.00
10+	197	0.00
Total	5,245,961	100.00

Table 12. HCPCS reporting by encounter type

Type of Encounter	*N (%)*	*% with more than one HCPCS reported*
Office Visit	4,822,189 (91.9)	12.2
Mental Health	400,401 (7.6)	0.2
IPPE/AWV	16,306 (0.3)	17.9
MNT/DSMT	7,065 (0.1)	2.9
Total	5,245,961 (100.0)	11.3

The extent to which this additional information was provided varied among FQHCs, however. For example, we observed patterns of some clinics consistently reporting only one HCPCS code (i.e., for the encounter) on all claims, whereas other clinics have reported more than one HCPCS code with some regularity. One possible explanation for these patterns is that there have been differences in the interpretation or incorporation of the HCPCS reporting requirement into clinic practices. As a result, there is a risk that payment categories or adjustments for the types of services being provided might be

based on incomplete information and result in payments under the PPS that do not accurately reflect the cost of providing those services. While the additional reporting so far by FQHCs has been informative, the information being reported should be validated to support consideration of potential payment adjustments or payment categories for specific types of services.

Table 13. Reporting of more than one HCPCS code per encounter

Total Number of Clinics	*Clinics only reporting one HCPCS per encounter*	*Clinics reporting only one HCPCS on at least 99% of encounters*	*Clinics reporting only one HCPCS on at least 95% of encounters*
3,509	635 (18.1%)	982 (28.0%)	1,646 (46.9%)

FQHC Size

In addition to clinical and demographic characteristics of patients, and characteristics of encounters, we evaluated characteristics of FQHCs as predictors of the estimated cost per encounter. Based on a model with no other adjustments, FQHCs in the lowest tertile of total visits were found to have estimated costs that were 14.5 percent higher than FQHCs in the highest tertile of total visits and 11.9 percent higher than FQHCs in the middle tertile (see Table 14; 1.145/1.023 = 1.119). These patterns were similar when controlling for the GAF and new patient visit/initial preventive visit.

Table 14. Estimated FQHC costs by FQHC size

	Unadjusted model		**Adjusted for GAF and new/initial visit**	
	R-squared = 0.01		**R-squared = 0.097**	
Characteristic	***Estimated multiplier***	***P-value***	***Estimated multiplier***	***P-value***
FQHC total visit volume				
Low (< 17,369 visits)	1.145	<.0001	1.153	<.0001
Medium (17,369-42,711 visits)	1.023	<.0001	1.056	<.0001
High (> 42,711 visits; reference)	1.000	--	1.000	--

N=5,223,512 per diem encounters.

The observed differences in cost by FQHC size are consistent with some economies of scale for larger FQHCs, or operating efficiencies that may result from being able to spread fixed costs over a larger number of visits. However, there are potential disadvantages to using these differences as the basis for adjusting payments to FQHCs. One potential goal for the PPS is to provide FQHCs with an incentive to operate at an efficient scale. This could be accomplished by not reducing payments for larger FQHCs that have lower costs. In this way, FQHCs can benefit from any improvements in efficiency.

Urban/Rural Location

There is precedent in the current all-inclusive payment rate system for FQHCs to adjust payments based on urban versus rural location. This has been reflected in the higher upper payment limit in place for urban FQHCs relative to rural FQHCs. Based on the results of an unadjusted comparison of urban and

rural FQHCs (see Table 15), all urban FQHCs had estimated costs for per diem encounters that were 17.8 percent higher than mixed urban/rural FQHCs and 12.6 percent higher than all rural FQHCs (1.178/1.046 = 1.126). When adjusting for the GAF and new patient visit/initial preventive visit, these differences were reduced to 9.4 percent and 4.1 percent, respectively (where 1.094/1.051 = 1.041). While an urban/rural difference in estimated costs remained, it appears that payment adjustments based on the GAF and new patient visit/initial preventive visit would account for much of the observed difference in estimated costs between urban and rural FQHCs.

Table 15. Estimated FQHC costs by urban/rural location

	Unadjusted model		**Adjusted for GAF and new/initial visit**	
	R-squared = 0.037		**R-squared = 0.093**	
Characteristic	***Estimated multiplier***	***P-value***	***Estimated multiplier***	***P-value***
FQHC: All Urban Sites	1.178	<.0001	1.094	<.0001
FQHC: All Rural Sites	1.046	<.0001	1.051	<.0001
FQHC: Mixed Urban-Rural (reference)	1.000	--	1.000	--

N=5,223,512 per diem encounters.

VIII. PPS Base Payment Rate

The adjusted payment rate requires establishing a per diem encounter (PDE) base payment rate (i.e., the average cost per PDE with a budget neutrality factor applied for the PPS adjustments) and making adjustments for geographic location as well as new patient/initial preventive visit types (Section VII). The manner in which these payment components are combined to determine the per diem encounter payment amount is described below.

Estimating the Average Cost for a Per Diem Encounter

The Affordable Care Act directs that the base payment rate should be calculated such that the estimated aggregate amount of prospective payment rates is equal to 100 percent of the estimated amount of reasonable costs that would have resulted, in the absence of the UPL and productivity standards, if the PPS had not been implemented. In accordance with the statute, we estimated the average Medicare cost per visit without applying the UPL or productivity standards. To be consistent with the change in policy, transitioning from a Medicare payment rate based on individual encounters to a per diem visit rate, the average Medicare cost per visit was calculated at the PDE level. Using Medicare claims data, the estimated average cost per PDE was calculated by dividing the sum of the adjusted charges (where adjusted charge equals the reported charge multiplied by the CCR) by the total number of per diem encounters. The estimated average cost per PDE in the absence of the UPL and productivity standards was calculated as $150.96.

Estimating the Per Diem Encounter Base Payment Rate

In addition to incorporating the average cost per PDE, the base payment rate also needs to be defined such that any adjustments that are subsequently applied will yield the expected total amount of Medicare expenditures under the PPS. This requires determining the average payment multiplier (adjustment) and then adjusting the base payment rate downward accordingly. The proposed PPS has two adjustment factors: the GAF and new patient/initial preventive visit. For each factor, the average adjustment was calculated, weighted by frequency. The average payment multiplier was then calculated as the average GAF (0.9944) multiplied by the average adjustment for new patient/initial preventive visits (1.3333), resulting in an estimated value of 1.0036:

Patient Characteristic	*Frequency**	*Adjustment Factor (AF)*
New Patient/Initial Visit	2.79%	1.3333
Non New Patient/Initial Visit	97.21%	1.0000

*Represents % of per diem encounters

$$\textit{Average payment multiplier} = \textit{(Non New/Initial Frequency)(Non New/Initial AF)(Average GAF)} + \textit{(New/Initial Frequency)(New/Initial AF)(Average GAF)}$$

$$\textit{Average payment multiplier} = 0.9721(1.00)(0.9944) + 0.0279(1.3333)(0.9944) = 1.0036$$

To ensure subsequent adjustments result in the expected total amount of expenditures, the reciprocal of the average payment multiplier was applied to the estimated average cost per PDE. A price inflation

factor of 1.0364 was then applied to reflect the historical updates and most recent forecasted update to the MEIto trend forward the dollar values of the average cost per PDE to correspond to the initial FQHC PPS payment period from October 1, 2014 to December 31, 2015 (Table 16).

$$\textit{Estimated Base Payment Rate} = \$150.96 * (1/ 1.0036) * 1.0364 = \$155.90/PDE$$

Table 16. Estimated base payment rate for per diem encounters (PDEs) under the PPS, using the average cost per PDE calculated from Medicare FQHC claims data.

N Cost Reports	*Total Adjusted Charges*	*N Per Diem Encounters*	*Avg Payment Multiplier*	*Avg Est, Cost per PDE*	*Estimated Base Rate*	***MEI-Adjusted Est. Base Rate***
1,141	$788,547,531	5,223,512	1.0036	$150.96	$150.42	**$155.90**

To demonstrate how adjustments could be applied to determine the new payment rate under the PPS, two hypothetical examples are provided below. The per diem payment rate for a patient in Utah where no encounters for a specified date of service included a new patient/initial visit would be calculated as:

$$\text{PaymentRate}_{\text{Utah*non-new patient/initial visit}} = \$155.90 * 0.945 = \$147.33/PDE.$$

Similarly, the per diem payment rate for a patient in Alaska where at least one encounter for a specified date of service included a new patient/initial visit would be calculated as:

$$\text{PaymentRate}_{\text{Alaska*new patient/initial visit}} = \$155.90 * 1.306 * 1.3333 = \$271.47/PDE.$$

Assuming an accurate projection of the frequency with which the payment adjustments are applied, we would expect an overall average payment rate of $155.90/PDE, or consistent with the average per diem payment rate in 2015 dollars that would have resulted in the absence of the limits under Medicare.

Alternative Base Payment Rate Calculations

Encounter-Level Base Payment Rate

Because FQHCs are currently paid using an encounter-level rate, we estimated an alternative single encounter base rate as a comparison to the per diem rate (Table 17). The method was the same as above except the denominator did not combine separately payable encounters on the same date of service into a combined daily visit. In other words, the average estimated cost per visit was calculated by dividing the sum of the adjusted charges by the total number of individual encounters. The average payment multiplier and MEI adjustment were the same as with the per diem rate.

$$\textit{Estimated Base Payment Rate} = \$150.32 * (1/1.0036) * 1.0364 = \$155.23$$

Table 17. Estimated base payment rate for a single encounter, using the average cost per encounter (visit) calculated from Medicare FQHC claims data.

N Cost Reports	*Total Adjusted Charges*	*N Encounters*	*Avg Payment Multiplier*	*Avg Est. Cost per Visit*	*Estimated Base Rate*	***MEI-Adjusted Est. Base Rate***
1,141	$788,547,531	5,245,961	1.0036	$150.32	$149.78	**$155.23**

Cost Report Derived Base Payment Rate

Current payment for FQHCs is based on an average cost per visit as determined by total allowable costs and total visits reported on the cost reports. For comparison purposes, we estimated an alternative single encounter base rate using cost report data. Because cost reports only report total Medicare visits in aggregate, it is not possible to estimate a per diem rate from this data source.

A cost reporting entity-specific average cost per visit was calculated by dividing total allowable costs (excluding influenza and pneumococcal vaccinations) by total visits (Table 18). Cost reporting entity-specific estimated Medicare costs were calculated by multiplying the cost reporting entity-specific average cost per visit by the number of Medicare visits (without applying the outpatient mental health limitation). Total estimated Medicare costs were calculated by summing all cost reporting entity-specific estimated Medicare costs. The overall average cost per visit was calculated by dividing total estimated Medicare costs (excluding vaccines) by the total number of Medicare visits. The average payment multiplier and MEI adjustment were the same as with the previous rate calculations.

$$\textit{Estimated Base Payment Rate} = \$154.89 * (1/1.0036) * 1.0364 = \$159.95$$

Table 18. Estimated base payment rate for a single encounter, using the average cost per encounter (visit) calculated from Medicare FQHC cost reports.

N Cost Reports	*Total Est. Medicare Costs*	*N Medicare Visits*	*Avg Payment Multiplier*	*Avg Est. Cost per Visit*	*Estimated Base Rate*	***MEI-Adjusted Est. Base Rate***
1,141	$832,387,663	5,374,217	1.0036	$154.89	$154.33	**$159.95**

IX. Impact Analyses

The preceding sections of this report describe analyses performed in support of the development of a Medicare PPS for FQHCs as mandated by the Affordable Care Act. The key features of the resulting PPS include 1) payment rates that reflect the overall average reasonable cost per visit in the absence of the upper payment limit and minimum productivity standards, 2) a per diem encounter unit of payment, and 3) adjustment for geographic location and new patient/initial preventive visits. A comparison of the current payment system with the proposed PPS is provided below.

Comparison of features of the current Medicare FQHC payment system and the proposed PPS.

Feature	*Current Payment System (AIR)*	*Proposed PPS*
Payment Bundle	▪ Medicare FQHC services	▪ Medicare FQHC services
Unit of Payment	▪ Per diem encounter, with exceptions for multiple visits per day	▪ Per diem encounter
Upper Payment Limit (UPL)	▪ Yes	▪ None (in accordance with Affordable Care Act guidelines)
Minimum Productivity Requirement	▪ Yes	▪ None (in accordance with Affordable Care Act guidelines)
Adjustment:		
Beneficiary-Level	▪ None	▪ None
Encounter-Level	▪ None	▪ New patient/initial preventive visit (based on E/M HCPCS codes)
FQHC-Level	▪ Urban/rural location (as reflected in the separate UPLs)	▪ Geographic location (based on GPCIs)

The following impact analyses present the projected effects of the proposed statutory and policy changes effective on or after October 1, 2014, and this impact is fully implemented when all FQHCs are paid under the FQHC PPS. Effects of individual proposed policy changes were estimated by calculating payments that apply one proposed policy change at a time while holding all other payment policies constant. The following analyses are discussed in the sections below:

- Impact of removing the UPL and minimum productivity standards
- Impact of transitioning from a payment system based on a FQHC's own cost to a system based on the overall average reasonable cost
- Overall impact of all policy changes (transitioning from a payment system based on a cost reporting entity's own average cost per visit to an adjusted per diem PPS rate)
- Overall impact of all statutory and policy changes (transitioning from the current AIR to the proposed FQHC PPS rate)
- Impact of transitioning from a beneficiary coinsurance system based on 20 percent of the reported claims charges to 20 percent of the lesser of the reported claims charge or the Medicare payment rate

Specifically, the impact analyses presented in this section were intended to investigate whether the proposed PPS is 1) consistent with the Affordable Care Act, and 2) generally equitable across FQHCs with respect to the projected distributive impacts of its implementation in the final quarter of 2014. As shown below, the transition to the proposed PPS would substantially affect payments to FQHCs, with some FQHCs experiencing greater impacts than others. All analyses were performed using the final analytic data set defined in Section V (Data Sources and Analytic Database). It is important to note that while we adjust for price inflation using the MEI to simulate overall payments during the initial FQHC PPS payment period (October 1, 2014 to December 31, 2015), we do not attempt to make adjustments forecasting future changes in such variables as frequency of per diem encounters or new patient/initial preventive visits, which would also affect overall payment changes.

Impact of Statutory Changes: Removing the UPL and Minimum Productivity Standards

Analytic Methods and Results

The first set of impact analyses was performed to examine the effect of removing the UPL and minimum productivity standards on the FQHC payment rate. Descriptive statistics were obtained to quantify the number of FQHCs affected by the limits, including 1) a frequency distribution of the number of FQHCs with average costs per visit above or below their respective UPL (Table 19), 2) the frequency of FQHCs with average costs per visit exceeding their respective UPL stratified by urban/rural location (Table 20), and 3) the frequency of FQHCs that did not meet the minimum productivity standards stratified by urban/rural location (Table 21). The ***average cost per visit*** was calculated by dividing the total allowable costs (excluding pneumococcal and influenza vaccinations) by the total number of visits reported on the cost report, which represents the all-inclusive rate in the absence of the UPL and minimum productivity standards.

Table 19. Distribution of the difference between the cost reporting entities' average cost per visit and the 2011 UPL.

Dollar amount below and above the weighted UPL	*N entities*	*Percentage of entities*
> $50 Below	1	0.09
$30 - $50 Below	9	0.79
$10 - $30 Below	79	6.92
Within $10 (Above or Below)	188	16.48
$10 - $30 Above	250	21.91
$30 - $50 Above	196	17.18
> $50 Above	418	36.63
Total	1,141	100.00

*Urban UPL = $126.22; Rural UPL = $109.24.

Table 20. Cost reporting entities with average costs per visit exceeding the 2011 UPL.

Cost Reporting Entity Location	*N entities*	*N (%) entities exceeding the UPL*	*Difference between total Medicare costs applying the UPL and total Medicare costs in the absence of the UPL*
Urban	647	613 (94.7%)	-$87,007,199
Rural	348	337 (96.8%)	-$44,664,539
Mixed Urban-Rural	146	127 (87.0%)	-$23,672,754
Total	1,141	1,077 (94.4%)	-$155,344,492

*Urban UPL = $126.22; Rural UPL = $109.24.

Table 21. Cost reporting entities that did not meet the 2011 minimum productivity standards' minimum number of visits.

Cost Reporting Entity Location	*N entities*	*N (%) entities that did not meet the minimum productivity standards*	*N (%) entities that did not meet the minimum productivity standards and had average costs per visit below the UPL*	*Difference between total Medicare costs applying the minimum productivity standards and total Medicare costs in the absence of the minimum productivity standards*
Urban	647	246 (38.0%)	15 (2.3%)	-$1,103,419
Rural	348	159 (45.7%)	3 (0.9%)	-$487,499
Mixed Urban-Rural	146	47 (32.2%)	6 (4.1%)	-$184,337
Total	1,141	452 (39.6%)	24 (2.1%)	-$1,775,255

Results from Table 19 indicate that of the 1,141 cost reporting entities included in our analysis, more than 75 percent had average costs per visit that exceeded the upper payment limit by $10 or more, with more than 36 percent exceeding the upper payment limit by $50 or more. A similar proportion of urban (94.7 percent) and rural (96.8 percent) cost reporting entities had costs per visit that exceeded the upper payment limit, suggesting that nearly all entities, regardless of location were reporting costs in excess of their payment rates (Table 20). A slightly larger proportion of rural entities (45.7 percent) failed to meet the minimum productivity standards, compared to urban entities (38.0 percent). However, as shown in Table 21, the impact of this limitation was greater among urban entities, where a higher proportion of those not meeting the minimum productivity standards also had average costs per visit below the UPL (2.3 percent) compared to rural entities (0.9 percent).

The impact of removing these limits on Medicare payments was also determined. To obtain ***current payment amounts***, the AIR for each cost reporting entity (derived from the cost reports), which includes adjustments for the UPL and minimum productivity standards, was multiplied by the entity's respective number of encounters (determined via linkage with Medicare claims data by cost reporting period) and summed across all cost reporting entities. ***Estimated unadjusted payment amounts*** were calculated by multiplying each cost reporting entity's average cost per visit (as described above) by its respective number of encounters (derived from claims) and then summing across all cost reporting entities. Both current and estimated unadjusted payment amounts were multiplied by 0.8 to produce the estimated

Medicare liability. Additionally, a price inflation factor of 1.018 was applied to current and estimated unadjusted payment amounts to reflect the growth in the MEI and to correspond to the FQHC payment period immediately preceding implementation of the PPS (2014). Finally, the ***estimated percent change in payment amounts*** was calculated as the difference between the estimated unadjusted payment amount and the current payment amount divided by the current payment amount.

Impacts were calculated overall as well as stratified by the cost reporting entity's urban/rural location, percent Medicare volume, total visit volume, census region, and census division (Table 22). Designations within strata were all determined from the cost reports. Percent Medicare volume was based on the percent of total visits identified as Medicare visits was defined in terms of tertiles. Total visit volume was based on the total number of visits and was also defined in terms of tertiles.

The overall effect of removing the UPL and minimum productivity standards would result in an expected overall average 29.87 percent increase in payments to cost reporting entities (Table 22). Stratified results indicate higher impacts among rural entities (41.54 percent), entities with a high percentage of Medicare volume (33.64 percent), entities with a low total visit volume (33.70 percent), and entities located in the southern and US territory census regions and divisions.

Table 22. Overall impact of removing the UPL and minimum productivity standards.

Cost Reporting Entity Characteristic	*N Entities (N Sites)*	*Current payment amount (Adjusted for 2014 MEI)*	*Estimated unadjusted payment amount (Adjusted for 2014 MEI)*	*Estimated Dollar Change in Payments*	*Estimated Percentage Change in Payments*
Overall	1,141 (3,509)	$503,733,368	$654,176,178	$150,442,810	29.87%
Urban	647 (1,756)	$254,573,954	$314,046,166	$59,472,212	23.36%
Rural	348 (820)	$122,034,138	$172,725,246	$50,691,108	41.54%
Mixed Urban-Rural	146 (933)	$127,125,276	$167,404,766	$40,279,490	31.68%
Low Medicare Volume (<6.9%)	380 (1,039)	$85,478,474	$106,216,608	$20,738,134	24.26%
Medium Medicare Volume (6.9%-13.2%)	381 (1,235)	$171,668,605	$218,413,427	$46,744,822	27.23%
High Medicare Volume (>13.2%)	380 (1,237)	$246,586,289	$329,546,143	$82,959,854	33.64%
Low Total Visit Volume (<17,340 visits)	380 (502)	$39,765,983	$53,165,713	$13,399,729	33.70%
Medium Total Visit Volume (17,340-42,711 visits)	381 (903)	$118,962,005	$156,352,138	$37,390,133	31.43%
High Total Visit Volume (>42,711 visits)	380 (2,123)	$345,005,379	$444,658,328	$99,652,948	28.88%
Census Region:					
Northeast	200 (550)	$110,285,268	$139,115,350	$28,830,082	26.14%
Midwest	221 (661)	$81,200,964	$106,235,850	$25,034,887	30.83%
South	377 (1,292)	$164,133,986	$219,662,684	$55,528,698	33.83%
West	339 (1,001)	$147,902,627	$188,867,375	$40,964,748	27.70%
US Territories	4 (5)	$210,523	$294,918	$84,395	40.09%
Census Division:					

Cost Reporting Entity Characteristic	*N Entities (N Sites)*	*Current payment amount (Adjusted for 2014 MEI)*	*Estimated unadjusted payment amount (Adjusted for 2014 MEI)*	*Estimated Dollar Change in Payments*	*Estimated Percentage Change in Payments*
New England	92 (236)	$64,601,448	$82,027,519	$17,426,071	26.97%
Middle Atlantic	108 (314)	$45,683,820	$57,087,831	$11,404,011	24.96%
East North Central	143 (460)	$57,507,412	$75,198,907	$17,691,495	30.76%
West North Central	78 (201)	$23,693,552	$31,036,944	$7,343,392	30.99%
South Atlantic	187 (688)	$98,337,934	$130,905,427	$32,567,493	33.12%
East South Central	83 (317)	$33,785,302	$46,686,282	$12,900,980	38.19%
West South Central	107 (287)	$32,010,750	$42,070,975	$10,060,225	31.43%
Mountain	87 (311)	$35,105,020	$45,972,960	$10,867,940	30.96%
Pacific	252 (690)	$112,797,607	$142,894,415	$30,096,808	26.68%
US Territories	4 (5)	$210,523	$294,918	$84,395	40.09%

*All dollar amounts have been adjusted by a 1.018 MEI factor and are expressed in 2014 dollars.

Impact of Transition to Payment Based on Overall Average Cost

Analytic Methods and Results

Transitioning from the current AIR to a PPS represents a shift from basing payments on a cost reporting entity's own costs to cost reporting entities' typical costs, or an overall average. To examine the impact of this change in isolation, we compared each entity's own average cost per visit to the overall average cost per visit (Table 23). Because the PPS is intended to be based on an average estimated cost per visit as calculated using Medicare claims data, this approach was applied for this analysis. The ***average estimated cost per visit*** was calculated as the average CCR-adjusted charge (reported in the claims) per claims encounter. Distributions of the difference between each entity's own average estimated cost per visit and the overall average estimated cost per visit (calculated as $153.68) are provided for all entities as well as stratified by entity characteristic (as defined in the preceding analysis). As in the previous analysis, a MEI factor of 1.018 was applied to all dollar amounts to correspond to the FQHC payment period immediately preceding implementation of the PPS (2014).

As shown in Table 23, nearly 20 percent of all cost reporting entities have average estimated costs per visit within $10 of the overall average, and approximately 58 percent are within $30. With respect to the tails of the distribution, a larger proportion of entities had average estimated costs per visit more than $50 below the overall average (16.48 percent) compared to the proportion with average estimated costs per visit more than $50 above the overall average (2.98 percent). Stratified results indicated similar patterns with a few exceptions. Major differences in distributions were not noted for urban versus rural locations as well as percent Medicare volume tertiles. Entities with lower total visit volume did have a higher proportion with average estimated costs per visit more than $50 below the overall average (31.05 percent) compared to those with high total visit volume (6.84 percent). Notably, the Pacific census division was characterized by a more diffuse distribution, with larger proportions of entities in the tails (28.17 percent with average estimated costs per visit more than $50 below the overall average and 17.65 percent with average estimated costs per visit more than $50 above the overall average).

Here, only approximately 47 percent of entities had average estimated costs per visit within $30 of the overall average.

Table 23. Distribution of cost reporting entities' own average estimated cost per visit compared to the overall average estimated cost per visit ($153.68).

Type of FQHC	N entities	Average estimated cost per visit	More than $50 below the overall avg estimated cost per visit N (%)	$30 - $50 below the overall avg estimated cost per visit N (%)	$10 - $30 below the overall avg estimated cost per visit N (%)	Within $10 (above or below) the overall avg estimated cost per visit N (%)	$10 - $30 above the overall avg estimated cost per visit N (%)	$30 - $50 above the overall avg estimated cost per visit N (%)	More than $50 above the overall avg estimated cost per visit N (%)
All FQHCs	1,141	$153.68	188 (16.48%)	114 (9.99%)	183 (16.04%)	226 (19.81%)	249 (21.82%)	147 (12.88%)	34 (2.98%)
Urban/rural status:									
Urban	647	$165.29	121 (18.70%)	72 (11.13%)	111 (17.16%)	135 (20.87%)	132 (20.40%)	65 (10.05%)	11 (1.70%)
Rural	348	$146.62	59 (16.95%)	31 (8.91%)	51 (14.66%)	57 (16.38%)	80 (22.99%)	55 (15.80%)	15 (4.31%)
Mixed rural-urban	146	$139.25	8 (5.48%)	11 (7.53%)	21 (14.38%)	34 (23.29%)	37 (25.34%)	27 (18.49%)	8 (5.48%)
Medicare volume:									
Low (< 6.9% of total visits)	380	$158.60	65 (17.11%)	42 (11.05%)	65 (17.11%)	85 (22.37%)	78 (20.53%)	37 (9.74%)	8 (2.11%)
Medium (6.9%-13.2% of total visits)	381	$157.09	59 (15.49%)	40 (10.50%)	57 (14.96%)	74 (19.42%)	80 (21.00%)	58 (15.22%)	13 (3.41%)
High (> 13.2% of total visits)	380	$149.84	64 (16.84%)	32 (8.42%)	61 (16.05%)	67 (17.63%)	91 (23.95%)	52 (13.68%)	13 (3.42%)
Total volume:									
Low (< 17,340 total visits)	380	$174.57	118 (31.05%)	46 (12.11%)	59 (15.53%)	56 (14.74%)	52 (13.68%)	44 (11.58%)	5 (1.32%)
Medium (17,340-42,711 total visits)	381	$154.68	44 (11.55%)	37 (9.71%)	58 (15.22%)	83 (21.78%)	96 (25.20%)	47 (12.34%)	16 (4.20%)
High (> 42,711 total visits)	380	$150.96	26 (6.84%)	31 (8.16%)	66 (17.37%)	87 (22.89%)	101 (26.58%)	56 (14.74%)	13 (3.42%)
Census region:									
Northeast	200	$166.84	36 (18.00%)	24 (12.00%)	45 (22.50%)	49 (24.50%)	36 (18.00%)	9 (4.50%)	1 (0.50%)
Midwest	221	$146.80	31 (14.03%)	17 (7.69%)	27 (12.22%)	61 (27.60%)	48 (21.72%)	32 (14.48%)	5 (2.26%)
South	377	$138.50	34 (9.02%)	30 (7.96%)	49 (13.00%)	67 (17.77%)	105 (27.85%)	73 (19.36%)	19 (5.04%)
West	339	$165.47	86 (25.37%)	42 (12.39%)	62 (18.29%)	49 (14.45%)	60 (17.70%)	31 (9.14%)	9 (2.65%)
US Territories	4	$199.88	1 (25.00%)	1 (25.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	2 (50.00%)	0 (0.00%)
Census division:									
New England	92	$166.92	18 (19.57%)	13 (14.13%)	24 (26.09%)	23 (25.00%)	12 (13.04%)	2 (2.17%)	0 (0.00%)
Middle Atlantic	108	$166.72	18 (16.67%)	11 (10.19%)	21 (19.44%)	26 (24.07%)	24 (22.22%)	7 (6.48%)	1 (0.93%)
East North Central	143	$144.70	19 (13.29%)	12 (8.39%)	15 (10.49%)	36 (25.17%)	32 (22.38%)	25 (17.48%)	4 (2.80%)
West North Central	78	$151.88	12 (15.38%)	5 (6.41%)	12 (15.38%)	25 (32.05%)	16 (20.51%)	7 (8.97%)	1 (1.28%)
South Atlantic	187	$135.38	13 (6.95%)	12 (6.42%)	23 (12.30%)	34 (18.18%)	57 (30.48%)	37 (19.79%)	11 (5.88%)
East South Central	83	$135.46	7 (8.43%)	4 (4.82%)	11 (13.25%)	10 (12.05%)	25 (30.12%)	21 (25.30%)	5 (6.02%)
West South Central	107	$151.61	14 (13.08%)	14 (13.08%)	15 (14.02%)	23 (21.50%)	23 (21.50%)	15 (14.02%)	3 (2.80%)
Mountain	87	$154.13	15 (17.24%)	10 (11.49%)	15 (17.24%)	16 (18.39%)	22 (25.29%)	6 (6.90%)	3 (3.45%)
Pacific	252	$169.11	71 (28.17%)	32 (12.70%)	47 (18.65%)	33 (13.10%)	38 (15.08%)	25 (9.92%)	6 (17.65%)
US Territories	4	$199.88	1 (25.00%)	1 (25.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	2 (50.00%)	0 (0.00%)

*All dollar amounts have been adjusted by a 1.018 MEI factor and are expressed in 2014 dollars.

Impact of All Policy Changes

Analytic Methods and Results

The transition from a hypothetical payment system based on cost reporting entities' own average cost per visit, in the absence of the UPL and minimum productivity standards, to a system based on the proposed FQHC PPS rate was examined (Table 24). This represents the overall impact of all proposed PPS features, including 1) payments based on an overall average estimated cost per visit, 2) the transition to a per diem unit of payment, and 3) adjustment for geographic location and new patient/initial preventive visits. Guidance from the Affordable Care Act indicated the overall expected combined impact of these changes was expected to be 0 percent, or budget neutral to the aggregate amount of expected Medicare expenditures under the all-inclusive rate in the absence of the UPL and minimum productivity standards.

Accordingly, we compared each entity's own average unadjusted cost per visit to each entity's own average payment rate under the proposed FQHC PPS. Because the PPS is intended to be based on an average estimated cost per visit as calculated using Medicare claims data, we applied this methodology to the comparison category as well. The ***average estimated cost per visit*** was calculated as the average CCR-adjusted charge (reported in the claims) per claims encounter. The ***average estimated PPS rate*** was calculated according to the methodology described in Section VIII (PPS Base Payment Rate).

Estimated unadjusted payment amount was calculated by multiplying each cost reporting entity's average estimated cost per visit (as described above) by its respective number of encounters (from claims) and then summing across all cost reporting entities. Adjusted PPS rates were calculated for each per diem encounter and summed across all per diem encounters, yielding the ***estimated new payment amount***. Both estimated unadjusted and estimated new payment amounts were further multiplied by 0.8 to produce the estimated Medicare liability. Additionally, a MEI adjustment factor of 1.035 was applied to estimated unadjusted and new payment amounts to correspond to the initial FQHC PPS payment period from October 1, 2014 to December 31, 2015 (indicated as 2015). Finally, the ***estimated percent change in payments*** was calculated as the difference between the estimated new payment amount and the estimated unadjusted payment amount divided by the estimated unadjusted payment amount.

Table 24 presents the results of the overall and stratified impacts of all policy changes. As expected, the overall impact across cost reporting entities is 0 percent. Stratified results indicate a modest amount of variation, particularly with respect to geographic location. In general, entities located in urban settings, with lower Medicare volume, high total visit volume, and located in western census regions and divisions are expected to receive an increase in payments. Whereas entities located in rural settings, with higher Medicare volume, moderate total visit volume, and located in midwestern and southern census regions and divisions are expected to receive an decrease in payments.

Table 24. Overall impact of all policy changes transitioning from an unadjusted average estimated cost per visit to the proposed FQHC PPS rate.

Cost Reporting Entity Characteristic	*N Cost reporting entities (N Sites)*	*Estimated unadjusted payment amount (adjusted for 2015 MEI)*	*(Single) encounters*	*Estimated new payment amount (adjusted for 2015 MEI)*	*Per diem encounters*	*Estimated Dollar Change in Payments*	*Estimated Percentage Change in Payments*
Overall	1,141 (3,509)	$652,938,326	5,245,961	$652,908,819	5,223,512	-$27,507	0.00%
Urban	647 (1,756)	$313,451,933	2,518,395	$322,809,786	2,503,343	$9,357,853	2.99%
Rural	348 (820)	$172,398,408	1,385,116	$167,257,094	1,381,466	-$5,141,313	-2.98%
Mixed Urban-Rural	146 (933)	$167,087,986	1,342,450	$162,841,939	1,338,703	-$4,246,047	-2.54%
Low Medicare Volume (<6.9%)	380 (1,039)	$106,015,643	851,771	$109,661,668	847,631	$3,646,025	3.44%
Med. Medicare Volume (6.9%-13.2%)	381 (1,235)	$218,000,129	1,751,498	$219,001,739	1,742,697	$1,001,610	0.46%
High Medicare Volume (>13.2%)	380 (1,237)	$328,922,554	2,642,692	$324,245,412	2,633,184	-$4,677,142	-1.42%
Low Total Visit Volume (<17,340 visits)	380 (502)	$53,065,138	426,346	$53,075,609	424,432	$10,472	0.02%
Med. Total Visit Volume (17,340-42,711 visits)	381 (903)	$156,056,283	1,253,817	$153,662,667	1,248,039	-$2,393,615	-1.53%
High Total Visit Volume (>42,711 visits)	380 (2,123)	$443,816,905	3,565,798	$446,170,542	3,551,041	$2,353,636	0.53%
Census Region:							
Northeast	200 (550)	$138,852,114	1,115,592	$141,631,531	1,108,527	$2,779,418	2.00%
Midwest	221 (661)	$106,034,811	851,925	$102,404,255	847,315	-$3,630,556	-3.42%
South	377 (1,292)	$219,247,018	1,761,516	$210,273,424	1,756,632	-$8,973,594	-4.09%
West	339 (1,001)	$188,510,023	1,514,563	$198,302,232	1,508,673	$9,792,208	5.19%
US Territories	4 (5)	$294,360	2,365	$297,377	2,365	$3,017	1.03%
Census Division:							
New England	92 (236)	$81,872,304	657,794	$82,840,059	652,330	$967,755	1.18%
Middle Atlantic	108 (314)	$56,979,810	457,798	$58,791,472	456,197	$1,811,662	3.18%
East North Central	143 (460)	$75,056,603	603,034	$73,003,548	599,530	-$2,053,054	-2.74%
West North Central	78 (201)	$30,978,208	248,891	$29,400,706	247,785	-$1,577,502	-5.09%
South Atlantic	187 (688)	$130,657,714	1,049,755	$126,903,093	1,047,305	-$3,754,621	-2.87%
East South Central	83 (317)	$46,597,939	374,386	$43,491,311	373,077	-$3,106,627	-6.67%
West South Central	107 (287)	$41,991,366	337,375	$39,879,020	336,250	-$2,112,346	-5.03%
Mountain	87 (311)	$45,885,999	368,666	$45,004,568	366,762	-$881,431	-1.92%
Pacific	252 (690)	$142,624,024	1,145,897	$153,297,663	1,141,911	$10,673,639	7.48%
US Territories	4 (5)	$294,360	2,365	$297,377	2,365	$3,017	1.03%

*All dollar amounts have been adjusted by a 1.035 MEI factor and are expressed in 2015 dollars.

Additionally, distributions of the difference between each entity's own average estimated cost per visit and each entity's own average estimated PPS rate are provided overall and stratified by entity characteristic (Table 25). As in the previous analysis, a MEI factor of 1.035 was applied to all dollar amounts.

As shown in Table 25, nearly 25 percent of all cost reporting entities have average estimated costs per visit within $10 of the corresponding PPS rate, and approximately 59 percent are within $30. With respect to the tails of the distribution, a larger proportion of entities had average estimated costs per visit more than $50 below the overall average (15.78 percent) compared to the proportion with average estimated costs per visit more than $50 above the overall average (3.07 percent). Stratified results indicated similar patterns with a few exceptions. As before, major differences in distributions were not noted for urban versus rural locations as well as percent Medicare volume tertiles. Entities with lower total visit volume did have a higher proportion with average estimated costs per visit more than $50 below the corresponding PPS rate (29.74 percent) compared to those with high total visit volume (6.05 percent). Notably again, the Pacific census division was characterized by a more diffuse distribution, with larger proportions of entities in the tails (21.03 percent with average estimated costs per visit more than $50 below the corresponding PPS rate and 8.33 percent with average estimated costs per visit more than $50 above the corresponding PPS rate). Here, only approximately 48 percent of entities had average estimated costs per visit within $30 of the corresponding PPS rate.

Table 25. Distribution of cost reporting entities' own average estimated cost per visit compared to cost reporting entities' own average PPS rate.

Type of FQHC	Number of cost-reporting entities	Average adjusted charge	Average adjusted per diem rates under the FQHC PPS	More than $50 below the PPS rate N (%)	$30 - $50 below the PPS rate N (%)	$10 - $30 below the PPS rate N (%)	Within $10 (above or below) the PPS rate N (%)	$10 - $30 above the PPS rate N (%)	$30 - $50 above the PPS rate N (%)	More than $50 above the PPS rate N (%)
All FQHCs	1,141	$156.24	$156.24	183 (16.04%)	109 (9.55%)	181 (15.86%)	276 (24.19%)	214 (18.76%)	139 (12.18%)	39 (3.42%)
Geographic location:										
Urban	647	$168.05	$161.19	107 (16.54%)	62 (9.58%)	107 (16.54%)	155 (23.96%)	124 (19.17%)	70 (10.82%)	22 (3.40%)
Rural	348	$149.07	$151.34	67 (19.25%)	34 (9.77%)	54 (15.52%)	75 (21.55%)	60 (17.24%)	47 (13.51%)	11 (3.16%)
Mixed urban-rural	146	$141.57	$152.05	9 (6.16%)	13 (8.90%)	20 (13.70%)	46 (31.51%)	30 (20.55%)	22 (15.07%)	6 (4.11%)
Medicare volume:										
Low Medicare Volume (<6.9%)	380	$161.25	$161.75	62 (16.32%)	35 (9.21%)	66 (17.37%)	85 (22.37%)	70 (18.42%)	47 (12.37%)	15 (3.95%)
Medium Medicare Volume (6.9%-13.2%)	381	$159.72	$157.08	57 (14.96%)	39 (10.24%)	51 (13.39%)	98 (25.72%)	75 (19.69%)	45 (11.81%)	16 (4.20%)
High Medicare Volume (>13.2%)	380	$152.34	$153.92	64 (16.84%)	35 (9.21%)	64 (16.84%)	93 (24.47%)	69 (18.16%)	47 (12.37%)	8 (2.11%)
Total volume:										
Low Visit Volume (<17,340 visits)	380	$177.49	$156.45	114 (30.00%)	54 (14.21%)	55 (14.47%)	63 (16.58%)	50 (13.16%)	35 (9.21%)	9 (2.37%)
Medium Visit Volume (17,340-42,711 visits)	381	$157.27	$153.91	44 (11.55%)	36 (9.45%)	60 (15.75%)	100 (26.25%)	76 (19.95%)	49 (12.86%)	16 (4.20%)
High Visit Volume (>42,711 visits)	380	$153.21	$157.07	25 (6.58%)	19 (5.00%)	66 (17.37%)	113 (29.74%)	88 (23.16%)	55 (14.47%)	14 (3.68%)
Census regions:										
Northeast	200	$169.62	$159.71	31 (15.50%)	20 (10.00%)	47 (23.50%)	49 (24.50%)	34 (17.00%)	15 (7.50%)	4 (2.00%)
Midwest	221	$149.25	$151.07	36 (16.29%)	17 (7.69%)	34 (15.38%)	63 (28.51%)	43 (19.46%)	26 (11.76%)	2 (0.90%)
South	377	$140.82	$149.63	43 (11.41%)	35 (9.28%)	42 (11.14%)	103 (27.32%)	84 (22.28%)	61 (16.18%)	9 (2.39%)
West	339	$168.23	$164.30	72 (21.24%)	36 (10.62%)	58 (17.11%)	60 (17.70%)	53 (15.63%)	36 (10.62%)	24 (7.08%)
US Territories	4	$203.21	$157.18	1 (25.00%)	1 (25.00%)	0 (0.00%)	1 (25.00%)	0 (0.00%)	1 (25.00%)	0 (0.00%)
Census divisions:										
New England	92	$169.71	$158.74	17 (18.48%)	11 (11.96%)	25 (27.17%)	25 (27.17%)	12 (13.04%)	1 (1.09%)	1 (1.09%)
Middle Atlantic	108	$169.50	$161.09	14 (12.96%)	9 (8.33%)	22 (20.37%)	24 (22.22%)	22 (20.37%)	14 (12.96%)	3 (2.78%)
East North Central	143	$147.12	$152.21	22 (15.38%)	11 (7.69%)	17 (11.89%)	37 (25.87%)	33 (23.08%)	22 (15.38%)	1 (0.70%)
West North Central	78	$154.42	$148.32	14 (17.95%)	6 (7.69%)	17 (21.79%)	26 (33.33%)	10 (12.82%)	4 (5.13%)	1 (1.28%)
South Atlantic	187	$137.64	$151.47	13 (6.95%)	13 (6.95%)	23 (12.30%)	52 (27.81%)	42 (22.46%)	38 (20.32%)	6 (3.21%)
East South	83	$137.72	$145.72	9 (10.84%)	9 (10.84%)	6 (7.23%)	20 (24.10%)	26 (31.33%)	11 (13.25%)	2 (2.41%)
West South	107	$154.15	$148.25	21 (19.63%)	13 (12.15%)	13 (12.15%)	31 (28.97%)	16 (14.95%)	12 (11.21%)	1 (0.93%)
Mountain	87	$156.71	$153.39	18 (20.69%)	9 (10.34%)	15 (17.24%)	19 (21.84%)	19 (21.84%)	5 (5.75%)	2 (2.30%)
Pacific	252	$171.94	$167.81	54 (21.43%)	27 (10.71%)	43 (17.06%)	41 (16.27%)	34 (13.49%)	31 (12.30%)	22 (8.73%)
US Territories	4	$203.21	$157.18	1 (25.00%)	1 (25.00%)	0 (0.00%)	1 (25.00%)	0 (0.00%)	1 (25.00%)	0 (0.00%)

*All dollar amounts have been adjusted by a 1.035 MEI factor and are expressed in 2015 dollars.

Impact of All Statutory and Policy Changes

Analytic Methods and Results

The overall impact of all changes incorporated in transitioning from the current AIR, which is based on a per visit unit of payment and includes adjustments for the UPL and minimum productivity standards, to the proposed FQHC PPS rate, which is based on a per diem unit of payment and includes adjustments for geographic location and new patient/initial preventive visits, was examined (Table 26). To obtain ***current payment amount***, the AIR for each cost reporting entity (derived from the cost reports), which includes adjustments for the UPL and minimum productivity standards, was multiplied by the entity's respective number of encounters (determined via linkage with Medicare claims data by cost reporting period) and summed across all cost reporting entities. Total current payments were divided by the number of encounters (from claims) to obtain the ***current payment rate.*** Adjusted PPS rates were calculated for each per diem encounter and summed across all per diem encounters, yielding the ***estimated new payment amount***. Total estimated new payments were divided by the number of per diem encounters to determine the ***estimated new payment rate***. Both current and estimated new payment amounts were further multiplied by 0.8 to produce the estimated Medicare liability. Finally, the ***estimated percent change in payment rate*** represents the difference between the estimated new payment rate and the current payment rate divided by the current payment rate.

A MEI adjustment factor of 1.018 was applied to all ***current*** dollar amounts to correspond to the FQHC payment period immediately preceding implementation of the PPS (2014). Separately, a MEI adjustment factor of 1.035 was applied to all ***new*** dollar amounts to correspond to the initial FQHC PPS payment period from October 1, 2014 to December 31, 2015 (indicated as 2015). This impact analysis, therefore, examines the impact of all statutory and policy changes in addition to a price inflation increase. Impacts were calculated overall and stratified by cost reporting entity characteristic (as defined in the preceding analyses).

Tables 26 and 27 present the results of the overall and stratified impacts of all statutory and policy changes in addition to a MEI update. Table 26 provides the estimated new payment amounts and rates, and Table 27 shows the percent change in payments that will be expected under the PPS. The overall estimated new payment rate adjusted for the 2015 MEI is $156.24. The overall impact across cost reporting entities is estimated to be 30.17 percent. As shown in Table 27, the impact of all PPS adjustments is 0.00 percent, indicating the overall impact of 30.17 percent is driven by the statutorily required changes and the MEI adjustment. Stratified results indicate a modest amount of variation, particularly with respect to geographic location. In general, entities located in rural settings, with higher Medicare volume, low total visit volume, and located in western and US Territory census regions and divisions are expected to receive a greater increase in payments. Whereas entities located in urban settings, with lower Medicare volume, low to moderate total visit volume, and located in midwestern and southern census regions and divisions are expected to receive smaller increases in payments relative to the overall average of 30.17 percent.

Table 26. Overall impact of all statutory and policy changes transitioning from the current all-inclusive rate (AIR) to the adjusted FQHC PPS rate.

Cost Reporting Entity Characteristic	*N Cost reporting entities (N Sites)*	*Current payment amount (adjusted for 2014 MEI)*	*(Single) encounters*	*Current payment rate (adjusted for 2014 MEI)*	*Estimated new payment amount (adjusted for 2015 MEI)*	*Per diem encounters*	*Estimated new payment rate (adjusted for 2015 MEI)*	*Estimated percentage change in payment rates*
Overall	1,141 (3,509)	$503,747,584	5,245,961	$120.03	$652,908,819	5,223,512	$156.24	30.17%
Urban	647 (1,756)	$254,563,461	2,518,395	$126.35	$322,809,786	2,503,343	$161.19	27.57%
Rural	348 (820)	$122,050,559	1,385,116	$110.14	$167,257,094	1,381,466	$151.34	37.40%
Mixed Urban-Rural	146 (933)	$127,133,565	1,342,450	$118.38	$162,841,939	1,338,703	$152.05	28.45%
Low Medicare Volume (<6.9%)	380 (1,039)	$85,474,261	851,771	$125.44	$109,661,668	847,631	$161.72	28.92%
Medium Medicare Volume (6.9%-13.2%)	381 (1,235)	$171,685,791	1,751,498	$122.53	$219,001,739	1,742,697	$157.09	28.20%
High Medicare Volume (>13.2%)	380 (1,237)	$246,587,532	2,642,692	$116.64	$324,245,412	2,633,184	$153.92	31.97%
Low Total Visit Volume (<17,340 visits)	380 (502)	$39,768,433	426,346	$116.60	$53,075,609	424,432	$156.31	34.06%
Medium Total Visit Volume (17,340-42,711 visits)	381 (903)	$118,981,282	1,253,817	$118.62	$153,662,667	1,248,039	$153.90	29.75%
High Total Visit Volume (>42,711 visits)	380 (2,123)	$344,997,869	3,565,798	$120.94	$446,170,542	3,551,041	$157.06	29.86%
Census Region:								
Northeast	200 (550)	$110,295,243	1,115,592	$123.58	$141,631,531	1,108,527	$159.71	29.23%
Midwest	221 (661)	$81,194,145	851,925	$119.13	$102,404,255	847,315	$151.07	26.81%
South	377 (1,292)	$164,159,371	1,761,516	$116.49	$210,273,424	1,756,632	$149.63	28.45%
West	339 (1,001)	$147,888,241	1,514,563	$122.06	$198,302,232	1,508,673	$164.30	34.61%
US Territories	4 (5)	$210,584	2,365	$111.30	$297,377	2,365	$157.18	41.22%
Census Division:								
New England	92 (236)	$64,610,654	657,794	$122.78	$82,840,059	652,330	$158.74	29.29%
Middle Atlantic	108 (314)	$45,684,588	457,798	$124.74	$58,791,472	456,197	$161.09	29.14%
East North Central	143 (460)	$57,499,765	603,034	$119.19	$73,003,548	599,530	$152.21	27.71%
West North Central	78 (201)	$23,694,381	248,891	$119.00	$29,400,706	247,785	$148.32	24.64%
South Atlantic	187 (688)	$98,346,600	1,049,755	$117.11	$126,903,093	1,047,305	$151.46	29.34%
East South Central	83 (317)	$33,792,893	374,386	$112.83	$43,491,311	373,077	$145.72	29.15%
West South Central	107 (287)	$32,019,879	337,375	$118.64	$39,879,020	336,250	$148.25	24.96%
Mountain	87 (311)	$35,102,363	368,666	$119.02	$45,004,568	366,762	$153.38	28.88%
Pacific	252 (690)	$112,785,878	1,145,897	$123.03	$153,297,663	1,141,911	$167.81	36.39%
US Territories	4 (5)	$210,584	2,365	$111.30	$297,377	2,365	$157.18	41.22%

Table 27. Relative impact of all statutory and policy changes transitioning from the current all-inclusive rate (AIR) to the adjusted FQHC PPS rate.

Cost Reporting Entity Characteristic	*N Grantees (N Sites)*	*(Single) encounters*	*(Per Diem) encounters*	*Effect of statutorily required changes (CR)**	*Effect of statutorily required changes (Claims)***	*Effect of Per Diem rate*	*Effect of new patient/ initial visit adjustment*	*Effect of geographic adjustment factor (GAF)*	*Effect of all PPS Adjustments*	*Effect of all policy changes*	*Effect of all policy changes and MEI Adjustments*
Overall	1,141 (3,509)	5,245,961	5,223,512	29.87%	28.03%	0.00%	0.00%	0.00%	0.00%	28.03%	30.17%
Urban	647 (1,756)	2,518,395	2,503,343	23.36%	21.84%	-0.17%	0.04%	3.13%	2.99%	25.48%	27.57%
Rural	348 (820)	1,385,116	1,381,466	41.54%	39.29%	0.16%	-0.90%	-3.06%	-2.98%	35.14%	37.40%
Mixed Urban-Rural	146 (933)	1,342,450	1,338,703	31.68%	29.63%	0.15%	0.01%	-2.69%	-2.54%	26.34%	28.45%
Low Medicare Volume (<6.9%)	380 (1,039)	851,771	847,631	24.26%	22.59%	-0.06%	0.23%	3.26%	3.44%	26.81%	28.92%
Medium Medicare Volume (6.9%-13.2%)	381 (1,235)	1,751,498	1,742,697	27.23%	25.52%	-0.08%	0.14%	0.04%	0.46%	26.10%	28.20%
High Medicare Volume (>13.2%)	380 (1,237)	2,642,692	2,633,184	33.64%	31.67%	0.07%	-0.17%	-1.32%	-1.42%	29.80%	31.97%
Low Total Visit Volume (<17,340 visits)	380 (502)	426,346	424,432	33.70%	31.83%	-0.02%	0.11%	-0.07%	0.02%	31.86%	34.06%
Medium Total Visit Volume (17,340-42,711 visits)	381 (903)	1,253,817	1,248,039	31.43%	29.60%	-0.04%	0.09%	-1.59%	-1.53%	27.62%	29.75%
High Total Visit Volume (>42,711 visits)	380 (2,123)	3,565,798	3,551,041	28.88%	27.06%	0.01%	-0.05%	0.57%	0.53%	27.73%	29.86%
Census Region:											
Northeast	200 (550)	1,115,592	1,108,527	26.14%	24.62%	-0.21%	-0.12%	2.33%	2.00%	27.11%	29.23%
Midwest	221 (661)	851,925	847,315	30.83%	29.15%	-0.12%	0.07%	-3.38%	-3.42%	24.73%	26.81%
South	377 (1,292)	1,761,516	1,756,632	33.83%	31.73%	0.15%	0.03%	-4.26%	-4.09%	26.34%	28.45%
West	339 (1,001)	1,514,563	1,508,673	27.70%	25.96%	0.04%	0.01%	5.15%	5.10%	32.40%	34.61%
US Territories	4 (5)	2,365	2,365	40.09%	37.48%	0.43%	1.06%	-0.49%	1.03%	38.90%	41.22%
Census Division:											
New England	92 (236)	657,794	652,330	26.97%	25.68%	-0.41%	-0.23%	1.83%	1.18%	27.16%	29.29%
Middle Atlantic	108 (314)	457,798	456,197	24.96%	23.11%	0.08%	0.03%	3.05%	3.18%	27.02%	29.14%
East North Central	143 (460)	603,034	599,530	30.76%	29.15%	-0.16%	0.08%	-2.66%	-2.74%	25.61%	27.71%
West North Central	78 (201)	248,891	247,785	30.99%	29.16%	-0.02%	0.07%	-5.13%	-5.09%	22.59%	24.64%
South Atlantic	187 (688)	1,049,755	1,047,305	33.12%	30.97%	0.19%	-0.02%	-3.04%	-2.87%	27.21%	29.34%
East South Central	83 (317)	374,386	373,077	38.19%	36.11%	0.08%	0.02%	-6.76%	-6.67%	27.03%	29.15%
West South Central	107 (287)	337,375	336,250	31.43%	29.42%	0.09%	0.19%	-5.30%	-5.03%	22.91%	24.96%
Mountain	87 (311)	368,666	366,762	30.96%	29.24%	-0.09%	0.29%	-2.13%	-1.92%	26.76%	28.88%
Pacific	252 (690)	1,145,897	114,911	26.68%	24.81%	0.08%	-0.08%	7.49%	7.48%	34.15%	36.39%
US Territories	4 (5)	2,365	2,365	40.09%	36.68%	0.43%	1.06%	-0.49%	1.03%	38.90%	41.22%

*Where average cost per visit = total allowable costs (excluding influenza and pneumococcal vaccinations) reported in the cost reports / total number of visits reported in the cost reports

**Where average cost per visit = total CCR-adjusted charges reported in claims / total number of single encounters reported in claims

Impact of Changes to Beneficiary Coinsurance

Analytic Methods and Results

In addition to the statutory and policy changes stemming from the mandates in the Affordable Care Act, a modification to the methodology for assessing FQHC beneficiary coinsurance is also under consideration. Currently, coinsurance is calculated based on 20 percent of the charges reported for an encounter claim. Concurrent with implementation of the new PPS, beneficiary coinsurance would begin being assessed as 20 percent of the lesser of the FQHC's charge or the PPS payment rate. Accordingly, we examined the overall impact of this change on beneficiary coinsurance payments. Evaluating impact under the PPS would require a number of assumptions regarding potential changes in claims reporting practices that may be due to implementation of the PPS or other trends over time. To avoid uncertainty introduced by forecasting these types of changes, we compared the current methodology (20 percent of the reported charge) to 20 percent of the lesser of the FQHC's reported charge or its current AIR (Table 28).

Current beneficiary coinsurance amount was calculated as 20 percent of the total per diem encounter charge reported in the claims. The sum of all current beneficiary coinsurance amounts produced the ***total current beneficiary coinsurance amount***. For this analysis, the AIR was derived from the Medicare claims data using the Medicare payment amount. Per diem Medicare payment amounts were divided by 0.8 to obtain the estimated AIR. Twenty percent of the estimated AIR was calculated to yield the ***AIR coinsurance amount***. The ***minimum beneficiary coinsurance amount*** was calculated as the lesser of current beneficiary coinsurance amount and the AIR coinsurance amount. The ***total minimum beneficiary coinsurance*** amount was calculated by summing all of the minimum beneficiary coinsurance values. The difference between the total current beneficiary coinsurance and the total estimated minimum beneficiary coinsurance was calculated as the estimated dollar change in coinsurance. This was divided by the total current beneficiary coinsurance to determine the ***estimated percent change in coinsurance***. Finally, a MEI factor of 1.018 was applied to all dollar amounts to correspond to the FQHC payment period immediately preceding implementation of the PPS (2014).

A total of 1,244,873 beneficiaries were included in our final analytic data set, and the average number of beneficiary per diem encounters per year was 4.2. Table 28 presents the results of the overall impact of basing coinsurance on 20 percent of the lesser of the FQHC's reported charge or its current AIR. Overall, this change in policy would result in beneficiaries owing 18.4 percent less in coinsurance than they would under the current system.

Descriptive distributions were also obtained to characterize the range of coinsurance amounts that would be expected under the two systems. Distributions for the current coinsurance methodology (20 percent of the reported charge) as well as coinsurance based on 20 percent of the lesser of the FQHC's reported charge or its current AIR are provided. Table 29 presents coinsurance distributions summed to the beneficiary level, indicating the total amount of coinsurance a beneficiary would owe for the entire time period included in the analysis data set (January 1, 2011 and June 30, 2012). Table 30 displays coinsurance distributions at the per diem encounter level, indicating the range of coinsurance amounts

beneficiaries would owe for a per diem encounter. As in the previous analysis, a MEI factor of 1.018 was applied to all dollar amounts to correspond to the FQHC payment period immediately preceding implementation of the PPS (2014).

Table 29 indicates beneficiaries paid an average amount of $102.19 in coinsurance for all visits to a FQHC between January 1, 2011 and June 30, 2012. This amount would decrease to approximately $83.34 in coinsurance if the methodology were based on 20 percent of the lesser of the FQHC's reported charge or its current AIR. Table 30 presents similar distributions at the per diem encounter level. Based on the current coinsurance methodology, beneficiaries would pay an average amount of $24.36 for one per diem encounter. This amount would decrease to just under $19.86 for one per diem encounter if coinsurance were assessed based on 20 percent of the lesser of the FQHC's reported charge or its current AIR.

Table 28. Overall impact of basing beneficiary coinsurance on 20 percent of the lesser of the FQHC's reported claims charge or its current all-inclusive rate (AIR).

	N Beneficiaries	*N per diem encounters*	*Total current beneficiary coinsurance*	*Total estimated minimum beneficiary coinsurance*	*Estimated dollar change in coinsurance*	*Estimated percentage change in coinsurance*
Beneficiary Coinsurance	1,244,873	5,223,512	$127,207,145	$103,744,665	$-23,462,480	-18.44%

*All dollar amounts have been adjusted by a 1.018 MEI factor and are expressed in 2014 dollars.

*The AIR was derived from the payment rate reported in Medicare claims data as opposed to the cost reports.

Table 29. Distributions of current beneficiary coinsurance, minimum beneficiary coinsurance, and the difference between the two methodologies at the beneficiary level (based on total estimates per beneficiary for the period of January 1, 2011 – June 30, 2012).

	Mean	*Minimum*	*10th Percentile*	*25th Percentile*	*Median*	*75th Percentile*	*90th Percentile*	*Maximum*
Distribution of Current Beneficiary Coinsurance	$102.19	$0.00	$21.58	$36.85	$71.26	$127.86	$211.54	$6183.54
Distribution of Minimum Beneficiary Coinsurance (Lesser of Current Coinsurance and Coinsurance Based on AIR)	$83.34	$0.00	$20.36	$28.50	$61.18	$105.87	$173.70	$2967.68
Distribution of Difference: Minimum Coinsurance – Current Coinsurance	$-18.85	$-3215.85	$-47.61	$-19.65	$-4.85	$0.00	$0.00	$0.00

*All dollar amounts have been adjusted by a 1.018 MEI factor and are expressed in 2014 dollars.

Table 30. Distributions of current beneficiary coinsurance, minimum beneficiary coinsurance, and the difference between the two methodologies at the per diem encounter level.

	Mean	*Minimum*	*10th Percentile*	*25th Percentile*	*Median*	*75th Percentile*	*90th Percentile*	*Maximum*
Distribution of Current Beneficiary Coinsurance	$24.36	$0.00	$14.05	$16.90	$21.99	$29.32	$37.67	$335.94
Distribution of Minimum Beneficiary Coinsurance (Lesser of Current Coinsurance and Coinsurance Based on AIR)	$19.86	$0.00	$13.44	$16.29	$20.36	$23.61	$25.70	$114.86
Distribution of Difference: (Minimum Coinsurance – Current Coinsurance)	$-4.49	$-258.84	$-14.21	$-6.26	$-0.00	$0.00	$0.00	$0.00

*All dollar amounts have been adjusted by a 1.018 MEI factor and are expressed in 2014 dollars.

X. Conclusion

The analyses described in this report were performed to support the development and implementation of a Medicare PPS for FQHCs and has informed an approach for determining payment rates under the PPS that addresses the requirements of the Affordable Care Act. One key aspect of this approach involved the use of linked FQHC cost report and claims data to establish a base payment rate that reflects the overall estimated cost of providing FQHC services. In addition, payment adjustments based on new FQHC patient visits/initial preventive visits under Medicare and a Geographic Adjustment Factor can be used to reflect certain variation in resource utilization for beneficiaries treated at FQHCs. These adjustment factors are incorporated in the proposed design of the PPS. Impact analyses suggest the overall expected increase in Medicare payments to FQHCs primarily reflects the removal of the UPL and minimum productivity standards that are currently applied under the AIR. Variation among FQHCs in the amount of the expected increase in payments under the PPS that reflects a combination of these changes and the application of the PPS adjustments is anticipated.

XI. References

Centers for Medicare & Medicaid Services, Department of Health and Human Services (2009). *Chapter 13: Rural Health Clinic (RHC) and Federally Qualified Health Center (FQHC) Services.* Medicare Benefit Policy Manual. Baltimore, MD: CMS.

Centers for Medicare & Medicaid Services, Department of Health and Human Services (2010). *Chapter 9: Rural Health Clinics/Federally Qualified Health Centers.* Medicare Claims Processing Manual. Baltimore, MD: CMS.

Centers for Medicare & Medicaid Services, Department of Health and Human Services (2010). *Transmittal 2123: Announcement of Medicare Rural Health Clinics (RHCs) and Federally Qualified Health Centers (FQHCs) Payment Rate Increases*. Retrieved on September 3, 2013 from http://www.cms.gov/Regulations-and-Guidance/Guidance/Transmittals/downloads/R2123CP.pdf

Government Accountability Office (2010, July). *Medicare Payments to Federally Qualified Health Centers* (GAO-10-576R). Washington, DC: Kathleen M. King.

Health Care Financing Administration (HCFA), HHS (1992). *Final Rule with Comment Period: Medicare Program; Payment for Federally Qualified Health Center.* Federal Register, 57 FR 24961.

Health Care Financing Administration (HCFA), HHS (1996). *Final Rule: Medicare Program; Payment for Federally Qualified Health Center.* Federal Register, 42 CFR Parts 405 and 491.

Health Resources and Services Administration (HRSA) (2012). *National Health Center Data from the 2011 Uniform Data Systems*. Rockville, MD.

Health Resources and Services Administration (HRSA) (2013). *National Health Center Data from the 2012 Uniform Data Systems*. Rockville, MD. Retrieved September 3, 2013 from http://bphc.hrsa.gov/healthcenterdatastatistics/index.html

H.R. 5835--101st Congress: Omnibus Budget Reconciliation Act of 1990 (1990). In www.GovTrack.us. Retrieved September 3, 2013, from http://www.govtrack.us/congress/bills/101/hr5835

Jacobson PD, Dalton VK, Berson-Grand J, Weisman CS (2005). *Survival Strategies for Michigan's Health Care Safety Net Providers*. Health Services Research. 40(3):923-940.

Medicare Payment Advisory Commission (2011). *Chapter 6: Federally Qualified Health C enters. Report to the Congress: Medicare and the Health Care Delivery System.* Washington, DC: MedPac.

Patient Protection and Affordable Care Act (2010). Retrieved September 3, 2013 from http://www.hhs.gov/healthcare/rights/law/index.html

Public Health Services Act (42 USCS § 254b) Section 330 (1975). Retrieved September 3, 2013 from http://www.law.cornell.edu/uscode/text/42/254b