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Bundle Care | Care Tool
Affordable Insurance Exchanges

- CMS - Bundled Payments for Care Improvement Initiative Update
- CMS - Bundled Payments for Care Improvement Initiative Frequently Asked Questions
- CMS - Affordable Insurance Exchanges
- The Health Insurance Marketplace
- Medicare & Medicaid Research Review - Home Health Compare Poses Small Impact on Market Area Exit Decisions
- Medicare & Medicaid Research Review - Public Reporting and Market Area Exit Decisions by Home Health Agencies

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Resource Link: http://innovations.cms.gov/initiatives/bundled-payments/index.html

Bundled Payments for Care Improvement

Subscribe to receive emails about the Bundled Payments initiative.

Recent Updates:

11/30 - Announced: Models 2-4 Episodes

09/06 - Announced: 09/12 webinar on Models 2-4 application consideration & next steps

06/20 - Online application ICD-9 Code exclusions, important application information now posted. Models 2-4 applications remain due by 5pm ET, June 28, 2012.

September 06, 2012 Update:

Thank you for your continued engagement in Models 2, 3, and 4 of the Bundled Payments for Care Improvement initiative. We have received a very enthusiastic response from providers across the country. Over the last two months we have reviewed the many proposals, which included thousands of episode definitions, identified points of commonality, and considered numerous key policy and operational issues inherent in designing the Bundled Payment model on a sizable scale.

We are now moving to the next stage of this process by convening technical panels to review the applications over the next several weeks. We anticipate contacting candidates recommended by the review panels in early October to share additional information on the work we have done on model definition and other policy and operational issues and to respond to questions.

Over the next several weeks we also will conduct a webinar update and resume learning sessions to take advantage of the great work being done in the private sector around episode-based payment and care redesign. We look forward to working with you, and will make every effort to keep you apprised of our plans in this exciting effort to redesign care through episode payment.

Overview

Under the Bundled Payments initiative, CMS would link payments for multiple services patients receive during an episode of care. For example, instead of a surgical procedure generating multiple claims from multiple providers, the entire team is compensated with a “bundled”

payment that provides incentives to deliver health care services more efficiently while maintaining or improving quality of care. Providers will have flexibility to determine which episodes of care and which services would be bundled together.

The Bundled Payments for Care Improvement initiative is seeking applications for four broadly defined models of care, three of which would involve a retrospective bundled payment arrangement, with a target price (target payment amount) for a defined episode of care and one of which would be paid prospectively. Read the Fact Sheet (PDF).

Background

Medicare currently makes separate payments to providers for the services they furnish to beneficiaries for a single illness or course of treatment, leading to fragmented care with minimal coordination across providers and health care settings. Payment is based on how much a provider does, not how well the provider does in treating the patient.

Research has shown that bundled payments can align incentives for providers – hospitals, post acute care providers, doctors, and other practitioners– to partner closely across all specialties and settings that a patient may encounter to improve the patient's experience of care during a hospital stay in an acute care hospital, and during post-discharge recovery.

Initiative Details: 2 Payments Types, 4 Models

The Centers for Medicare & Medicaid Services (CMS) is working in partnership with providers to develop models of bundling payments through the Bundled Payments initiative. The Bundled Payments initiative is seeking applications for four broadly defined models of care.

Retrospective Bundled Payments

In these models, CMS and providers would set a target payment amount for a defined episode of care. Applicants would propose the target price, which would be set by applying a discount to total costs for a similar episode of care as determined from historical data. Participants in these models would be paid for their services under the Original Medicare fee-for-service (FFS) system, but at a negotiated discount. At the end of the episode, the total payments would be compared with the target price. Participating providers may share the gains resulting from the more efficient redesigned care model.

Model 1: Retrospective Acute Care Hospital Stay Only. The episode of care would be defined as the inpatient stay in the general acute care hospital. Medicare will pay the hospital a discounted amount based on the payment rates established under the Inpatient Prospective Payment System (IPPS). Medicare will pay physicians separately for their services under the Medicare

Physician Fee Schedule. Hospitals and physicians will be permitted to share gains arising from better coordination of care.

Model 2: Retrospective Acute Care Hospital Stay plus Post-Acute Care. The episode of care would include the inpatient stay and post-acute care and would end, at the applicant's option, either a minimum of 30 or 90 days after discharge.

Model 3: Retrospective Post-Acute Care Only. The episode of care would begin at initiation of post-acute care with a participating Skilled Nursing Facility (SNF), Inpatient Rehabilitation Facility (IRF), Long-Term Care Hospital (LTCH) or Home Health Agency (HHA) within 30 days of discharge from the inpatient stay and would end no sooner than 30 days after the initiation of the episode. In both Models 2 and 3, the bundle would include physicians' services, care by the post-acute provider, related readmissions, and other Part B services proposed in the episode definition such as clinical laboratory services; durable medical equipment, prosthetics, orthotics and supplies (DMEPOS); and Part B drugs. The target price will be discounted from an amount based on the applicant's historical fee-for-service payments for the episode. Payments will be made at the usual fee-for-service payment rates, after which the aggregate Medicare payment for the episode will be reconciled against the target price. Any reduction in expenditures beyond the discount reflected in the target price will be paid to the participants to share among the participating providers.

Prospective Bundled Payments

Model 4: Acute Care Hospital Stay Only. CMS would make a single, prospectively determined bundled payment to the hospital that would encompass all services furnished during the inpatient stay by the hospital, physicians and other practitioners. Physicians and other practitioners would submit "no-pay" claims to Medicare and would be paid by the hospital out of the bundled payment.

Additional Information on the Bundled Payments for Care Improvement Initiative

- Preliminary Models 2-4 Episodes (XLS)
- How to Apply to Models 2-4
- Fact Sheet on the Bundled Payments for Care Improvement initiative (PDF)
- Request For Applications (PDF)
- Frequently Asked Questions (PDF)
- Bundled Payments Learning & Resources Area
- Information specific to:
  - Model 1: Retrospective Acute Care Hospital Stay Only
  - Model 2: Retrospective Acute Care Hospital Stay plus Post-Acute Care
  - Model 3: Retrospective Post-Acute Care Only
  - Model 4: Acute Care Hospital Stay Only

BUNDLED PAYMENTS FOR CARE IMPROVEMENT INITIATIVE
FREQUENTLY ASKED QUESTIONS
August 23, 2011
Last Updated on January 4, 2012

Because of the unprecedented public response to this initiative, CMS will need additional preparation time to accommodate the extraordinary degree of provider interest. We are therefore announcing:

Applications for the Bundled Payments for Care Improvement Models 2-4 are now due on April 30, 2012.

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OVERVIEW

What is the Bundled Payments for Care Improvement initiative? (August 23, 2011)

The Bundled Payments for Care Improvement initiative is a new Affordable Care Act initiative launched by the Innovation Center designed to encourage doctors, hospitals and other health care providers to work together to better coordinate care for patients both when they are in the hospital and after they are discharged. This initiative intends to:

a. Support and encourage providers who are interested in continuously reengineering care to achieve "better health, better care, and lower costs through continuous improvement" (three-part aim outcomes).
b. Create a positively reinforcing cycle that leads to decreasing the cost of an acute episode of care and the associated post-acute care while fostering quality improvement.
c. Develop and test payment models that create extended accountability for three-part aim

outcomes for acute and post-acute medical care.

d. Shorten the cycle time for adoption of evidence-based care.
e. Create environments that stimulate rapid development of new evidence-based knowledge.

How does the Bundled Payments for Care Improvement initiative interact with the *National Pilot Program on Payment Bundling* as required in section 3023 of the Affordable Care Act (section 1866D of the Social Security Act)? (August 23, 2011)

CMS may be implementing the National Pilot Program required by the Affordable Care Act to be in place by January 1, 2013 at a later date. The Bundled Payments for Care Improvement initiative is a separate initiative being undertaken under the Innovation Center's authority. It is designed to provide opportunities for care improvement that are consistent with the goals and approach of the National Pilot Program on Payment Bundling authorized by the Affordable Care Act. The Innovation Center is committed to being a trustworthy partner in promoting opportunities for all health care providers to improve the quality of care while reducing costs through continuous improvement. The Bundled Payment for Care Improvement initiative will help inform future Innovation Center and Department of Health and Human Services activities that aim to improve the quality of care for Americans.

What are Bundled Payments? (August 23, 2011)

There are a number of contexts in which Medicare uses the term "bundled payment" but it generally means that rather than paying separately for each item or service, a single payment is made for a defined group of services. The bundled payment may cover services furnished by a single entity (hospital or other provider) or it may be used to pay for items and services furnished by several providers in multiple care delivery settings.

The bundled payment may cover services furnished by a single entity (hospital or other provider). In this context, bundled payment refers to a single negotiated episode payment of a predetermined amount for all services (physician, hospital, and other provider services) furnished during an episode of care. This could be paid prospectively or retrospectively. For example, Medicare and the awardee would agree to a bundled payment target price for acute care hospital services for an inpatient stay plus professional services and post-acute care related to the principal reason for the hospitalization, rather than paying separately for each physician visit and procedure provided during the episode.

How do bundled payments differ from capitation payments, such as those made to health plans under the Medicare Advantage program? (August 23, 2011)

Bundled payments differ from capitation or global payments in that the bundled payment is a single payment amount for services related to a clinical condition in a specified episode only, rather than for all care for a patient during a specified time period. For example, services for a traumatic injury occurring within the episode time window may not be included in the bundled payment amount and could be paid separately.

BENEFICIARY CHOICE

How will CMS ensure that Medicare beneficiary choice and quality is preserved? (August 23, 2011)

Nothing in this initiative limits in any way a Medicare beneficiary's right to receive care from the health care provider of their own choosing. Medicare beneficiaries have the right to choose a different Medicare provider for their care who is not part of the Bundled Payments for Care Improvement initiative.

Applicants will, in part, be evaluated based on their proposed plans to provide beneficiaries with information about the applicant's participation in this initiative, as well as proposed plans for beneficiary engagement and inclusion in redesigning care. Medicare will require all providers applying to the Bundled Payments for Care Improvement initiative to include a strict quality monitoring program as part of the application. Quality measures, internal monitoring, and quality improvement protocols will be required.

I am a Medicare beneficiary, how will I be affected if my health care provider is participating in the Bundled Payment for Care Improvement initiative? (August 23, 2011)

As with all CMS pilot initiatives that test new models of care delivery and Medicare payment, beneficiary protection is a top priority of the initiative. As part of the application process, applicants must detail how they intend to notify Medicare beneficiaries of their involvement in the Bundled Payments for Care Improvement initiative and explain the potential implications of the initiative for the beneficiary's care. When a provider participates in this initiative, the initiative includes all Medicare beneficiaries who receive care from that provider and who meet the episode definition. Applicants must commit to providing quality of care at or above the quality of care that all Medicare beneficiaries currently experience. CMS will rigorously monitor all participating providers to ensure that the quality of care is at least the same as, if not better than, it was prior to the initiative, and CMS may terminate provider participation in the initiative if the quality of care decreases or there are other significant beneficiary concerns. As always, Medicare beneficiaries have the right to choose a different Medicare provider for their care who is not part of the Bundled Payments for Care Improvement initiative.

THE BUNDLED PAYMENTS FOR CARE IMPROVEMENT INITIATIVE

How will Medicare pay awardees and participating providers? (September 9, 2011)

In Model 1, Medicare will continue to pay acute care hospitals under the Inpatient Prospective Payment System (IPPS). However, these payments to participating acute care hospitals will be at a reduced payment amount that reflects the applicable discount percentage on all MS-DRGs that is reflected in the awardee's provider agreement. Medicare Part B payments to physicians and other practitioners will not change. Discounted IPPS payments for all MS-DRGs will be made to any participating acute care hospital where a beneficiary receives treatment, including a hospital participating as a partner with an awardee convener or with another awardee. The awardee is responsible for some financial risk if aggregate Medicare Part A and Part B expenditures increase beyond a risk threshold for the period of the inpatient stay or during the 30 days after discharge, compared to historical expenditures.

In Models 2 and 3, Medicare payments will not change; Medicare will continue to pay each provider under the current applicable fee-for-service payment system at the applicable amounts for the dates of service. After the episode of care concludes, the aggregate Medicare expenditures for the episode of care will be compared to the target price. If the actual expenditures were less than the target price, Medicare will pay the difference to the awardee. If the actual expenditures were more than the target price, the awardee will pay the difference to Medicare.

In Model 4, Medicare will make a single, prospectively established bundled payment to the acute care hospital where a beneficiary is hospitalized. All Part A and Part B physicians' services furnished during the inpatient stay are included in the bundled payment, and the hospital would be responsible for distributing the payment to the other providers caring for the patient. If the admitting hospital is not the awardee, the awardee would not receive payment from Medicare for the episode. The awardee (whether or not the admitting hospital) would be financially responsible for Medicare expenditures for any related readmissions during the readmission window, as well as for increases in aggregate Medicare Part A and Part B expenditures beyond a risk threshold during the 30 days after discharge compared to historical expenditures.

Does Model 1 include all MS-DRGs? Will applicants be able to propose a subset of MS-DRGs to include? (September 9, 2011)

In Model 1, applicants will propose a single rate of discount that will apply to Part A payments for inpatient hospital services for all MS-DRGs. Applicants cannot propose a subset of MS-DRGs to include in the initiative under this model. The discount can be phased in from no minimum discount for the first six months, increasing to a 2% minimum in the third year. However, Model 1 awardees that also participate in another model under this initiative will have the MS-DRGs identified for those other models removed from the Model 1 payment changes.

How does Model 4 of this initiative differ from the Acute Care Episode (ACE) demonstration? (September 9, 2011)

Model 4 of the Bundled Payments for Care Improvement initiative is very similar to the ACE Demonstration. Both pay prospectively-established bundled payments for inpatient hospital and physicians' professional services furnished during an acute care hospitalization. Model 4 includes readmissions related to the initial hospitalization within a minimum of 30 days after discharge, while the ACE demonstration does not (except readmissions on the day of discharge). Unlike the ACE Demonstration, Model 4 will not include a beneficiary shared savings component. In the ACE demonstration, the discount to the MS-DRG payment that is the basis for the prospectively established bundled payment amount included outlier and capital payments, but excluded indirect medical education (IME) and Disproportionate Share Hospital (DSH) payments. In contrast, in Model 4 of this initiative, the discount to the MS-DRG payment that is the basis for the prospectively established bundled payment amount will include outlier payments but exclude capital, IME, and DSH payments. The Bundled Payments for Care Improvement initiative expands upon the ACE Demonstration by including more conditions (more MS-DRGs) and does not limit the demonstration to certain geographic regions.

What methodology will CMS use to trend forward target prices? (September 9, 2011)

CMS's methodology for trending forward target prices will be determined after applications are received and prior to awards being made. Please use data from calendar year 2009 for your historical payments, and propose a target price in calendar year 2009 dollars. CMS will trend proposed target prices to calendar year 2012 dollars for purposes of final agreements with awardees. The target price will be further trended forward in subsequent years of the performance period.

What impact will the Bundled Payments discounts have on indirect medical education (IME), disproportionate share hospital (DSH), and outlier payments? (September 20, 2011)

Discounts to MS-DRG payments under this initiative will not be applied to IME or DSH payments, therefore those payments will not change. The calculation of these additional payments for each specific model is described below.

In Model 1, IME, DSH, and outlier payments will be calculated using the non-discounted base payment amount and then paid, if applicable, in addition to the discounted MS-DRG operating payment.

In Models 2 and 3, all Medicare fee-for-service payments will be paid at the usual rates. When determining the target price, applicants should include outlier payments in their calculations; outlier payments will be included in the episode reconciliation calculation when determining whether the awardee has met the target price. The target price will exclude IME and DSH payments, and the payment reconciliation calculation will exclude IME and DSH payments from the index admission (Model

2) and readmissions (Models 2 and 3) when calculating the actual expenditures for comparison with the target price.

In Model 4, IME and DSH payments will be calculated based on the non-discounted base operating payment that would otherwise be paid for the applicable MS-DRG for the episode. IME and DSH payments will be paid in addition to the bundled episode payment, which does not include IME and DSH payments. In determining the bundled payment for the episode, outlier payments will be included in the price calculation. Therefore there will be no additional outlier payments.

My Model 2, 3, or 4 episode definition includes multiple MS-DRGs for the same clinical condition. Should I propose one target price or bundled payment amount that applies to all of the included MS-DRGs, or should I propose a separate target price or bundled payment amount for each MS-DRG? (September 20, 2011)

In Models 2, 3, and 4, applicants will propose an episode definition, which should include the MS-DRGs targeted, the length of the episode (Models 2 and 3) or length of the readmission window (Model 4), and related services. We encourage applicants to include multiple MS-DRGs in their episode definition, and particularly encourage applicants to propose episode definitions that include all of the MS-DRGs for the relevant clinical conditions that reflect the various complications and comorbidities that may apply to Medicare beneficiaries.

Proposed episode definitions that include multiple MS-DRGs should use the same rate of discount across all DRGs in that episode definition. For example, if your episode includes four MS-DRGs, you should apply the same rate of discount to each 2009 average cost per episode to determine your proposed target prices or bundled payments amount for the episode. Or, for example, your episode may include three MS-DRGs for the same condition for a diagnosis without complications and/or comorbidities, one with complications and/or comorbidities, and one with major complications and/or comorbidities. In this case, you should complete a separate application Table C 1 for each MS-DRG, using the same episode definition (i.e., the same time parameters and services included), and applying the same rate of discount to each 2009 average cost per episode to determine your proposed target prices or bundled payment amounts.

Can a beneficiary who is transferred to or from a participating acute inpatient facility be included? (January 5, 2012)

Yes. If an eligible beneficiary is admitted to a participating provider and then transferred to another acute inpatient hospital, he or she is included in the program if the admission at the participating provider is for an assigned MS-DRG (or any MS-DRG for Model 1). If an eligible beneficiary is admitted to a non-participating acute inpatient hospital and transferred to a participating provider, he or she is included in the program if the admission at the participating provider is for an assigned MS-DRG (or any MS-DRG for Model 1). In Model 1, the discount will be applied to the participating provider's IPPS payment. In Model 2 and Model 4, the episode of care will begin at admission to the participating provider if the admission is for an assigned MS-DRG.

If my application includes a proposal for gainsharing, must I seek a waiver from the OIG? (September 9, 2011)

Under Section 1115A(d)(1) of Title XI of the Social Security Act, as added by Section 3021 of the Affordable Care Act, the Secretary of Health and Human Services may waive such requirements of Titles XI and XVIII, as well as Sections 1902(a)(1), 1902(a)(13), and 1903(m)(2)(A)(iii), as may be necessary for

purposes of carrying out Section 1115A with respect to testing of models described in section 1115A(b). The Secretary will consider exercising this waiver authority with respect to the fraud and abuse laws in Titles XI and XVIII as may be necessary to develop and implement the Bundled Payments for Care Improvement initiative. The Secretary may also consider waiving additional provisions under Title XVIII for this purpose. We anticipate that applicable waivers, if granted, would be included in the terms and conditions of the agreement between CMS and the awardee(s) and/or providers.

Are participants in the Bundled Payments for Care Improvement initiative prohibited from engaging in gainsharing arrangements that involve items or services furnished to individuals whose care is paid for by a commercial payor? (October 20, 2011)

Participants in the Bundled Payments for Care Improvement initiative are not prohibited by the terms of the program from engaging in gainsharing arrangements involving care furnished to private pay patients. Such arrangements may implicate federal fraud and abuse laws, as well as state and local laws. Accordingly, participants in this initiative must ensure that private pay gainsharing arrangements comply with any applicable federal, state and local laws, or the terms of any applicable waiver of those laws. We anticipate that the terms of any such waiver of the federal fraud and abuse laws would protect a gainsharing arrangement pursuant to which participants in this initiative rendered services to Medicare beneficiaries.

I am a physician. If I am participating in an approved gainsharing arrangement through this initiative at one participating hospital, may I also participate in another approved gainsharing arrangement with another participating hospital? (October 20, 2011)

Yes, physicians are welcome to participate in multiple approved gainsharing arrangements through this initiative.

I would like to waive Medicare coinsurance/copayments/deductibles for beneficiaries included in this initiative. May I apply for a waiver to do so through this initiative? (October 20, 2011)

Under Section 1115A(d)(1) of Title XI of the Social Security Act, as added by Section 3021 of the Affordable Care Act, the Secretary of Health and Human Services may waive such requirements of Titles XI and XVIII, as well as Sections 1902(a)(1), 1902(a)(13), and 1903(m)(2)(A)(iii), as may be necessary for purposes of carrying out Section 1115A with respect to testing of models described in section 1115A(b). The Secretary will consider exercising this waiver authority with respect to the fraud and abuse laws in Titles XI and XVIII as may be necessary to develop and implement the Bundled Payments for Care Improvement initiative. The Secretary may also consider waiving additional provisions under Title XVIII for this purpose. Applicants may propose such waivers in their application and should provide a compelling explanation for why such waivers are necessary to their model design.

BUNDLED PAYMENTS AND MEDICAID

How does this initiative affect beneficiaries enrolled in both Medicare and Medicaid (often called "dual eligibles")? How does this initiative affect Medicaid providers? (September 20, 2011)

The Bundled Payments for Care Improvement initiative will be targeted to all Medicare FFS beneficiaries with Part A and Part B coverage. Dual eligibles, are not excluded from receiving care under the demonstration unless they would otherwise not be able to participate (e.g. because they are a Medicare

Advantage enrollee or because they have end-stage renal disease). If a dual eligible beneficiary receives Medicare-covered care for an included condition from a participating provider, the episode of care will be included in the initiative.

While the current bundled payments demonstration and payment methodology are based upon Medicare spending, for Medicare-Medicaid enrollees CMS encourages providers to engage with States, particularly in better coordinating care for Medicare-Medicaid enrollees. And CMS will look favorably on applications that demonstrate partnership with State Medicaid programs. CMS is also interested in and plans to monitor the impact of the initiative on Medicaid expenditures with respect to dual eligibles.

Is CMS planning a state-oriented Medicaid bundled payment initiative? (September 20, 2011)

The Bundled Payments for Care Improvement initiative will test alternative models for payment in Medicare fee-for-service (FFS) to incentivize care redesign, engage and protect beneficiaries, and learn and diffuse best practices in order to inform potential changes to the Medicare FFS program. CMS will look favorably on applications that demonstrate partnership with State Medicaid programs, private payers, or multi-payer collaboratives to redesign care. Medicaid providers may be able to participate if their State Medicaid program partners with providers in this initiative. States can also apply as conveners in this current opportunity. Furthermore, State Medicaid programs may be able to pursue various payment reform initiatives, including bundling, through State plan and waiver authority.

POTENTIAL APPLICANTS

Who should apply for the Bundled Payment for Care Improvement initiative? (August 23, 2011)

This initiative seeks innovative proposals that will build on the success of previous CMS demonstrations and private sector initiatives. In all models contained in this Request for Applications (RFA), CMS is seeking proposals that:

- affect broad categories of conditions;
- reach many beneficiaries;
- offer significant savings to Medicare;
- are designed to be scalable and replicable by similar health systems around the country; and
- are able to be implemented on aggressive timelines.

Applicants are anticipated to have experience with cross-provider care improvement efforts of this type, and either have already begun to redesign care or are prepared to redesign care and enter into payment arrangements that include financial and performance accountability for episodes of care. For more information related to applicant selection criteria, please refer to the RFA.

Can I apply and/or participate in multiple models? (August 23, 2011)

Yes. Applicants are welcome and encouraged to apply for and participate in one or more models. Letters of Intent (LOI) must be submitted separately for Model 1 and for Models 2-4; however, applicants interested in applying for more than one of Models 2-4 can submit one LOI for these models. Applicants must submit a separate application for each proposed model. The LOI and application for Model 1 are due by September 22, 2011 and October 21, 2011, respectively; the LOI and application for Models 2-4 are due by November 4, 2011 and March 15, 2012, respectively. These applications will be considered

separately. Please refer to the "Application Submission, Review Process and Selection Criteria" section of the RFA, as well as the applications, for further details on additional information applicants must provide if applying for multiple models.

If a Model 1 awardee applies for and is selected for Models 2 or 4 that include episode payment for certain MS-DRGs, CMS will amend the Model 1 agreement to exclude those MS-DRGs for patient episodes from Model 1. This will ensure that the same clinical cases are subject to only a single episode payment model.

What kinds of applicants is CMS seeking for this initiative? (August 23, 2011)

CMS is seeking to partner with providers who are committed to using bundled payments as a tool towards redesigning care to achieve three-part aim outcomes. Specifically, CMS is seeking proposals that affect broad categories of conditions, reach many beneficiaries, offer significant savings to Medicare in the context of a robust programmatic design; are designed to be scalable and replicable; involve participation by other payers; and are able to be implemented on aggressive timelines. Additionally, for all models, CMS will give preference to applicants who are meaningful users of health information technology or who have a minimum of 50% of their providers meeting the standards for meaningful use. For Models 2 and 3, CMS will give preference to applicants proposing an episode definition longer than 30 days. CMS will also look favorably on applications that indicate a higher historical rate of physician participation in the Physician Quality Reporting System (PQRS) as well as describe plans to encourage greater physician participation in PQRS for the duration of the initiative. Finally, CMS will view favorably applications that include governing bodies with meaningful representation from consumer advocates, patients, and all participating provider types/organizations, and applications that include functional status in the proposed quality measures. For a more detailed list of application review criteria, please refer to the "Application and Selection Process" section of the RFA.

Will CMS limit the number of awardees for a particular condition or in a health care market? (September 9, 2011)

CMS will not limit awardees based on geographic region, geographic type (e.g., urban, rural), or size of health system. CMS will prioritize applications based on scores on the criteria listed in the Request for Applications (RFA) and on other considerations described in the RFA. CMS is interested in selecting awardees that will allow the evaluation of the initiative to best inform our recommendations regarding rapid replication and scaling; this interest will inform awardee selection and could result in selection of a number of awardees for a particular clinical condition or in a particular health care market. However, we look forward to having a broad geographic distribution of awardees in the initiative.

I am part of, or represent, an organization that would like to apply to be an Accountable Care Organization (ACO). Can I apply for the Bundled Payments for Care Improvement initiative? (August 23, 2011)

Yes. We know that healthcare transformation requires some synergy between new payment methods and care improvement strategies. The Bundled Payments for Care Improvement initiative is not a shared savings program with Medicare, so CMS encourages entities to participate in the Bundled Payments for Care Improvement initiative and the Medicare Shared Savings Program, the testing of the Pioneer ACO Model, medical home initiatives, and other shared savings initiatives. However, each application will be reviewed in light of the programs the applicant is participating in and the applicant's individual circumstances. However, CMS reserves the right to potentially subject these entities to additional requirements, modify program parameters, or ultimately exclude participation in multiple programs, based on a number of factors, including the capacity to avoid counting savings twice in interacting programs and to conduct a valid evaluation of the proposed interventions.

My hospital is a psychiatric hospital/critical access hospital. Can my hospital participate? (Updated October 25, 2011)

To be eligible to apply as an awardee, a hospital's payment for treating Medicare fee-for-service beneficiaries must be made fully and solely under the Inpatient Prospective Payment System (IPPS). Hospitals paid under the Inpatient Psychiatric Facility Prospective Payment System (IPF PPS), paid on a cost basis, or paid under the IPPS but supplemented by another methodology are not eligible to be the awardee. These providers are welcome to participate in the initiative as partners with other eligible awardees to redesign and improve care, and they may also share in any gains that result from improved care if the hospital agrees to share the gains they receive.

Are sole-community hospitals eligible to apply as awardees for the Bundled Payments for Care Improvement initiative? (October 25, 2011)

Sole community hospitals are paid under the IPPS, and thus they are eligible to apply as awardees for the Bundled Payments for Care Improvement initiative. We apologize for any misleading or inconsistent messages that have been circulated regarding the eligibility of sole community hospitals, and we can confirm at this time that we will accept applications from sole community hospitals for this initiative.

I am a Home Health Agency (HHA)/Inpatient Rehabilitation Facility (IRF)/Skilled Nursing Facility (SNF)/Long-Term Care Hospital (LTCH). How can I participate in this initiative? (September 9, 2011)

HHAs, IRFs, SNFs, and LTCHs can participate in the Bundled Payments for Care Improvement initiative in a number of ways. Models 2 and 3 include the post-acute care following an acute care hospital stay. These post-acute providers are eligible to apply to be the awardee for Model 2 or Model 3. In Model 2, the episode of care includes the acute care hospital stay and all Part A and Part B services related to the targeted condition for the duration of the episode, which begins at acute care hospital admission and ends a minimum of 30 days after hospital discharge. In Model 3, the episode of care includes all Part A and Part B services related to the targeted condition for the duration of the episode. The Model 3 episode begins when a beneficiary who was discharged from an acute care hospital stay for the targeted condition initiates post-acute care services with a participating IRF, SNF, LTCH, or HHA within 30 days of hospital discharge, and the episode lasts a minimum of 30 days.

In Models 2 and 3, Medicare payments will not change; Medicare will continue to pay each provider under the current applicable fee-for-service payment system at the applicable amounts for the dates of service. After the episode of care concludes, the aggregate Medicare expenditures for the episode of care will be compared to the target price. If the actual expenditures were less than the target price, Medicare will pay the difference to the awardee. If the actual expenditures were more than the target price, the awardee will pay the difference to Medicare.

HHAs, IRFs, SNFs, and LTCHs can also participate in Models 1 and 4 of this initiative, though the episodes of care included in these models do not include post-acute care. If post-acute providers choose to partner with participating hospitals and physicians to redesign care under Model 1 or Model 4, they can share in any resulting gains if the hospital agrees to share the gains they receive.

I am a multi-campus hospital with one CMS Certification Number (CCN) for all sites. Can I apply for only one site within my hospital to participate? (October 20, 2011)

If a provider applies to participate, all providers sharing that same CCN must also participate. If a multi-campus hospital with one CCN covering all sites applies, all sites covered by that CCN must participate, and must participate with the same parameters (such as the same discount rate, and for Models 2-4, the same episode definition).

I am a multi-campus hospital, hospital system, or convener whose participating hospitals each have their own CCN. Can multiple sites participate with different episode definitions and/or discount rates? (October 20, 2011)

If a hospital system or convener of multiple hospitals applies (as either an awardee convener or a facilitator convener) each hospital within that system or network may propose different parameters (i.e. (i.e. Model definition, discount rate, gain sharing methodology, etc.) provided each hospital has a different CCN, and a strong rationale is presented in the application to justify the necessity of different parameters. Applications from conveners that foster the participation of large numbers of providers, affecting large numbers of beneficiaries in a consistent, organized, and efficient manner, may be considered favorably. If multiple providers are applying under one convener, while the parameters are permitted to vary by provider, we would anticipate that the general approach would be substantially consistent across all participating providers. We would expect the convener's application to present compelling reasons for variations in methodology among different providers applying together under a single convener, because otherwise these providers could each apply separately for the program.

I am a physician group practice applying as an awardee or awardee convener for Models 2 or 3. The Request for Applications (RFA) states that all beneficiaries eligible for the episode (based on MS-DRG) must be included in the bundled payment model. What does this mean for my organization? (October 20, 2011)

CMS welcomes applications from physician groups. For physician groups applying as an awardee or an awardee convener, all beneficiaries with an included MS-DRG treated by any physician in the awardee physician group, regardless of the hospital or post-acute provider at which the beneficiary is treated, must be included in the bundled payment model. Under a scenario where all Medicare beneficiaries in a given MS-DRG in a hospital or treated by a post-acute care provider after a hospitalization for the MS-DRG may not be included in the episode, applicants should provide additional information to address the potential for shifting of patients outside the episode by changing the treating physician to one who is not a member of the awardee physician group. This should include information such as how patients are assigned to physicians in the hospitals and post-acute provider settings; referral patterns and anticipated changes to these referral practices as a result of this initiative; percentage of cases that meet the episode definition and that were under the care of members of this physician group at each hospital and/or post-acute provider for at least the past three years; as well as any additional information the applicant believes is necessary to describe how this concern about changes in case mix related to the episode incentives could be ameliorated. In addition, because CMS views episode payments as a payment lever to achieve three-part aim care episode redesign outcomes, physician group applicants should describe fully their plans to redesign care in all of the relevant settings (i.e., hospital and post-acute care providers) caring for beneficiaries in the episode. This could include information on the physician group's partnership with the relevant facility (i.e., hospital), data on the percentage of physicians with privileges at a given hospital and/or post-acute care provider who are members of this physician group, as well as other information describing how the physician group's redesign efforts will reduce episode costs (including institutional costs) through redesign.

Physician group practices applying as an awardee may attach an additional 10 pages of appendices to the application to address these issues. Applicants applying as a convener are already permitted an additional 10 pages per site; these questions should be answered within that page limit.

If I were an awardee in the Bundled Payments for Care Improvement initiative, what would happen in the following scenario? My hospital has two included episodes of care – a cardiac episode of

care and an orthopedic episode of care. If a beneficiary is discharged with an included MS-DRG for the cardiac episode of care, and is then admitted within the time period of the episode for an MS-DRG that is included in the orthopedic episode of care, what would happen? To which episode would the beneficiary be assigned? (January 31, 2012)

If the second admission is for an MS-DRG that is considered a related readmission for the initial episode of care (that is, the MS-DRG assigned in the second admission is not designated as an unrelated MS-DRG) then that care would not trigger a new episode of care. The beneficiary would remain in the initial episode of care. In this case, the beneficiary would remain in the cardiac episode of care. If the second admission is for an MS-DRG that is considered an unrelated readmission for the initial episode of care (that is, the MS-DRG assigned in the second admission is designated as an unrelated MS-DRG), the beneficiary would trigger a new episode of care and would no longer be considered part of the first episode of care. In this case, the beneficiary would be counted towards the orthopedic episode of care.

If I were an awardee in the Bundled Payments for Care Improvement initiative in Model 2, what would happen in the following scenario? A beneficiary with an included MS-DRG is discharged from my hospital, and therefore is included in my episode of care. That beneficiary seeks post-acute care at a post-acute provider (SNF, HHA, LTCH, IRF) who is not partnering with my hospital, but is separately an awardee in Model 3 of the initiative for the same clinical condition. This beneficiary is now eligible for inclusion in the episode of care assigned to my hospital, as well as inclusion in the episode of care assigned to this post-acute provider. Given that a beneficiary cannot be in two separate episodes at the same time, what would happen? To whose episode would the beneficiary be assigned? (January 31, 2012)

If a beneficiary is eligible for inclusion in a Model 2 bundle with one awardee, and a Model 3 bundle related to the same acute care hospital stay with another awardee, that beneficiary will be counted towards the Model 2 bundle because the beneficiary would already be included in the Model 2 episode when he/she entered post acute care. In the above described scenario, the beneficiary would remain in the Model 2 episode of care.

The Request for Applications states that applicants "must include information regarding the ability of the proposed awardee(s) to bear financial risk…This must include enforceable assurances of each awardee's ability to pay Medicare. This assurance could take the form of an irrevocable letter of credit for the full amount of risk undertaken or any similarly enforceable mechanism that covers the full amount of risk." Could you provide more information? (January 31, 2012)

Applicants are not required to provide evidence of their ability to bear financial risk or provide a letter of credit or other mechanism when submitting their application by the April 30, 2012 deadline. However, prior to entering into an Awardee Agreement with CMS, the applicant must provide proof of ability to bear risk. Applicants who are not Medicare providers or suppliers (i.e. do not have a Medicare provider number), such as those who are applying to be a non-provider convener awardees, will be required to provide an irrevocable line of credit executable by CMS or a similarly enforceable mechanism prior to entering into any Awardee Agreement with CMS.

At this stage in the application process, we encourage applicants to obtain guidance from a bank or other financial institution on the processes and underwriting criteria for irrevocable letters of credit executable by CMS or other similarly enforceable mechanisms that could meet this requirement. At this time,

applicants may wish to identify documentation requirements for obtaining such a letter of credit or similar mechanism, approval lead time, collateral requirements, credit rating thresholds, transaction costs, recurring financial institution fees and other pertinent information.

After CMS has reviewed applications, CMS will provide information regarding the amount of financial risk each potential awardee would be accountable for and other details regarding this financial assurance.

DATA REQUESTS

I am an interested applicant, but I don't have enough data to decide how to define the various episodes of care and subsequently come up with a target price or prospective bundled payment amount. What can I do to get the information I need? (August 23, 2011)

CMS will provide historical Medicare claims data to potential applicants submitting letters of intent for Models 2–4. The data are intended to enable potential applicants to develop robust episode definitions and target prices or prospective bundled payment rates based on the historical experience of providers in the applicant's geographic area. To be eligible for receipt of data, applicants must develop a research request packet to be approved by CMS. Applicants must also sign and comply with a data use agreement and conform to all applicable privacy laws. For more information please refer to the "Application Submission Process" section of the RFA, or http://innovations.cms.gov/initiatives/bundled-payments/index.html or email BundledPayments@cms.hhs.gov.

Will the Limited Data Set (LDS) files that CMS will provide to prospective applicants who wish to conduct research into possible structures for bundled payment models and episodes of care include the same data elements as the LDSs that are typically provided when researchers request LDS files? Do they contain the same fields, and will they cost the same amount? (September 20, 2011)

The standard files that will be made available to potential applicants who wish to conduct bundled payment model and episode of care research will contain typical LDS fields. The data will include beneficiary-level claims with masked beneficiary identifiers. Specifically, the Limited Data Set will cover the potential applicant's geographic region and will include at a minimum Part A and Part B payment amount, MS-DRG/HCPCS codes (as applicable), services rendered, dates of services, diagnosis and procedure codes, and institutional provider, as well as beneficiary age and sex.

Furthermore, we find that charging for the data that is needed to conduct research into possible structures for bundled payment models and episodes of care may severely limit the number of potential applicants in a manner that would be detrimental to the success of the Bundled Payments for Care Improvement initiative. We have therefore elected to invoke the Innovation Center's authority to waive "such requirements of titles XI and XVIII [of the Social Security Act (SSA)] as may be necessary" (section 1115A(d)(1) of the SSA) to carry out the program. We will waive data fees for potential applicants to this initiative who submit a data request for purposes of conducting bundled payment model and episode of care research in preparation for applying to the program.

What degree of detail will be available through the limited datasets that are being provided to prospective applicants who wish to conduct research into possible structures for bundled payment models and episodes of care? Will it include the complete set of services? (September 20, 2011)

The LDS files that will be provided to prospective applicants to this program who successfully complete the Research Request Packet submission process will include beneficiary demographic information, as well as inpatient hospital, outpatient hospital, home health agency, skilled nursing facility, durable medical equipment, and carrier files. No hospice or Part D files will be available through the bundled payment models and episodes of care Research Request Packet submission process.

Can I share the data I receive with my partner institutions? (September 20, 2011)

The use of the data that is requested and received through this program is governed by the data disclosure conditions described in the Research Request Packet and the use and disclosure limitations in the Data Use Agreement. Data will not be transmitted to prospective applicants who wish to conduct research into possible structures for bundled payment models and episodes of care until the potential researcher has executed a data use agreement in which they agree to abide by the use and disclosure limitations. Among other requirements, the DUA will require that any person or entity that the recipient subsequently discloses the data to will sign a DUA signature addendum in which they agree to the same terms and conditions on use and disclosure as the original recipient. The DUA from the original requestor, along with any relevant signature addenda, must be submitted to and accepted by CMS before data will be released to any potential applicants. If any additional individuals access, receive or use the data provided without having signed the DUA or DUA signature addendum, the original recipient will be found in violation of the DUA. The DUA only covers use and disclosure of CMS data. You may share the outcome of your analysis with your Bundled Payment partner organizations if those analyses are stripped of CMS' data. Your partners will be able to use those CMS data-stripped findings to complete the application without having to sign a DUA signature addendum.

I am interested in receiving CMS data but I am not applying to the Bundled Payments for Care Improvement initiative. How do I get access to this data for this purpose? (October 25, 2011)

The Bundled Payments for Care Improvement team recognizes the importance of research into structures for bundled payment models and episodes of care outside the parameters of the Bundled Payments for Care Improvement initiative; however, at this time it is not possible to apply for data through the process outlined in the Research Request Packet and Data Use Agreement (DUA) on the Bundled Payments for Care Improvement website unless you are planning to apply for the initiative. If you are not planning to apply for the initiative, you are welcome to apply for research data through the Research Data Assistance Center using the method described on their website: http://www.resdac.org/Medicare/requesting_data.asp. This request will be processed through the normal channels, distinct and separate from those channels created specifically for potential applicants to the Bundled Payments for Care Improvement initiative.

I am applying to the initiative and would prefer to reuse CMS data that I already have access to from prior research instead of applying for a dataset through the process described on the Bundled Payments website. How do I gain permission to reuse data for this purpose? (October 25, 2011)

If you have already received Medicare data for another research purpose and would like to reuse it to examine structures for bundled payment models and episodes of care in preparation for an application to the Bundled Payments for Care Improvement initiative, you may apply for an amendment to your existing DUA using the process outlined on the website of the Research Data Assistance Center, as follows: http://www.resdac.org/Medicare/requesting_data.asp. This request will be processed through the normal channels, distinct and separate from those channels created specifically for potential applicants to the Bundled Payments for Care Improvement initiative.

I am applying as a convener, and I would like to request data for all of my participating institutions. How do I fill out the Research Request Packet and Data Use Agreement? Does every participating organization need to sign these forms? (October 25, 2011)

If you are applying as a convener and are planning to do centralized data analysis in a standardized fashion for all of your participating organizations, your organization may apply for data with one Research Request Packet and DUA, and without signatures from each of your participating organizations. Please note that we expect the submission of a request for research data on behalf of another organization partnering in your potential application signals awareness of that submission by all parties, and to this end we will be corresponding with all institutions listed on a convener's data application to notify them that data has been requested by the convener in regard to the institution's participation in a potential application by that convener. Please also note that the use of data that is requested and received through this program is governed by the data disclosure conditions described in the Research Request Packet and the use and disclosure limitations in the DUA. If any additional individuals access, receive, or use the data provided without having signed the DUA or DUA signature addendum, the original recipient of data will be found in violation of the DUA.

I am applying for the program and would like a third party to do data analysis on my behalf. Does that entity need to appear in my Research Request Packet and Data Use Agreement? If so, how? (October 25, 2011)

If an entity other than an applicant is planning on conducting data analysis on behalf of that applicant, that entity should appear on the DUA as the custodian of the data, and as the primary user if they are planning to act as such. The applicant organization should fill out the Research Request Packet and DUA, but the custodian will need to either fill out or provide to the applicant information to complete any fields that require responses specific to the custodian, such as the list of key personnel, shipping and contact information, and any data management information necessary. Please note that it is possible to designate the custodian as the party to receive the data, if desired. Both parties, the applicant and the custodian, must appear on both documents and both must sign the DUA. Please also note that the use of data that is requested and received through this program is governed by the data disclosure conditions described in the Research Request Packet and the use and disclosure limitations in the DUA. If any additional individuals access, receive, or use the data provided without having signed the DUA or DUA signature addendum, the original recipient of data will be found in violation of the DUA.

Do I need to fill out Attachment A on the Data Use Agreement? (October 25, 2011)

No, you do not need to fill out Attachment A on the Data Use Agreement. This information is contained within the Research Request Packet.

If I request historical Medicare claims data for Models 2, 3 or 4 by submitting a Research Request Packet, when will I receive the data? If I submit the research request packet prior to the November 4, 2011 deadline, will I receive the data earlier? (September 9, 2011)

We anticipate that all applicants who request data will receive it at approximately the same time, so as to allow all applicants an equal amount of time to prepare their applications. Therefore, submitting the Research Request Packet prior to November 4, 2011 will not expedite receipt of data. We anticipate that all applicants who request data will have approximately two months between receipt of the data and the application deadline.

What are the data specifications of the data I will receive if my Research Request Packet and Data Use Agreement are approved? What does it mean when you say that data extracts will be delivered in CSV format with a SAS program? (October 25, 2011)

The data files will have a .dat extension. They are fixed column ASCII format files. CMS will provide the SAS read-in programs as well as File Transfer Summary (FTS) documents. If you are not using SAS to analyze your data, the FTS document will serve as a layout.

We anticipate more detailed information regarding the data, including a variable listing, will be posted on our website in late November 2011.

The RFA mentions "CY2008 summary data for 18 sample episode definitions that include combinations of acute and post-acute care." Is this extra data that is separate from the LDS files, and how will I access it? Do I need to submit a research request packet to get this information? (September 20, 2011)

The 18 sample episode definitions and summary data supporting them will be made available separately from the LDS files. You do not need to submit a research request packet to have access to the summary data. More information on how to access these data will be available on the Bundled Payments for Care Improvement website by early November.

I requested data as a potential applicant to one or more of Models 2-4, but I have been notified that I did not receive all of the Hospital Referral Clusters (HRCs) that I requested in my Research Request Packet. Why won't I receive all the HRCs that I requested in order to assist in preparing my application for the Bundled Payments for Care Improvement initiative? (January 5, 2012)

Any data requestor who asked for more than one Hospital Referral Cluster was required to specify the percent of their patient population that resides in each cluster (or, in the case of conveners requesting more than one region of data for any one partner institution, the percentage of the patient population that resides in each cluster for each partner institution). In our analysis of these requests, we ensured that every data requestor was able to receive enough data to cover at least 85% of their patient population. For data requestors who specified the HRC of residence for at least 85% of their patient population, enough HRCs were approved to cover at least 85% of their patient population. We selected these approved HRCs from the complete list of requested HRCs in priority order, starting with HRCs that contained the largest percentage of your patient population and continuing in order until at least 85% of the patient population had been covered. **All entities who requested data should receive either a notification of their approved HRCs or an explanation of what documents are still necessary to complete their data request by 1/10/2012. If you have not been contacted regarding your approved HRCs, please do not contact CMS until after 1/10/2012 as we are currently working to get these notifications to you.**

Due to the established policies governing the release of data for research that require us to provide only the minimum data necessary for the task of researching possible structures for bundled payment models and episodes of care, we were not able to provide some requestors with all the HRCs that they requested. We have done our best to ensure that all requestors have data available to them that covers at least 85% of their patient population (or, in the case of conveners requesting more than one region of data for any one partner institution, 85% of the patient population that resides in each cluster for each partner institution).

I submitted a non-binding Letter of Intent (LOI) for Models 2-4 and requested data through a Research Request Packet and Data Use Agreement (DUA). Now, I wish to add additional participating providers from other geographic regions to my application. May I request additional Hospital Referral Clusters so as to analyze data for these new partners? (January 5, 2012)

While additional providers (such as hospitals, post-acute care providers, or physicians) may join the project prior to the submission of the application on March 15, 2012, it will not be possible to submit requests for additional data covering these providers. The deadline for data requests was on November 4, 2011. You are able to add additional provider partners prior to submitting your application, but you are not able to receive data for these potential additional partners.

I work for a hospital that submitted a non-binding Letter of Intent for Models 2-4 and requested data through a Research Request Packet and Data Use Agreement. Now, I wish to add additional participating providers. These additional providers are in the same Hospital Referral Cluster as my hospital. May I analyze the data (which I have already requested) for my own hospital as well as for my new provider partners? (January 5, 2012)

If you would like to analyze data for provider partners that you have added since submitting your Letter of Intent (LOI), you must expressly request that these additional partners be added to your LOI. In order to make this request, you will need to submit the following items to BundledPayments@cms.hhs.gov. Please submit these items in a single, unencrypted email with "Additional Partners for [hospital name] LOI" in the subject line between **1/10/2012 and 1/24/2012**:

- An updated LOI that includes all provider partners (both the original partners and any additional partners that have been added). Be sure to include both CMS Certification Numbers (CCNs), if applicable, and contact information for each partner.
- A letter of consent for each partner that did not appear on your original LOI submission. This letter must identify your organization (the organization requesting the data and originally submitting the LOI) by name, and must indicate approval on behalf of the new partner to be part of the combined data analysis towards application for the Bundled Payments for Care Improvement initiative. The letter of consent must be signed by the President/CEO/Executive Director of the new organization.

Note that **this situation only applies** if the additional partners are located in Hospital Referral Clusters (HRCs) that you have already requested and been approved to receive. You cannot receive additional HRCs based on your new provider partners, and the HRCs you have been approved to receive will not be adjusted based on these additional partners (even if they change the percentage of patients residing in each HRC).

I am a convener who submitted a non-binding Letter of Intent (LOI) for Models 2-4 and requested data through a Research Request Packet and Data Use Agreement. I wish to analyze multiple HRCs of data to determine if there are hospitals or other providers who may wish to join my application. Is this permissible? (January 5, 2012)

No. The use of the data that is requested and received through this program is governed by the data disclosure conditions described in the Research Request Packet and the use and disclosure limitations in the Data Use Agreement. The data may only be analyzed on behalf of those providers who were listed on your original LOI, as submitted by November 4, 2011. While the Limited Data Set (LDS) may include services provided at other institutions, this is to allow you to analyze the care that patients receive after being discharged from the hospital or post-acute provider included on your LOI. You are not permitted to analyze the data so as to constructs episodes of care for provider organizations that were not listed on

your original Data Use Agreement. You are able to add additional provider partners prior to submitting your application, but you are not able to request additional data for those providers, and you are not able to analyze the data you are have already requested on behalf of additional providers unless they have been expressly added to your LOI through the process laid out above.

Resource Link: http://cciio.cms.gov/programs/exchanges/index.html

Affordable Insurance Exchanges

The Affordable Care Act helps create a competitive private health insurance market through the creation of Affordable Insurance Exchanges. These State-based, competitive marketplaces, which launch in 2014, will provide millions of Americans and small businesses with “one-stop shopping” for affordable coverage. They will also provide the sole venue where Members of Congress will get their health insurance.

CCIIO has proposed rules outlining a framework that will enable States to build Affordable Insurance Exchanges. For detailed information about the Exchanges, visit HealthCare.gov.

You can access the proposed rules under “Regulations and Guidance” below.

Additional Resources:

- Regulations & Guidance
- Fact Sheets & FAQs
- Letters & News Releases
- Funding Opportunities
- Requests for Comments
- Training Resources
- Other Resources

Resource Link: http://www.healthcare.gov/law/features/choices/exchanges/index.html

The Health Insurance Marketplace

The Health Insurance Marketplace is designed to make buying health coverage easier and more affordable. Starting in 2014, the Marketplace will allow individuals and small businesses to compare health plans, get answers to questions, find out if they are eligible for tax credits for private insurance or health programs like the Children's Health Insurance Program (CHIP), and enroll in a health plan that meets their needs. Learn more about the Marketplace.

YouTube embedded video: http://www.youtube-nocookie.com/embed/2Rrq8GzWxs8

The Marketplace Can Help You:

- Look for and compare private health plans.
- Get answers to questions about your health coverage options.
- Enroll in a health plan that meets your needs.
- Get a break on costs. Find out if you're eligible for health programs or tax credits that make coverage more affordable.

What This Means for You

- Consumer Checklist: For individuals and families, Marketplace is a single place where you can enroll in private or public health insurance coverage.
- Small Business Checklist: For small businesses, the Marketplace is a way to level the playing field, where you have better choice of plans and insurers at a lower cost, the way larger employers do now.

For More Information

States across the country are working to implement the health care law. States can apply for Exchange Establishment grants through the end of 2014. Learn more about Exchange Establishment grants in your state.

- Find detailed technical and regulatory information on the Marketplace.
- HealthCare Blog: See recent posts about the Marketplace.
- Fact Sheets: Find the latest information on implementation of the Marketplace.
- Learn more about the Marketplace and Essential Health Benefits.

MMRR Medicare & Medicaid Research Review

Contact: MMRR-Editors@cms.hhs.gov

Thursday, January 17, 2012

Home Health Compare Poses Small Impact on Market Area Exit Decisions

According to authors Jung and Feldman, the introduction of Home Health Compare, a public reporting program initiated by Medicare in 2003, had a very small and weak effect on selective exits by home health agencies between 2002 and 2004,. A 10-percent increase in reporting, the equivalent to reporting one more indicator per agency, increased the probability of a home health agency leaving an area with less-educated people by 0.3 percentage points, compared with leaving an area with high education. This small level of market-area exits under public reporting is unlikely to be practically meaningful, suggesting that Home Health Compare did not lead to a disruption in access to home health care through selective exits during the initial year of the program. Read the full paper, “Medication Days’ Supply, Adherence, Wastage, and Cost Among Chronic Patients in Medicaid,” published in Volume 2, Issue 4 of the Medicare & Medicaid Research Review.

Read the full article:

http://www.cms.gov/Research-Statistics-Data-and-Systems/Research/MMRR/Downloads/MMRR2012_002_04_A06.pdf

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Public Reporting and Market Area Exit Decisions by Home Health Agencies

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Objective: To examine whether home health agencies selectively discontinue services to areas with socio-economically disadvantaged people after the introduction of Home Health Compare (HHC), a public reporting program initiated by Medicare in 2003.
Study Design /Methods: We focused on agencies' initial responses to HHC and examined selective market-area exits by agencies between 2002 and 2004. We measured HHC effects by the percentage of quality indicators reported in public HHC data in 2003. Socio-economic status was measured by per capita income and percent college-educated at the market-area level.
Data Source(s): 2002 and 2004 Outcome and Assessment Information Set (OASIS); 2000 US Census file; 2004 Area Resource File; and 2002 Provider of Service File.
Principal Findings: We found a small and weak effect of public reporting on selective exits: a 10-percent increase in reporting (reporting one more indicator) increased the probability of leaving an area with less-educated people by 0.3 percentage points, compared with leaving an area with high education.
Conclusion: The small level of market-area exits under public reporting is unlikely to be practically meaningful, suggesting that HHC did not lead to a disruption in access to home health care through selective exits during the initial year of the program.

Keywords: Public Reporting, Market-area Exits, Selection Incentives, Home Health Care, Home Health Compare
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Introduction

Public reporting of quality information is growing in the U.S. healthcare system. Most states have quality reporting programs for hospitals, and the Centers for Medicare and Medicaid Services (CMS) has initiated public reporting programs for Medicare-participating hospitals, nursing homes, and home health agencies. The rationale behind this approach is compelling. Consumers' uncertainty about quality has long been identified in healthcare (Arrow, 1963). Economic theory suggests that if consumers cannot identify quality differences in products, providers will not invest in quality improvement (Akerlof, 1970). Disclosing relevant information may help consumers choose providers based on quality, which will motivate providers to improve quality. Some also suggest that public reporting, by providing feedback on practices, directly influences providers to change their practices and improve quality (Werner & Asch, 2005). With the expectation that information disclosure is desirable, public reporting programs have been adopted in many healthcare settings.

As public reporting expands, an important concern has been raised that those programs may adversely affect access to care of vulnerable populations. The discussion began with disturbing findings that hospitals turned away high-risk patients after they were required to disclose mortality rates for cardiac procedures (Dranove, Kessler, McClellan, & Satterthwaite, 2003). In addition to incentives to select patients based on health risk, public reporting programs may give providers motives to select patients based on socio-economic status (SES). Providers who serve low-SES people usually lack resources to invest in quality, and thus, they are often categorized as "poor-quality" (Goldman, Vittinghoff, & Dudley, 2007; Werner, Goldman & Dudley, 2008). This implies that those providers may receive little financial or reputational rewards from reporting programs. To avoid this disadvantage, providers may reduce services for socio-economically disadvantaged populations or leave communities with those populations, worsening disparities in access to health care (Casalino & Elster, 2007; Chien, Chin, Davis, & Casalino, 2007).

Selection incentives related to information disclosure have been shown mainly in hospital care. However, public reporting programs are diffusing to home health care, which differs from other types of care in that services are delivered in patients' homes. This unique feature of home health care implies that home health agencies can enter or exit markets at low cost, which leads to dynamic supply changes (Scalzi, Zinn, Guilfoyle, & Perdue, 1994; General Accounting Office, 1999). Bishop, Kerwin, and Wallack (1999) viewed this fluctuation in supply as indicating that agencies do not have the technical capacity to adjust to changes in market conditions. However, Porell, Liu, and Brungo (2006) reported that agencies dropped market areas with greater financial pressure after changes in the payment system. This suggests that the potential for distorted incentives after public reporting in home health care may take the form of selective market-area choices.

We examine whether agencies selectively exited certain market areas after a nation-wide public reporting program, Home Health Compare (HHC), which was initiated by Medicare in 2003. Quality indicators in HHC focus on how well patients perform important activities of independent living in their homes, such as bathing or transferring. These activities can be improved by home health staff's efforts and thus are among the main targets of home health care. However, performance of these activities also depends on patients' use of inputs other than home health services, such as paid help or practicing self-care skills, which are not adequately captured in the current risk-adjustment model (Mor, 2005). The use of other supportive inputs has been shown to depend on patients' incomes (Brega, Jordan, & Schlenker, 2003), and education is positively related to home health outcomes (Miller & Weissert, 2000). Thus, agencies may have incentives to avoid patients who are expected to use fewer supportive services, because they are held accountable for poor outcomes that could be caused by unobserved inputs.

Our study examines whether agencies discontinued service to areas with low-SES patients under HHC. To our knowledge, this is the first study that investigates selection incentives at the market-area level. This is an important issue to address, because it may result in geographic concentration of the adverse impacts of reporting. Because public reporting programs are continuously evolving, our analysis provides information that could be used to refine those programs.

Home Health Compare (HHC)

Home health care is a growing source of post-acute care for the elderly.[1] Medicare home health care spending increased by about 10% annually between 2001 and 2009, and it reached $19.6 billion in 2011 (Medicare Payment Advisory Commission, MedPAC, 2012). The number of Medicare beneficiaries who receive home health services increased at an annual rate of 5.6% between 2002 and 2005 (MedPAC, 2008). As home health care becomes increasingly important, ensuring home health quality is a priority. CMS, thus, developed a patient assessment tool, the Outcome and Assessment Information Set (OASIS), which contains health outcome and risk measures, and has collected data since 1999.

In 2003, CMS introduced HHC, which posts a subset of agencies' risk-adjusted OASIS performance measures on the CMS-HHC Web site.[2] All Medicare-certified agencies are required to report quality scores under HHC; however, agencies with fewer than 20 cases for a specific quality indicator are not required to disclose quality scores for that indicator. Eleven indicators were included in HHC in 2003, and about half of agencies had at least one missing

[1]Medicare covers home health services used for rehabilitation or recovery during a limited time period. Another type of care includes non-medical personal and home-making services. These "home care" services requiring long-term attention are not covered by Medicare unless they are prescribed concurrently with skilled nursing services.

[2]Since July 2011, HHC has used revised risk-adjustment models based on OASIS-C, which adds data items on evidence-based processes. Additional risk factors are likely to improve the predictability of risk-adjustment models; however, the use of other health inputs by patients remains unobserved and unadjusted.

indicator in the public HHC data. We utilized this variation in the extent to which an agency was subject to HHC during the initial year to capture the HHC effect. We constructed the percentage of quality indicators reported ("percent reporting") for each agency, and used this variable to examine the impact of public reporting on selective market-area exits by agencies.

Conceptual Model

Our conceptual model of market-area exits by home health agencies is based on the theory of profit-maximizing firms, which has been used to analyze health care providers' market entry/exit decisions (Halpern, 2005; Cawley, Chernew, & McLaughlin, 2005).

Agency's Profit Function

Most agencies serve multiple market areas; thus, the agency's total profit is the sum of its profits from all market areas. Suppose an agency serves two market areas: one with all high-SES consumers (*H*-area) and another with all low-SES consumers (*L*-area). Denoting the profits in *H* and *L*-areas as π_H and π_L, respectively, the agency's total profit is:

$$\Pi = \pi_{H+}\pi_L \quad (1)$$

Profit in each area is:

$$\pi = (p - c)sN \quad (2)$$

where the Medicare payment for an episode of care (p) is the same across market areas after adjusting for cost differences across markets, c is the average cost per episode, s is the number of episodes for a patient, and N is the number of patients in the area.[3] The last three factors (c, s, and N) vary by area. Using subscripts H and L to represent corresponding areas, the agency's total profit is:

$$\Pi = (p - c_H)s_H N_H + (p - c_L)s_L N_L \quad (3)$$

Agency Quality

The quality of an agency (Q) serving H and L-areas is specified as:

$$Q = \frac{N_H q_H(s_H, X_H) + N_L q_L(s_L, X_L)}{N_H + N_L} \quad (4)$$

Each patient's health outcome (q) depends on home health services (s) and other inputs (X), such as patients' investment in health through using paid-aide services or practicing self-care skills. High-income and more-educated patients are likely to use more of other inputs than low-income/low-education patients, due to greater financial affordability and better information about the health benefits from using them. More-educated patients also may be proficient at practicing self-care skills.

[3]Medicare prospectively pays home health agencies for a 60-day episode. Agencies may have other revenue sources but we focus on Medicare patients because Medicare is the major revenue source (National Center for Health Statistics, 2007).

Agencies' Service Area Choices

Before public reporting, it is hard for patients to evaluate differences in quality across agencies, so we assume that demand for home health services (*N*) are independent of agency quality (*Q*). This implies that there is little linkage between the two areas, assuming limited economies of scale. The decision to drop an area will be based only on the change in profit from dropping that area. Thus, the change in profit from dropping an L-area before reporting is:

$$\Delta\pi^{NR} = -(p - c_L)s_L N_L \quad (5)$$

The agency will drop the L-area if this expression is positive.

After reporting, we assume that high-SES patients respond to the quality reports (N_H is a function of *Q*), an assumption supported by the literature (Abraham, Feldman, Carlin, & Christianson, 2006; Angelelli, Grabowski, & Mor, 2006; Miller & West, 2007). We assume N_L is independent of agency quality after reporting, because the same sources have shown that low-SES consumers are not as responsive to quality information.

The key change is that reporting connects the *H* and *L*-areas in a way that was not present before reporting. Specifically, agency quality depends on health outcomes for *both* types of patients. High-SES patients observe agency quality and are attracted to high quality:

$$N_H = f(Q), f'_Q > 0 \quad (6)$$

But the low scores for patients from the *L*-area drag agency quality down and agencies are held accountable for low quality that is due to unobserved inputs. Thus, *avoiding* patients from the L-area (who are not favorable to *Q*) now affects the agency's profit in an *H*-area by increasing demand in the H-area through improved quality scores. The agency will incorporate the "spillover" effect of dropping an *L*-area on its profit in the *H*-area. Formally, assuming the cost of exit is minimal, the change in profit when the agency exits the *L*-area under reporting is:

$$\Delta\pi^{R} = (p - c_H)s_H \Delta N_H - (p - c_L)s_L N_L \quad (7)$$

To examine the impact of reporting on the likelihood of dropping an *L*-area, we subtract equation (5) from equation (7),

$$\Delta\pi^{R} - \Delta\pi^{NR} = (p - c_H)s_H \Delta N_H \quad (8)$$

This difference in profit changes is positive, because leaving the *L*-area and thus improving quality scores is expected to increase demand in the *H*-area. Therefore, our hypothesis is:

> An agency is more likely to exit an area with a large share of socio-economically disadvantaged people under public reporting, when all else is equal.

Equation (8) indicates that leaving an *L*-area is more likely if the demand increase in an *H*-area (ΔN_H) is greater, when all else is equal. We will examine this differential effect on exiting an *L*-area by the size of the expected demand increase from the agency's remaining service area.

Empirical Specification

Our empirical analysis focuses on agencies' initial responses to HHC by examining market-area exits between 2002 and 2004. Some might consider comparing exit decisions during pre- and post-reporting periods (e.g., 2001–2002 versus 2004–2005), a better approach. However, a pre-post design is not appropriate for our study, because only self-selected (survived) market areas are served during the post-reporting period. Thus, we utilize variation in the degree of public reporting across agencies in 2003 to identify HHC effects. The basic empirical model is:

$$\mathrm{DROP_{ij}} = \alpha + \beta \mathrm{REPO_i} * \mathrm{SES_{ij}} + \gamma \mathrm{X_{ij}} + \mu_s + \varepsilon_{ij} \quad (9)$$

$\mathrm{DROP_{ij}}$ is an indicator that equals one, if the i^{th} agency leaves the j^{th} market area between 2002 and 2004. $\mathrm{REPO_i}$ is the extent to which the agency is subject to public reporting in 2003. $\mathrm{SES_{ij}}$ is a 2002 baseline socio-economic mix of the j^{th} area that the i^{th} agency serves. $\mathrm{X_{ij}}$ is a vector of factors that influence the agency's ability to survive demand/supply shocks between 2002 and 2004, μ_s denotes state fixed effects, and ε_{ij} is a random error term.

The demand increase from dropping a low-SES area is likely to be larger if consumers in the agency's remaining service area have larger responses to quality scores. Thus,

$$\beta = \delta_1 + \delta_2 \mathrm{RMN_{i(-j)}} \quad (10)$$

where $\mathrm{RMN_{i(-j)}}$ is the baseline socio-economic mix in the agency's *remaining* service areas. The constant term, δ_1, represents effects of any unmeasured factors affecting the demand response in the remaining service area. By substituting equation (10) into (9):

$$\mathrm{DROP_{ij}} = \alpha + \delta_1 \mathrm{REPO_i} * \mathrm{SES_{ij}} + \delta_2 \mathrm{REPO_i} * \mathrm{SES_{ij}} * \mathrm{RMN_{i(-j)}} + \gamma \mathrm{X_{ij}} + \mu_s + \varepsilon_{ij} \quad (11)$$

Estimation and Hypothesis Testing

We use a linear probability model (LPM) to estimate equation (11) and obtain bootstrapped standard errors that adjust for clustering within an agency. We chose LPM over a logit model, because LPM lets us include state fixed-effects to control for state-specific environments affecting agencies' market-area exits, which is important, because Medicaid benefits for home health care vary by state. It is also straightforward to interpret interaction terms from LPM, which are the main variables of interest in our study.

Our hypothesis is supported if the coefficients of REPO*SES and/or REPO*SES*RMN are positive. The coefficient of the two-way interaction between REPO and a low-SES area (δ_1) captures the effect of public reporting on exiting the area, when there is no difference in the expected demand gain in other areas across agencies. The coefficient of the three-way interaction among REPO, SES, and RMN (δ_2) tests differential effects of reporting on selective area exits based on characteristics of the agency's remaining service area.

Definition of Market Areas

We define market areas by ZIP Codes, which are the smallest geographic units that indicate the location of home health patients. Under HHC, agency quality is ranked among the agencies serving a ZIP Code.

HHC Effect (REPO)

We measure HHC reporting (REPO) by the percent of quality measures reported in 2003 ("percent reporting"), which reflects exogenous variation in the extent to which agencies were subject to reporting. This approach assumes that agencies with more reported indicators and those with fewer reported indicators would be similar except for the HHC effect. However, because the reporting criterion depends on the number of cases treated, larger agencies tend to report more indicators than smaller agencies. If small and large agencies have different propensities to drop an area, the assumption might not hold. We address this possibility by controlling for agency size, as well as intensity of care and case-mix of an agency, both of which may be correlated with both percent reporting and the decision to exit an area. We measure intensity of care by the number of home health visits per episode, and capture case-mix by the number of eligible HHC indicators per patient.

Moreover, we conduct a sensitivity analysis using only small agencies. If this small-agency analysis shows similar results to the full-sample analysis, it would suggest that percent reporting captures "reporting" effects and that the bias from unobserved agency attributes is small.

We also estimate the model separately by agency profit-status. We expect the HHC effect to be greater among for-profit agencies, whose main objective is financial gains, than not-for-profit agencies. If not-for-profit agencies place more value on serving the community than profits, they may not engage in selective market exits under HHC.

Socio-economic Status (SES)

We measure market-area SES by the percent of the population with a college education and per capita income. Areas are classified as low-education (low-income) if their percentage of college-educated people (per capita income) is below average. We use separate low-income and low-education indicators. While these two variables are correlated, literature suggests they have independent effects on health care use and outcomes (Robert & House, 2000), and omitting one variable will result in biased estimates.

Demand Increase in the Remaining Service Areas (RMN)

We use the socio-economic mix in the agency's remaining service areas to capture consumer responses to quality scores and potential increases in demand in those areas. We aggregate market-level income and education up to the agency level using a weighted average across all the market areas an agency serves, except the area in question. The weights are the shares of the

agency's total patients in each of its remaining service areas. We create a high-SES indicator if the agency's remaining service areas have above-average income and education.

Factors Affecting the Agency's Ability to Survive Shocks

Agencies may drop areas that become unprofitable due to demand or supply shocks. We control for agency and market-area factors that influence the agency's ability to survive shocks. We measure those factors at their 2002 baseline values. Agency-level factors are the number of patients, the number of visits per episode, the number of eligible HHC indicators per patient, the number of full-time-equivalent (FTE) registered nurses (RNs) and aides, profit status, hospital affiliation, Medicare tenure, and percent reporting. Market-level factors are the number of home health care users, nursing facility beds and long-term care (LTC) hospital beds, hospital admission rates, Medicare Part A/B payment rates, distance from the agency to the centroid of the area, market concentration, and SES indicators. To capture market concentration, we use the Herfindahl-Hirschman Index (HHI). Following Kessler and McClellan (2000), we estimate a patient choice model for all agencies within 30 miles from the patient's ZIP Code to obtain predicted probabilities of the patient choosing each agency. We then calculate predicted market shares of agencies in each ZIP Code and obtain the HHI based on those market shares.

Data

The primary data source is OASIS, which records ZIP Codes for all patients served by each agency. We identified all market areas served by each agency in 48 states (excluding Alaska and Hawaii) and DC in 2002 and areas that were no longer served in 2004. We constructed the numbers of patients per agency and home health users in a ZIP Code from the OASIS data.

We limited the sample to ZIP Codes with at least 10 home health users to obtain reliable estimates from the patient choice model. This exclusion removed 12,616 of 35,924 ZIP Codes in the original data. We considered agencies serving at least 10 patients in 2002 as active agencies. Of 6,426 agencies identified from the 2002 OASIS data, 275 agencies were excluded as inactive. We selected market areas with at least three patients from an "active" agency in 2002. This restriction, which reduced the number of agency-market areas from 237,843 to 135,434, helps mitigate a potential problem of miscoding due to sampling variation, because it is possible that an agency served one or two patients from a ZIP Code in 2002 and had no patient from that ZIP Code in 2004, by chance. We excluded 60 agencies that served only one ZIP Code in 2002.

We constructed "percent reporting" from the 2003 HHC. Twenty-seven agencies did not have HHC information. The 2000 U.S. Census file was the source of ZIP Code income and education. The Area Resource File (ARF) provided the information on health care use, cost, and facilities at the county level. We excluded 40 ZIP Codes that did not match with ARF. We obtained information about agency attributes from the 2002 Provider of Service File.

Results

The final data used for analysis comprised 125,747 agency-market area observations from 5,911 agencies that served 22,269 market areas. Exhibit 1 reports descriptive statistics for all variables used in the analysis. Market-area exit rates between 2002 and 2004 were low. On average, agencies dropped 5.3% of their market areas. The average "percent reporting" was 84.9%. About half of agencies reported all HHC measures; 15% of agencies reported less than 50%. The mean number of patients per agency was 596 (standard deviation=1,192).

Exhibit 1. Descriptive statistics for variables used in the analysis

Variables	Mean	Standard Deviation
Agency characteristics (N=5,911)		
Dropping rate (%)	5.3	(12.2)
Percent reporting (%)	84.9	(26.8)
Number of patients	595.7	(1192.2)
Number of nurse or therapy visits per episode	21.0	(7.3)
Number of eligible HHC indicators (per patient)	7.8	(0.7)
Number of RN (FTE)	15.6	(129.4)
Number of nurse aids (FTE)	7.9	(23.0)
Not-for-profit (1/0 indicator)	0.4	(0.5)
Hospital affiliation (1/0 indicator)	0.3	(0.5)
Medicare tenure (year)	14.3	(10.5)
Market-area factors (N=22,269)		
Percent college educated (%)	12.8	(8.2)
Per capita income ($)	20,270	(8,614)
Number of home health care users	155	(203)
Number of hospital admissions (per 1,000)	112.5	(85.2)
Number of LTC facility beds (per 1,000)	0.27	(1.46)
Number of nursing facility beds (per 1,000)	0.81	(2.34)
Medicare Part A/B payment ($)	548.5	(58.7)
Distance to the centroid of an area (mile)	19.5	(27.7)
Predicted Herfindahl index	3,329	(2,589)

SOURCE: Derived from 2002 and 2004 Outcome and Assessment Information System, 2000 U.S. Census file, 2004 Area Resource File, and 2002 Provider of Service file.

Exhibit 2 shows the results from the regression analysis. The two-way interaction between percent reporting and the low-education indicator had a positive effect on market-area exits, meaning that agencies with more reporting were more likely to leave an area with less-educated people, compared to agencies with fewer reported indicators. While this finding suggests that public reporting motivates agencies to exit low-SES areas, the estimated effect was weakly

significant (p=0.08) and small: a 10 percent increase in reporting increased the probability of leaving an area with less-educated people by 0.3 percentage points, compared to leaving an area with high education. This estimate implies that an agency serving 1,000 market areas and having to report one more indicator would exit three to four more low-SES than high-SES market areas. This indicates that public reporting induces only a very small level of selective exits, which is unlikely to be practically meaningful given that the average market exit rate was 5.3% and the average number of market areas served by an agency was about 40.

Exhibit 2. Regression results for the drop model (full-sample analysis)

Variables	Coefficient	Bootstrap Std. Err.	
Interactions between reporting and SES-mix of an area			
Two-way interactions			
Low-education area* percent reporting (REPO)	0.0003	(0.0002)	*
Low-income area*REPO	0.0001	(0.0002)	
Three-way interactions			
Low education*REPO* SES-mix of remaining area	0.0001	(0.0001)	
Low income*REPO* SES-mix of remaining area	0.0001	(0.0001)	
Other factors leading agencies to survive/fail shocks			
Percent reporting (REPO)	-0.0008	(0.0002)	***
Low-education area	-0.0353	(0.0174)	**
Low-income area	-0.0084	(0.0162)	
Number of patients (agency size)	-0.0003	(0.0005)	***
Number of visits per episode (intensity of care)	0.0001	(0.0004)	
Number of eligible HHC indicators (case-mix)	-0.002	(0.004)	
Number of RN (FTE)	0.0001	(0.0000)	
Number of nurse aides (FTE)	-0.0001	(0.0000)	
Not-for-profit agency	-0.016	(0.0063)	**
Hospital-based agency	-0.0125	(0.0039)	***
Medicare tenure of an agency (year)	-0.0002	(0.0002)	
Other factors leading agencies to survive/fail shocks			
Number of home health care users	-0.0037	(0.0005)	***
Number of hospital admissions	0.0001	(0.0000)	***
Number of LTC facility beds	0.0011	(0.0009)	
Number of nursing facility beds	0.0007	(0.0007)	
Medicare Part A/B payment ($)	0.0003	(0.0000)	***
Distance (mile)	0.0019	(0.0003)	***
Predicted Herfindahl index	-0.0003	(0.0001)	***
Constant	-0.0003	(0.0388)	
N	125,747		

*$p < 0.10$; **$p < 0.05$; ***$p < 0.01$

[1]State fixed effects are included in the model; standard errors are adjusted for clustering within an agency.

SOURCE: Authors' estimates from 2002 and 2004 Outcome and Assessment Information System, 2000 U.S. Census file, 2004 Area Resource File, and 2002 Provider of Service file.

The coefficient of the interaction term between percent reporting and the low-income indicator was positive but insignificant. The coefficients of three-way interactions among percent reporting, low-education or low-income area, and the socio-economic mix in the agency's remaining service areas had expected signs, but were insignificant, indicating that public reporting did not have differential effects on selective exits based on agencies' expected demand increases in the remaining areas.

For the factors leading agencies to survive/fail shocks, the coefficient of "percent reporting" was negative. It remained negative when the indicators that interact with the variable were set to either zero or one, implying that agencies with more reporting were less likely to drop an area than agencies with less reporting. This may reflect that agencies with more reporting expected that disclosing their quality scores would increase demand for their services.

The low-education indicator had a negative effect on exiting, which may reflect the finding in the literature that less-educated patients were more likely than more-educated patients to use home health care, due to lack of access to private paid assistance (Solomon et al., 1993).

The results on other variables were consistent with Porell et al.'s study (2006): Large agencies and hospital-based agencies were less likely to drop areas. Agencies were less likely to leave areas with more home health users and hospital admissions, and with less competitive and closer areas.

Sensitivity Analysis

To explore whether "percent reporting" captures unmeasured characteristics of large agencies, we estimated a model using only small agencies. We identified 2,098 agencies that treated fewer than 300 episodes in 2002. The mean number of patients per small agency was 102 (standard deviation=60), far smaller than in the full sample (mean=596; standard deviation=1,192). This substantial decrease in the mean and variation of agency size suggests that the potential bias from unobserved agency attributes is likely to be small in the small-agency analysis.

The average percent reporting among small agencies was 66.8%, compared with 84.9% in the full sample. Twenty percent of small agencies reported all measures, while half reported all measures in the full sample. About 70% of small agencies reported less than 50% of the measures. The average exit rate of 6.7% was higher than in the full sample (5.3%).
The coefficients of selected variables from this analysis are shown in Exhibit 3. The two-way interaction term between low education and percent reporting had a positive and significant coefficient: a 10 percent increase in reporting increased the probability of leaving an area with less-educated people by 0.4 percentage points, compared with leaving an area with highly-educated people. This finding is similar to the full-sample analysis and confirms that public reporting created only small selection incentives based on market-area education.

Consistent with the full-sample analysis, the coefficient of the two-way interaction between low income and percent reporting was not significant. The coefficients of all three-way interaction terms were positive, but insignificant.

Exhibit 3. Selected coefficients from the regression with small agencies

Variables	Coefficient	Bootstrap Std. Err.	
Interactions between reporting and SES-mix of an area			
Two-way interactions			
Low-education area* percent reporting (REPO)	0.0004	(0.0002)	*
Low-income area*REPO	-0.0003	(0.0002)	
Three-way interactions			
Low education*REPO* SES-mix of remaining area	0.0002	(0.0001)	
Low income*REPO* SES-mix of remaining area	0.0000	(0.0001)	
Other factors leading agencies to survive/fail shocks			
Percent reporting (REPO)	-0.0005	(0.0003)	*
Low-education area	-0.0407	(0.0188)	**
Low-income area	0.0165	(0.0183)	
N	15,143		

*$p < 0.10$; **$p < 0.05$; ***$p < 0.01$

[1]State fixed effects are included in the model; standard errors are adjusted for clustering within an agency.

SOURCE: Authors' estimates from 2002 and 2004 Outcome and Assessment Information System, 2000 U.S. Census file, 2004 Area Resource File, and 2002 Provider of Service file.

These findings from the analysis of small agencies suggest that percent reporting captures "reporting" effects on market-area exit decisions and that the estimated effect of percent reporting was not fully driven by unobserved agency characteristics.

Exhibit 4 reports the results on selected variables from separate analysis by agency profit-status. In the analysis of for-profit agencies, the two-way interaction between low education and percent reporting had a positive and significant coefficient, suggesting that for-profit agencies selectively exited market areas with low education after public reporting. The magnitude of the effect was small and similar to the analysis of all agencies. The same two-way interaction term was insignificant in the analysis of not-for-profit agencies, implying that public reporting did not create selection incentives for those agencies that may value serving under-served populations, regardless of financial gains.

Next, we performed a market-level analysis to incorporate market entries in the model. We estimated a model that uses changes in the number of agencies in an area between 2002 and 2004 as the dependent variable. The main independent variable is an indicator representing a market with low-SES. The result from this analysis is consistent with the finding we reported in our primary analysis: the change in the number of agencies is one less in low-SES markets than in markets with high-SES during the study period (Appendix Exhibit A1). This estimate implies one less entry into low-SES markets, because each area had 2.2 more agencies in 2004 than in

2002, on average. The overall growth of the home health industry during this period suggests that selective market-area exits did not create significant access problems in low-SES areas.

Exhibit 4. Selected coefficients from separate analysis by agency profit-status

	For-profit agencies		Not-for-profit agencies	
Variables	Coefficient	Bootstrap Std. Err.[1]	Coefficient	Bootstrap Std. Err.[1]
Reporting & area SES-mix Interactions				
Two-way interactions				
Low-education area* percent reporting (REPO)	0.0004	(0.0002) **	-0.0002	(0.0002)
Low-income area*REPO	-0.0002	(0.0002)	0.0003	(0.0002)
Three-way interactions				
Low education *REPO* SES-mix of remaining area	0.00006	(0.0001)	0.00004	(0.00001)
Low income *REPO* SES-mix of remaining area	0.00002	(0.00001)	0.00007	(0.00007)
Other factors leading agencies to survive/fail shocks				
Percent reporting (REPO)	-0.0007	(0.0002) ***	-0.0002	(0.0002)
Low-education area	-0.0487	(0.0196) **	0.0146	(0.0225)
Low-income area	0.0072	(0.0188)	-0.0329	(0.0247)
N	77,036		48,711	

*$p < 0.10$; **$p < 0.05$; ***$p < 0.01$

[1]SE=Standard Errors; standard errors are adjusted for clustering within an agency; state fixed effects are included in the model.

SOURCE: Authors' estimates from 2002 and 2004 Outcome and Assessment Information System, 2000 U.S. Census file, 2004 Area Resource File, and 2002 Provider of Service file.

However, it should be noted that this estimate does not represent differential entries or exits in low-SES markets that are specifically induced by public reporting. For example, if there was a policy change (e.g., a payment increase for Medicaid home health services) that led agencies to selectively enter low-SES markets, the estimate from the change model captures the effect of that policy change as well as the effect of public reporting.

Further, we explored whether exits from low SES markets were a strategic effort by agencies to raise quality scores. We estimated a model of agencies' quality changes as a function of an indicator for an agency's leaving a low-SES market, agency attributes, and state fixed effects. We also estimated the model replacing the indicator of exiting low-SES markets with the number of low-SES markets dropped by the agency. We found that the coefficients of both variables were positive and significant (results not shown). This indicates that agencies increased quality scores by leaving low-SES markets, supporting our hypothesis.

We also checked whether agencies engaged in patient selection, instead of (or in addition to) market exits. We used different levels of service-area "reduction" as the dependent variable:

25%, 50%, and 75% decreases in the number of patients served by the agency in an area. We found very similar results to the market-exit analysis when the indicator was a 75% decrease (which is closest to market exiting): the coefficient of the interaction term between reporting and low education was 0.0004 ($p=0.07$). The analyses with other indicators of service reduction showed no significant coefficients of interaction terms between reporting and low education, suggesting that selective market-area exits were more likely than patient selection.

Finally, we explored the possibility that agencies serving low-SES markets simply inflate quality scores under public reporting rather than leaving the markets. Coding inflation is possible, because HHC indicators are constructed from assessment data that are coded by aides or nurses. If this were the case, it would imply that quality scores improve more among agencies serving relatively low-SES markets than agencies operating in relatively high-SES markets. We analyzed whether quality changes are a function of SES-mix of the service areas, but found no significant effect of SES-mix on the change in quality scores. This finding suggests that quality changes were not inflated according to the SES-mix of the agency's service areas (results not shown).

Discussion

Agencies with more reporting were slightly more likely than agencies with less reporting to leave low-education areas during the first year of HHC. This effect was significant among for-profit agencies. While significant, the effect was very small and it is unlikely the selective exits under public reporting resulted in disturbances in access to home health care. We found that income does not have independent effects on selective exits under HHC, once education is controlled. This may be because low-income patients are eligible for Medicaid, which covers comprehensive home health services. Brega et al. (2003) showed that Medicaid patients were more likely to receive home health services through other organizations than non-Medicaid patients. If low-income patients covered by Medicaid do not have poor outcomes, agencies should not have incentives to drop low-income areas under HHC.

We also found that public reporting did not have differential effects on selective exits based on agencies' expected demand increases in the remaining areas. This finding may be because the SES-mix variable we used was a poor measure of expected demand increases under HHC. Or, agencies had yet to learn about impacts of exiting on demand increases.

Several limitations of our study should be noted. First, our study is limited to agencies' initial responses to HHC. It is unlikely that agencies fully learned about potential impacts of HHC immediately following the introduction of the program. Long-term effects of HHC may be different. Second, the number of agencies participating in Medicare increased during the study period. The growing demand for home health care may have contributed to the small effect we found. Third, agencies may have engaged in patient selection without exiting market areas. Our sensitivity analysis indicated that market-area selection was more likely than patient selection;

however, we cannot capture changes in the composition of patients served between the two years. Fourth, the variables we used to measure public reporting or potential demand increases may not have captured those factors, contributing to the small effects.

Our primary analysis focused on market-area exits, because the concern related to public reporting is that agencies will leave low-SES areas. However, we conducted a sensitivity analysis that incorporates market entries in the model. The results from both analyses were consistent, indicating a very small level of selection based on SES-mix of the market that is unlikely to lead to access problems during the initial year of HHC.

While small, the significant effect was consistently found in several sensitivity analyses, suggesting that home health agencies respond rationally to changes in incentives, consistent with Porell et al.'s (2006) study, and that public reporting may create undesirable motives for agencies to drop areas with underserved populations. This is an important issue that should be further examined, particularly given that incentive-based payment schemes, such as pay for performance (P4P), could bring similar consequences. P4P is rapidly expanding and is planned for home health care. Future research is needed to assess whether agencies strategically choose areas to enter/exit in a long term after public reporting or incentive-based quality improvement programs.

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References

Abraham, J. M., Feldman, R., Carlin, C., & Christianson, J. (2006). The effect of quality information on consumer health plan switching: evidence from the Buyers Health Care Action Group. *Journal of Health Economics*, *25*(4), 762–781. PubMed http://dx.doi.org/10.1016/j.jhealeco.2005.11.004

Akerlof, G. A. (1970). The Market for 'Lemons': Quality Uncertainty and the Market Mechanism. *The Quarterly Journal of Economics*, *84*(3), 488–500. http://dx.doi.org/10.2307/1879431

Angelelli, J., Grabowski, D. C., & Mor, V. (2006). Effect of educational level and minority status on nursing home choice after hospital discharge. *American Journal of Public Health*, *96*(7), 1249–1253. PubMed http://dx.doi.org/10.2105/AJPH.2005.062224

Arrow, K. J. (1963). Uncertainty in health care markets. *The American Economic Review*, *53*(5), 941–973.

Bishop, C. E., Kerwin, J., & Wallack, S. (1999). The Medicare home health benefit: implications of recent payment changes. *Care Management Journals*, *1*(3), 189–196. PubMed

Brega, A. G., Jordan, A. K., & Schlenker, R. E. (2003). Practice variations in home health care. *Home Health Care Services Quarterly*, *22*(3), 41–64. PubMed http://dx.doi.org/10.1300/J027v22n03_03

Casalino, L. P., & Elster, A., Eisenberg, A., Lewis, E., Montgomery, J., Ramos, D. (2007). Will pay-for-performance and quality reporting affect health care disparities? *Health Affairs*, *26*(3), w405–w414. PubMed http://dx.doi.org/10.1377/hlthaff.26.3.w405

Cawley, J., Chernew, M., & McLaughlin, C. (2005). HMO Participation in Medicare+Choice. *Journal of Economics & Management Strategy*, *14*(3), 543–574. http://dx.doi.org/10.1111/j.1530-9134.2005.00073.x

Chien, A. T., Chin, M. H., Davis, A. M., & Casalino, L. P. (2007). Pay for performance, public reporting, and racial disparities in health care: how are programs being designed? *Medical Care Research and Review*, *64*(5 Supp.), 283S–304S. PubMed http://dx.doi.org/10.1177/1077558707305426

Dranove, D., Kessler, D., McClellan, M., & Satterthwaite, M. (2003). Is More Information Better? The effects of report cards on health care providers. *The Journal of Political Economy*, *111*(3), 555–588. http://dx.doi.org/10.1086/374180

General Accounting Office (1999). *Report to Congressional Requesters: Medicare Home Health Agencies* Retrieved from http://www.gao.gov/archive/1999/he99120.pdf

Goldman, L. E., Vittinghoff, E., & Dudley, R. A. (2007). Quality of care in hospitals with a high percent of Medicaid patients. *Medical Care*, *45*(6), 579–583. PubMed http://dx.doi.org/10.1097/MLR.0b013e318041f723

Halpern, R. (2005). M+C plan county exit decisions 1999–2001. *Health Care Financing*

Review, *26*(3), 105–123. PubMed

Kessler, D., & McClellan, M. (2000). Is hospital competition socially wasteful? *The Quarterly Journal of Economics*, *115*(2), 577–615. http://dx.doi.org/10.1162/003355300554863

Medicare Payment Advisory Commission MedPAC (2008). *Report to the Congress: Medicare payment policy.* Retrieved from www.medpac.gov/documents/mar08_entirereport.pdf

Medicare Payment Advisory Commission MedPAC (2012). A databook: Health care spending and the Medicare program. Retrieved from http://www.medpac.gov/documents/Jun12DataBookEntireReport.pdf

Miller, E. A., & Weissert, W. (2000). Predicting elderly people's risk for nursing home placement, hospitalization, functional impairment, and mortality: a synthesis. *Medical Care Research and Review*, *57*(3), 259–297. PubMed http://dx.doi.org/10.1177/107755870005700301

Miller, E. A., & West, D. M. (2007). Characteristics associated with use of public and private web sites as sources of health care information. *Medical Care*, *45*(3), 245–251. PubMed http://dx.doi.org/10.1097/01.mlr.0000244509.60556.49

Mor, V. (2005). Improving the quality of long-term care with better information. *The Milbank Quarterly*, *83*(3), 333–364. PubMed http://dx.doi.org/10.1111/j.1468-0009.2005.00405.x

National Center for Health Statistics (2007). *National Home and Hospice Care Survey.* Retrieved from http://www.cdc.gov/nchs/nhhcs.htm

Porell, F. W., Liu, K., & Brungo, D. P. (2006). Agency and market area factors affecting home health agency supply changes. *Health Services Research*, *41*(5), 1847–1875. PubMed http://dx.doi.org/10.1111/j.1475-6773.2006.00561.x

Robert, S. A., & House, J. S. (2000). Socioeconomic Inequalities in Health: An Enduring Sociological Problem. In Bird, E. (Ed), *Handbook of Medical Sociology* (pp.79–97). New Jersey: Prentice Hall.

Scalzi, C. C., Zinn, J. S., Guilfoyle, M. J., & Perdue, S. T. (1994). Medicare-certified home health services: national and regional supply in the 1980s. *American Journal of Public Health*, *84*(10), 1646–1648. PubMed http://dx.doi.org/10.2105/AJPH.84.10.1646

Solomon, D. H., Wagner, R., Marenberg, M. E., Acampora, D., Cooney, L. M., & Inouye, S. K. (1993). Predictors of formal home health care use in elderly patients after hospitalization. *Journal of the American Geriatrics Society*, *41*(9), 961–966. PubMed

Werner, R. M., & Asch, D. A. (2005). The unintended consequences of publicly reporting quality information. *Journal of the American Medical Association*, *293*(10), 1239–1244. PubMed http://dx.doi.org/10.1001/jama.293.10.1239

Werner, R. M., Goldman, L. E., & Dudley, R. A. (2008). Comparison of change in quality of care between safety-net and non-safety-net hospitals. *Journal of the American Medical Association*, *299*(18), 2180–2187. PubMed http://dx.doi.org/10.1001/jama.299.18.2180

Appendix

Exhibit A1. Regression results from a market-level analysis

Dependent variable: Changes in the number of agencies in a market between 2002 and 2004			
Explanatory variables	Coefficient	Robust Std. Err.	
Socioeconomic status (SES)-mix of an area			
Low-SES indicator	-1.0521	(0.4994)	**
Other factors leading agencies to survive/fail shocks			
Number of home health care users	0.5579	(0.2057)	***
Number of therapy or nurse visit per episode	0.0483	(0.0633)	
Number of hospital admissions	-0.0019	(0.0013)	
Number of LTC facility beds	-0.0463	(0.0280)	
Number of nursing facility beds	-0.0921	(0.0664)	
Medicare Part A/B payment ($)	0.0339	(0.0129)	**
Distance (mile)	-0.0107	(0.0062)	*
Predicted Herfindahl index	-0.0107	(0.0124)	**
Constant	-16.163	(7.6998)	
N	22,391		

*$p < 0.10$; **$p < 0.05$; ***$p < 0.01$

Note: 1) State fixed effects are included in the model; 2) Standard errors are adjusted for clustering at the state level; 3) Other factors leading agencies to survive/fail shocks are measured at their 2002 baseline values.

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