

### Supplement 3: Characteristics of included studies

Focus of study	Study characteristics	Sample description	Key features of the intervention(s)
<p>Compared a commercial Alternative Quality Contract (AQC) to a traditional fee-for-service Medicare model (1)</p> <p><i>ACO model:</i> AQC</p>	<p><i>Publication date:</i> 2013</p> <p><i>Jurisdictions studied:</i> U.S.</p> <p><i>Study period:</i> 2007-2010</p> <p><i>Methods used:</i> Quasi-experimental comparisons of patient data</p>	<ul style="list-style-type: none"> <li>• Data was collected from Medicare claims from 2007 to 2010 in Massachusetts.</li> <li>• The study sampled elderly fee-for-service Medicare beneficiaries in Massachusetts (equivalent to 1,761,325 person-years) served by 11 provider organizations entering an AQC in 2009 or 2010.</li> <li>• The AQC group was comprised of 417,182 person-years and the control group consisted of beneficiaries served by traditional providers, which was comprised of 1,344,143 person-years.</li> </ul>	<p>The intervention group was comprised of the elderly adult beneficiaries of 11 provider organization (comprised of groups of three or more primary care physicians) entering into a commercial AQC.</p>
<p>Compared a Pioneer ACO model to a traditional fee-for-service Medicare model (2)</p> <p><i>ACO model:</i> Pioneer</p>	<p><i>Publication date:</i> 2015</p> <p><i>Jurisdictions studied:</i> U.S.</p> <p><i>Study period:</i> 2012 &amp; 2013</p> <p><i>Methods used:</i> Difference-in-differences multivariable regression</p>	<ul style="list-style-type: none"> <li>• Data were collected from national Medicare claims for 2012 and 2013</li> <li>• The study sampled fee-for-service Medicare beneficiaries aligned with 32 Pioneer ACOs (675,712 in 2012; 806,258 in 2013) and a comparison group of alignment-eligible beneficiaries in the same markets (13,203,694 in 2012; 12,134,154 in 2013) across the U.S.</li> <li>• Data was also used from consumer assessment of healthcare providers and systems surveys for 775 randomly selected beneficiaries per accountable care organization compared to traditional Medicare recipient respondents.</li> </ul>	<p>The intervention group was comprised of all the beneficiaries covered under the 32 Pioneer ACOs.</p>
<p>Evaluated “patient and family activation and engagement” (PAE) among ACOs (3)</p> <p><i>ACO model:</i> All those included under “the universe of ACOs”</p>	<p><i>Publication date:</i> 2015</p> <p><i>Jurisdictions studied:</i> U.S.</p> <p><i>Study period:</i> 2012 &amp; 2013</p> <p><i>Methods used:</i> Mixed survey, phone interviews, and site visits</p>	<ul style="list-style-type: none"> <li>• The study sampled ACOs which ranged in size from 15 to 2,100 full time employed physicians with a mean of 227 full time employed physicians (standard deviation = 311) for the following research methods: <ol style="list-style-type: none"> <li>1. Web-based survey: National Survey of ACOs, 173 completed.</li> <li>2. Patient Activation and Engagement Survey, 101 completed.</li> <li>3. Phone interviews: 11 sites selected from 173 completed national survey of ACOs.</li> </ol> </li> </ul>	<p>The intervention group was comprised of all the beneficiaries covered under the 32 Pioneer ACOs.</p>

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		4. Site-visits: Two-day site visits. Two sites selected from the 101 completed patient activation and engagement surveys.	
<p>Compared the spending of 32 Pioneer ACOs to a traditional Medicare model (4)</p> <p><i>ACO model:</i> Pioneer</p>	<p><i>Publication date:</i> 2015</p> <p><i>Jurisdictions studied:</i> U.S.</p> <p><i>Study period:</i> Pre-intervention 2009-2011 and post-intervention 2012</p> <p><i>Methods used:</i> Difference-in-differences analysis with linear regression</p>	<ul style="list-style-type: none"> <li>• Data was collected from national Medicare claims from 2009 through 2012 for a random 20% sample of Medicare claims (14,876,933 beneficiary years from 2009 through 2011 and 5,043,581 beneficiary years in 2012)</li> <li>• The sample was further divided between a control group comprised of traditional beneficiaries (14,310,523 in 2009-2011/4,841,937 in 2012), and enrollees of Pioneer ACOs (566,410 in 2009-2011 and 201,644 in 2012) beneficiary years.</li> </ul>	<p>The intervention group was comprised of all the beneficiaries covered under the 32 Pioneer ACOs.</p>
<p>Compared a pediatric ACO to Medicaid fee-for-service and managed care (5)</p> <p><i>ACO model:</i> Partners for Kids (PFK) pediatric ACO</p>	<p><i>Publication date:</i> 2015</p> <p><i>Jurisdictions studied:</i> U.S.</p> <p><i>Study period:</i> 2008-2013</p> <p><i>Methods used:</i> Observational study of costs before/after intervention (control)</p>	<ul style="list-style-type: none"> <li>• Data was collected from pediatric Medicaid claims at one site serving 300,000 low-income children in central and southeastern Ohio, U.S., and were compared to statewide Medicaid fee-for-service (FFS) and managed care (MC) cost histories.</li> </ul>	<p>The intervention group was comprised of beneficiaries covered under Partners for Kids (PFK), an exclusively pediatric ACO which serves Medicaid enrollees aged 0 to 18 years.</p>
<p>Compared the use of low-value services in Pioneer ACOs to traditional Medicare claims (6)</p> <p><i>ACO model:</i> Pioneer</p>	<p><i>Publication date:</i> 2015</p> <p><i>Jurisdictions studied:</i> U.S.</p> <p><i>Study period:</i> Pre-intervention 2009-2011 and post-intervention 2012</p> <p><i>Methods used:</i> Difference-in-differences analysis</p>	<ul style="list-style-type: none"> <li>• Data was collected from a national random sample of 20% of Medicaid claims from 2009-2012.</li> <li>• Data was collected from clients of 32 Pioneer ACOs that totaled 693,218 person years compared to 17,453,423 in the traditional Medicare control group.</li> </ul>	<p>The intervention group was comprised of all the beneficiaries covered under the 32 Pioneer ACOs.</p>
<p>Compared the patient experience of ACO</p>	<p><i>Publication date:</i> 2014</p>	<ul style="list-style-type: none"> <li>• Data for this study came from annual consumer assessment of healthcare providers and systems survey,</li> </ul>	<p>The study used comparison groups</p>

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beneficiaries to a control group of traditional Medicare (7)  <i>ACO model:</i> Pioneer and Medicare Shared Savings Plan (MSSP).	<i>Jurisdictions studied:</i> U.S.  <i>Study period:</i> 2009-2013  <i>Methods used:</i> Before/after intervention (control)	and linked Medicare claims, administered nationally to a representative, cross-sectional sample of traditional fee-for-service Medicare beneficiaries.  <ul style="list-style-type: none"> <li>Data from 32,334 beneficiaries enrolled in ACOs was compared to 251,593 beneficiaries in a control group of traditional Medicare.</li> </ul>	comprised of the two dominant ACO models. Group 1 was comprised of all the beneficiaries covered under the 32 Pioneer ACOs. Group 2 was comprised of 219 ACOs entering the MSSP between 2012-2013. Both were compared to a traditional control.
Compared the effect on spending and quality in an Alternative Quality Contract (AQC) to traditional Medicare fee-for-service (8)  <i>ACO model:</i> AQC	<i>Publication date:</i> 2014  <i>Jurisdictions studied:</i> U.S.  <i>Study period:</i> 2006-2009  <i>Methods used:</i> Before/after intervention (control)	<ul style="list-style-type: none"> <li>Data was collected from Blue Cross Blue Shield of Massachusetts recipients.</li> <li>The intervention group consisted of four cohorts of AQC enrolled organizations that were defined by their first contract year: 2009 (490,167), 2010 (177,312) 2011 (97,754), and 2012 (583,002) compared to a control group of 966,813 traditional Medicare enrollees.</li> </ul>	The intervention group was comprised of beneficiaries of Blue Cross Blue Shield of Massachusetts whose physician provider organizations entered into an AQC from 2009-2012.
The study compared utilization of cardiovascular care before and after the Physician Group Practice (PGP) demonstration was implemented to examine both discretionary and non-discretionary carotid and coronary imaging and procedures (9)  <i>ACO model:</i> PGP	<i>Publication date:</i> 2014  <i>Jurisdictions studied:</i> U.S.  <i>Study period:</i> Pre-intervention 2002-2004 and post-intervention 2005-2009  <i>Methods used:</i> Difference-in-difference with matched controls	<ul style="list-style-type: none"> <li>Data was collected from Medicare administrative fee-for-service claims data from 2001-2010.</li> <li>The study sample was comprised of an intervention group receiving care from 10 physician groups participating in a Medicare pilot ACO project (819,779) and similar traditional Medicare patients (934,621 patients) from the same regions.</li> </ul>	The intervention group was comprised of the beneficiaries from 10 physician groups participating in the PGP demonstration pilot.
Compared the effect on	<i>Publication date:</i> 2012	<ul style="list-style-type: none"> <li>Data was collected from Blue Cross Blue Shield of</li> </ul>	The intervention group

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<p>spending and quality two years into a five-year Alternative Quality Contract (AQC), compared to a traditional fee-for-service Medicare group (10)</p> <p><i>ACO model:</i> AQC</p>	<p><i>Jurisdictions studied:</i> U.S.</p> <p><i>Study period:</i> 2006-2010</p> <p><i>Methods used:</i> Before/after intervention (quasi-experimental)</p>	<p>Massachusetts enrollees from January 2006 through December 2010 who were continuously enrolled for at least one calendar year.</p> <ul style="list-style-type: none"> <li>The sample includes a cohort of 428,892 enrollees covered under an AQC and 1,339,798 covered under traditional Medicare.</li> </ul>	<p>was comprised of beneficiaries of Blue Cross Blue Shield of Massachusetts aligned with seven physician provider organizations entered into an AQC in 2009.</p>
<p>Compared the difference in spending between an Alternative Quality Contract (AQC) to a traditional fee-for-service Medicare group (11)</p> <p><i>ACO model:</i> AQC</p>	<p><i>Publication date:</i> 2011</p> <p><i>Jurisdictions studied:</i> U.S.</p> <p><i>Study period:</i> 2006-2009</p> <p><i>Methods used:</i> Before/after intervention (quasi-experimental)</p>	<ul style="list-style-type: none"> <li>Data was collected from Blue Cross Blue Shield of Massachusetts enrollees from January 2006 through December 2009.</li> <li>The study sample was comprised of 1,634,514 Medicare beneficiaries with 380,142 subjects in the AQC group and 1,351,446 subjects in the tradition Medicare control group.</li> </ul>	<p>The intervention group was comprised of beneficiaries of Blue Cross Blue Shield of Massachusetts aligned with seven physician provider organizations entered into an AQC in 2009.</p>
<p>Estimated cost savings between a Medicare Physician Group Practice Demonstration (PGP) and traditional Medicare beneficiaries from the same regions (12)</p> <p><i>ACO model:</i> PGP</p>	<p><i>Publication date:</i> 2012</p> <p><i>Jurisdictions studied:</i> U.S.</p> <p><i>Study period:</i> Pre-intervention 2001-2004 and post-intervention 2005-2009</p> <p><i>Methods used:</i> Quasi-experimental analyses comparing pre-intervention and post-intervention trends</p>	<ul style="list-style-type: none"> <li>Data was collected from Medicare records from across the U.S.</li> <li>The study sample consisted of 990,177 enrolled in a Medicare PGP and 7,514,453 traditional Medicare beneficiaries from the same regions. Within the sample 15% were eligible for both Medicare and Medicaid.</li> </ul>	<p>The intervention group was comprised of the beneficiaries from 10 PGPs in the demonstration pilot.</p>
<p>Estimated changes between beneficiaries enrolled in the Medicare Physician</p>	<p><i>Publication date:</i> 2013</p> <p><i>Jurisdictions studied:</i> U.S.</p>	<ul style="list-style-type: none"> <li>Data was collected from Medicare fee-for-service claims data from 2001 to 2009.</li> <li>An intervention cohort consisted of data for beneficiaries from 10 PGP demonstration sites, and</li> </ul>	<p>The intervention group was comprised of the beneficiaries from 10 physician groups</p>

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<p>Group Practice (PGP) demonstration and traditional Medicare funded care (13)</p> <p><i>ACO model:</i> Medicare PGP model.</p>	<p><i>Study period:</i> Pre-intervention 2001-2004 and post-intervention 2005-2009.</p> <p><i>Methods used:</i> Difference-in-difference with regression analysis</p>	<p>compared with traditional Medicare beneficiaries residing in the same counties as the intervention group members.</p> <ul style="list-style-type: none"> <li>• The sample was further refined to individuals with at least one inpatient claim with a cancer diagnosis, or two physician visits at least a week apart with a specific cancer diagnosis based on Chronic Conditions Warehouse software, but omitting skin cancer. The analytic sample had 988,781 person years.</li> </ul>	<p>participating in the PGP demonstration pilot, with a focus on beneficiaries receiving cancer care.</p>
<p>Examined ACO characteristics and competencies, facilities, health information technology, monitoring and reporting infrastructure, and mortality and costs for the Medicare population (14)</p> <p><i>ACO model:</i> Pioneer model and Advance Payment ACO model.</p>	<p><i>Publication date:</i> 2015</p> <p><i>Jurisdictions studied:</i> U.S.</p> <p><i>Study period:</i> 2006-2009</p> <p><i>Methods used:</i> Panel study design, retrospective</p>	<ul style="list-style-type: none"> <li>• Data was collected from multiple national and Florida databases (Medicare, inpatient hospital discharge, vital statistics, the American Hospital Association, the Healthcare Information and Management Systems Society, etc.).</li> <li>• Panel data was assembled (2006-2009) based on inpatient hospital discharge, vital statistics, the American Hospital Association, the Healthcare Information and Management Systems Society, and other databases.</li> </ul>	<p>The intervention group was comprised of Centers for Medicare &amp; Medicaid Services sponsored ACOs in Florida, including Pioneer ACOs and advance payment ACO models.</p>
<p>Compared the quality between ACOs and physician group practice models (15)</p> <p><i>ACO model:</i> ACOs (including Pioneer and Medicare Shared Savings Plan (MSSP)) compared to a physician group</p>	<p><i>Publication date:</i> 2015</p> <p><i>Jurisdictions studied:</i> U.S.</p> <p><i>Study period:</i></p> <p><i>Methods used:</i> Retrospective, statistical analysis</p>	<ul style="list-style-type: none"> <li>• Data was collected from the Medicare physician compare website made available by the Centers for Medicare &amp; Medicaid Services.</li> <li>• Data for 2012 are available for the 146 shared savings program and pioneer ACOs that participated, compared to 66 independent physician group practices.</li> </ul>	<p>The intervention group was comprised of Centers for Medicare &amp; Medicaid Services sponsored ACOs (MSSP and Pioneer ACO) compared to a traditional physician group practice model which has not enrolled in the ACO program, but has attempted to improve</p>

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practice not participating in an ACO program.			quality and reduce costs along similar indicators.
Examined the impact of the Medicare Physician Group Practice Demonstration (PGP) on expenditure, utilization and quality outcomes (16)  <i>ACO model:</i> PGP	<i>Publication date:</i> 2014 <i>Jurisdictions studied:</i> U.S. <i>Study period:</i> Pre-intervention 2001-2004 and post-intervention 2005-2010.  <i>Methods used:</i> Pre-post comparison group observational design	<ul style="list-style-type: none"> <li>Data was collected from 3,355,467 Medicare claims from 2001-2010 for 1,776,387 person years assigned to 10 participating provider organizations enrolled in a PGP demonstration, and 1,579,080 person years in the corresponding local comparison groups.</li> </ul>	The intervention group was comprised of the beneficiaries from 10 physician groups participating in the PGP demonstration.
Explored incentivizing primary care in a Pioneer ACO.(17)  <i>ACO model:</i> Pioneer	<i>Publication date:</i> 2015 <i>Jurisdictions studied:</i> U.S. <i>Study period:</i> 2012 & 2013  <i>Methods used:</i> Interview, survey	<ul style="list-style-type: none"> <li>Data was collected through two waves of a web-based survey and interviews with primary-care providers working in a Pioneer ACO in Minneapolis, Minnesota.</li> <li>One survey was conducted in 2012 and included 157 respondents (55% response rate), while the second was conducted in 2013 had 150 respondents (56% response rate), and a “panel” comprised of 85 who responded to both surveys.</li> <li>Interviews were conducted with 48 primary care physicians six-month post intervention and interviews one-year post intervention with 30.</li> </ul>	The intervention group was comprised of all the beneficiaries covered by a Pioneer ACO located in Minnesota with 44 primary care clinics, seven hospitals, and multiple specialty clinics located in urban and rural sites, with an average panel size of approximately 12,000 patients.
Compared three commercial ACOs to comparison groups in their regions for outcomes related to total medical costs and a quality of care index (18)	<i>Publication date:</i> 2012 <i>Jurisdictions studied:</i> U.S. <i>Study period:</i> 2009-2010  <i>Methods used:</i> Retrospective claims data were used to calculate the effects of an	<ul style="list-style-type: none"> <li>Data was collected from Cigna ACOs initiatives in three sites: <ul style="list-style-type: none"> <li>New Hampshire, 1,018 physicians providing care to 16,654 patients;</li> <li>Arizona, 158 physicians serving 14,575 patients; and</li> <li>Texas, 141 primary-care physicians and 8,753 patients with a comparison group in each market</li> </ul> </li> </ul>	The intervention group was comprised of all the beneficiaries covered by a commercial ACO model characterized by the use of registered nurses who serve as care coordinators employed by participating practices.

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<i>ACO model:</i> Cigna commercial ACO	intervention (comparison)		
<p>Compared the 32 Pioneer ACOs costs to traditional Medicare spending between 2011 and 2012 (19)</p> <p><i>ACO model:</i> Pioneer</p>	<p><i>Publication date:</i> 2013</p> <p><i>Jurisdictions studied:</i> U.S.</p> <p><i>Study period:</i> Market data from 2009-2010 and claims data from 2011-2012.</p> <p><i>Methods used:</i> Quasi-experimental comparisons of patient data and qualitative interviews</p>	<ul style="list-style-type: none"> <li>Data was collected in the form of monthly Medicare claims records for 2011 and 2012 in the CMS Chronic Condition Warehouse, and market level data from 2009 and 2010, and through interviews with participants affiliated with the target ACO. Specific details about the samples are not provided.</li> </ul>	The intervention group was comprised of all the beneficiaries covered under the 32 Pioneer ACOs.
<p>Compared the 32 Pioneer ACOs costs to traditional Medicare spending in the years 2012 and 2013 (20)</p> <p><i>ACO model:</i> Pioneer</p>	<p><i>Publication date:</i> 2015</p> <p><i>Jurisdictions studied:</i> U.S.</p> <p><i>Study period:</i> 2012-2013</p> <p><i>Methods used:</i> Difference-in-differences design/quasi-experimental comparisons of patient data, semi-structured quarterly assessment interviews, site visits, and focus groups</p>	<ul style="list-style-type: none"> <li>Data was collected in the form of Medicare claims records for 32 Pioneer ACOs (total pooled beneficiary months of 7,851,613 in 2012 and 9,349,724 in 2013), from the CMS Chronic Condition Warehouse and through Consumer Assessment of Healthcare Providers and Systems (CAHPS) results from 2012 and 2013.</li> <li>Sixty ACOs participated in the quarterly assessment interviews. The evaluation team interviewed three national commercial payers and two regional commercial payers.</li> <li>The focus groups were comprised of 22 ACO leaders.</li> </ul>	The intervention group was comprised of all the beneficiaries covered under the 32 Pioneer ACOs.
<p>Examined the extent to which the implementation of an Alternative Quality Contract (AQC) model improved pediatric care quality (21)</p> <p><i>ACO model:</i> AQC</p>	<p><i>Publication date:</i> 2015</p> <p><i>Jurisdictions studied:</i> U.S.</p> <p><i>Study period:</i> 2009-2010</p> <p><i>Methods used:</i> Retrospective cross-sectional study</p>	<ul style="list-style-type: none"> <li>Data was collected from Blue Cross Blue Shield of Massachusetts affiliated hospitals using the Massachusetts' Health Quality Partners 2011 provider database and the American Hospital Association's 2009 annual survey database, and through semi-structured interviews with 22 leaders of 12 ACOs that participated in an Alternative Quality Contract in 2009 or 2010.</li> </ul>	The intervention group was comprised of adult-oriented ACOs, which entered into an AQC which were incentivized to increase their capacity to provide pediatric care.

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Examined the effects of joining an ACO on the quality of care provided by primary care physicians (22)  <i>ACO model:</i> Not specified	<i>Jurisdiction studied:</i> U.S.  <i>Study period:</i> 2014  <i>Methods used:</i> Semi-structured interviews	<ul style="list-style-type: none"> <li>• Data was collected through semi-structured interviews with 32 purposively selected respondents (10 from the North-East; nine in the South; six in the West; and seven in the MidWest)</li> <li>• The respondents included: 19 practicing primary care physicians; 10 ACO executives; and three private health plan executives who administered ACO contracts. Among the 22 respondents who either practiced within or were executives of ACOs, nine were in hospital-led ACO and 13 were in physician-led ACO.</li> </ul>	The intervention group comprised of 32 selected individuals from across the U.S. who have been involved with the delivery of primary care through ACOs, either as primary-care physicians, ACO executives, or contract administrators.
Effectiveness of ACO's in improving the management of patients with co-morbid mental and physical health conditions (23)  <i>ACO model:</i> Pioneer and MSSP	<i>Jurisdiction studied:</i> U.S.  <i>Study period:</i> 2008 to 2013  <i>Methods used:</i> Difference-in-differences analysis	<ul style="list-style-type: none"> <li>• Data was collected from a random sample of 20% of Medicare claims and enrollment data for the period of 2008 to 2013</li> </ul>	The intervention group comprised of a 20% random sample of individuals enrolled in either a Pioneer or MSSP ACO from the years 2008 to 2013.
Factors that promote high-performance in the Medicare Shared Savings Program (24)  <i>ACO model:</i> MSSP	<i>Jurisdiction studied:</i> U.S.  <i>Study period:</i> 2012-13  <i>Methods:</i> Mixed methods (semi-structured interviews and data analysis of select key documents)	<ul style="list-style-type: none"> <li>• Data was collected from a convenience sample of 16 ACO's</li> <li>• Six were chosen for qualitative data collection based on: 1) performance on measures of avoidable costs and quality of care; 2) geographic diversity; and 3) performance in a systematic assessment of ACO performance conducted in 2013</li> </ul>	The intervention group comprised of a convenience sample of six MSSP ACOs.
Assessing ACO performance among ethnic minority patients (25)	<i>Jurisdiction studied:</i> U.S.  <i>Study period:</i> 2012-15  <i>Methods:</i> Cross-sectional and	<ul style="list-style-type: none"> <li>• Data was collected from the Centers for Medicare and Medicaid Services on the performance of ACOs on 33 quality metrics and two disease composite measures</li> <li>• Additional information was used from the National Survey of Accountable Care Organizations</li> </ul>	The intervention group comprised of all MSSP ACOs during the first and second years of their contracts.



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<i>ACO model:</i> MSSP	longitudinal analysis		
Assess the early performance of MSSP ACOs (26)  <i>ACO model:</i> MSSP	<i>Jurisdictions studied:</i> U.S.  <i>Study period:</i> 2008-13  <i>Methods:</i> Quasi-experimental design	<ul style="list-style-type: none"> <li>Data was collected from a random 20% sample of fee-for-service beneficiaries from Medicare enrolment data from 2008 through 2013</li> </ul>	The intervention group comprised of a random 20% sample of MSSP ACOs that were continuously enrolled between 2009 and 2013.
Examine the relationship between patient outcomes and patient centeredness in two MSSP ACO's (27)  <i>ACO model:</i> MSSP	<i>Jurisdictions studied:</i> 2017  <i>Study period:</i> 2014  <i>Methods:</i> Observational study	<ul style="list-style-type: none"> <li>Data was collected from 2176 patients with diabetes and/or cardiovascular disease who also met the study eligibility criteria and received care in 2014 and completed a patient activation and patient-report outcomes of care survey</li> <li>As well as from 411 primary care team members from 16 randomly selected practices in two large ACO's completed surveys and were included.</li> </ul>	The intervention group comprised of patients with diabetes and/or cardiovascular disease who received care in 2014 at one of 16 randomly selected practices that are part of two large ACOs.
Effects of Pioneer ACO's on Medicare Part D spending and utilization (28)  <i>ACO model:</i> Pioneer or MSSP	<i>Jurisdictions studied:</i> U.S.  <i>Study period:</i> 2009-10  <i>Methods:</i> Difference-in-differences analysis	<ul style="list-style-type: none"> <li>Data was collected from 316,366 beneficiaries who were aligned with 23 ACOs in 2012, continuously enrolled in fee-for-service Medicare parts A,B, and D for 12-months in 2011 and 2012</li> <li>Data was also collected from 599,241 ACO-eligible beneficiaries who were not attributed to any Medicare ACOs, had 12-months of fee-for-service coverage under Medicare part A, B and D in 2012 and 2011</li> </ul>	The intervention group was comprised of beneficiaries aligned with Pioneer ACOs in 2012.
Reports on how emergency departments support ACO goals (29)  <i>ACO model:</i> not specified	<i>Publication date:</i> 2017  <i>Jurisdictions studied:</i> U.S. (Massachusetts)  <i>Study period:</i> Not specified	<ul style="list-style-type: none"> <li>A survey was emailed to emergency department directors at 70 Massachusetts hospitals</li> <li>A response was of 47% (33 hospitals) was obtained. 79% of respondents (26 hospitals) reported involvement in an ACO.</li> </ul>	Not applicable

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	<i>Methods used:</i> Survey		
<p>Compared whether MSSP hospitals discharge patients to higher-quality nursing homes than non-ACO hospitals (30)</p> <p><i>ACO model:</i> Medicare Shared Savings Program</p>	<p><i>Publication date:</i> 2018</p> <p><i>Jurisdictions studied:</i> U.S.</p> <p><i>Study period:</i> 2010-2013</p> <p><i>Methods used:</i> Difference-in-differences using linear probabilities</p>	<ul style="list-style-type: none"> <li>• Data were collected from MEDPAR files for Medicare recipients from 2010-2013</li> <li>• The study included all fee-for-service Medicare recipients discharged from acute care hospitals to skilled nursing facilities from 2010-2013. This comprised 12,736,287 discharges, of which 11.8% were from MSSP hospitals</li> </ul>	<p>The intervention group comprised Medicare recipients, discharged from an MSSP hospital to a skilled nursing facility</p>
<p>Reported barriers and facilitators to implementing behavioural health integration, and compared quality, utilization, and expenditure for individuals with behavioural health conditions enrolled and not enrolled in an ACO (31)</p> <p><i>ACO model:</i> ACOs in states receiving Round 1 State Innovation Models funding</p>	<p><i>Publication date:</i> 2019</p> <p><i>Jurisdictions studied:</i> U.S. (Maine, Vermont, Minnesota)</p> <p><i>Study period:</i> 2014-2018</p> <p><i>Methods used:</i> mixed methods; thematic analysis of interviews, focus group, and documents; difference-in-differences design using logistic and ordinary least squares regression with propensity weights</p>	<ul style="list-style-type: none"> <li>• Data for quantitative studies were collected from Medicaid claims, enrollment data, and managed care encounters for two years preceding ACO implementation and 2-4 years after (with variation across states). Sample was restricted to Medicaid beneficiaries who had one inpatient admission, or two outpatient visits, with behavioural health as the primary diagnosis in the 12 months prior to being attributed to the ACO or comparator group: 35%, on ACO enrollees in Maine, 22% in Minnesota, and 31% in Vermont were therefore included in the study</li> <li>• Data for qualitative studies were collected from 469 key informant interviews comprising 180 interviews with state officials, 54 with purchasers, 115 with providers and provider associations, 45 with consumer advocacy groups, and 75 other interviews; provider focus groups; documentary analysis of state reports, operational plans, evaluations, and other documents</li> </ul>	<p>The intervention group was comprised of beneficiaries covered under ACOs in three states that used State Innovation Models funding to integrate behavioural health and primary care.</p>
<p>Compared prostate cancer treatment, overtreatment and costs before and after implementing MSSP</p>	<p><i>Publication date:</i> 2018</p> <p><i>Jurisdictions studied:</i> U.S.</p> <p><i>Study period:</i> 2010-2013</p>	<ul style="list-style-type: none"> <li>• Data were collected from a 20% sample of national Medicare claims from 2010-2013.</li> <li>• The study included Medicare fee-for-service beneficiaries aged 66 and older who were diagnosed with prostate cancer. 33,011 individuals with newly diagnosed</li> </ul>	<p>The intervention group comprised ACO beneficiaries with newly diagnosed prostate cancer.</p>

Focus of study	Study characteristics	Sample description	Key features of the intervention(s)
(32) <i>ACO model:</i> Medicare Shared Savings Program	<i>Methods used:</i> Difference-in-differences logistic regression	prostate cancer were included. 5,065 of these were ACO beneficiaries.	
Compared antidepressant use and adherence among Medicare fee-for-service beneficiaries, ACO beneficiaries, and a control group (33)  <i>ACO model:</i> Pioneer and Medicare Shared Savings Program	<i>Publication date:</i> 2017 <i>Jurisdictions studied:</i> U.S. <i>Study period:</i> 2009-2013  <i>Methods used:</i> Difference-in-difference linear regression	<ul style="list-style-type: none"> <li>• Data were collected from a 20% sample of national Medicare claims from 2009-2013.</li> <li>• The study included individuals with a depression diagnosis linked to one or more inpatient claims, or two or more outpatient claims, in the prior or concurrent year</li> <li>•</li> </ul>	The intervention group comprised individuals with depression who were beneficiaries of a Pioneer or MSSP ACO.
Compared preventable admissions and readmissions in ACO and non-ACO hospitals (34)  <i>ACO model:</i> Pioneer and Medicare Shared Savings Program	<i>Publication date:</i> 2018 <i>Jurisdictions studied:</i> U.S. (17 states) <i>Study period:</i> 2010-2013  <i>Methods used:</i> Difference-in-difference analysis using propensity score matching	<ul style="list-style-type: none"> <li>• The study included all general hospitals in 17 states from 2010-2013. Data were collected from Medicare claims for preventable admissions, and 30-day readmissions for beneficiaries over 65 years of age in 17 states from 2010-2013.</li> </ul>	The intervention group was comprised of 103 hospitals participating in Pioneer or MSSP ACOs.
Compares discretionary post-acute spending before and after ACO implementation (35)  <i>ACO model:</i> Pioneer and Medicare Shared Savings Program	<i>Publication date:</i> 2019 <i>Jurisdictions studied:</i> U.S. <i>Study period:</i> 2009-2014  <i>Methods used:</i> Difference-in-differences using multinomial,	<ul style="list-style-type: none"> <li>• Data were collected from Medpar files from 2009-2014</li> <li>• The study included community-dwelling Medicare beneficiaries who were hospitalized for hip fracture (N=763,069), stroke (N= N=762,272), or pneumonia (N= 1,090,393). 24.6% of sampled individuals were attributed to an ACO.</li> <li>•</li> </ul>	The intervention group comprised ACO-attributed Medicare recipients hospitalized for hip fracture, stroke, or pneumonia.

Focus of study	Study characteristics	Sample description	Key features of the intervention(s)
	linear, and logistic regression		
Compares patient experiences in ACO and non-ACO hospitals (36)  <i>ACO model:</i> Pioneer and Shared Savings Programs	<i>Publication date:</i> 2019 <i>Jurisdictions studied:</i> U.S. <i>Study period:</i> 2010-2015 <i>Methods used:</i>	<ul style="list-style-type: none"> <li>• Secondary data were collected from the Hospital Consumer Assessment of Healthcare Providers and Systems survey, American Hospital Association Annual Survey of Hospitals, the 2013 AHA Survey of Care Systems and Payment</li> <li>• The study included all hospitals in the Hospital Compare program, amounting to a total of 3,462 hospitals with 20,772 hospital-year observations</li> </ul>	The intervention group comprised 122 hospitals that were part of Pioneer ACOs and 495 hospitals that were part of SSP ACOs.
Compared maternal and neonatal outcomes and costs in states with and without ACOs (37)  <i>ACO model:</i> Medicaid ACOs operating in New Jersey, Oregon, and Colorado	<i>Publication date:</i> 2019 <i>Jurisdictions studied:</i> U.S. (New Jersey, Oregon, Colorado, New Mexico, New York, Washington) <i>Study period:</i> 2008-2015 <i>Methods used:</i> Difference-in-differences regression analysis	<ul style="list-style-type: none"> <li>• The study included three states with ACOs (New Jersey, Oregon, Colorado) and three geographically proximal comparison states (New Mexico, New York, Washington)</li> <li>• Medicaid-covered neonatal and maternal hospital discharge data for each state were collected from the Healthcare Cost and Utilization project from 2008-2015. In ACO states, 19,697 discharges were included in New Jersey, 145,922 in Oregon, and 176,360 in Colorado. In comparison states, 94,493 discharges were included in New Mexico, 566,351 in New York, and 218,373 in Washington.</li> <li>•</li> </ul>	The intervention group comprised three states that have implemented ACOs.
Compares costs per visit before and after ACO implementation in Rural Health Clinics (38)  <i>ACO model:</i> Medicare Shared Savings Program	<i>Publication date:</i> 2018 <i>Jurisdictions studied:</i> U.S. <i>Study period:</i> 2007-2013 <i>Methods used:</i> propensity score matching	<ul style="list-style-type: none"> <li>• Data were collected from the Medicare Cost Report, the CMS Chronic Condition Data Warehouse, and the Area Health Resource File from 2007-2013</li> <li>• The study included clinics certified as Rural Health Clinics from 2007-2013 in 8 states. 821 non-ACO RHCs and 20 ACO RHCs were included.</li> <li>•</li> </ul>	The intervention group comprised 20 RHCs that joined an ACO in 2012 or 2013.
Compares prostate cancer treatment and spending between	<i>Publication date:</i> 2017 <i>Jurisdictions studied:</i> U.S.	<ul style="list-style-type: none"> <li>• Data were collected from a 20% national sample of fee-for-service Medicare claims</li> <li>• The study included individuals newly diagnosed with</li> </ul>	The intervention group comprised 1,100 individuals with newly

Focus of study	Study characteristics	Sample description	Key features of the intervention(s)
ACO and non-ACO practices (39)  <i>ACO model:</i> Shared Savings Program	<i>Study period:</i> 2012-2013  <i>Methods used:</i> generalized linear multivariable models	prostate cancer in 2012-2013 (N=15,640). 1,100 of these individuals were attributed to an ACO.	diagnosed prostate cancer who were attributed to an SSP ACO.
Compares patient experience, preventive care, and expenditures for non-elderly Americans with ACO and non-ACO usual sources of care (40)  <i>ACO model:</i> any ACO arrangement with Medicare or private insurers	<i>Publication date:</i> 2018  <i>Jurisdictions studied:</i> U.S.  <i>Study period:</i> 2015  <i>Methods used:</i> cross-sectional analysis using multivariate linear and logistic regression, logit models, gamma distribution with log link	<ul style="list-style-type: none"> <li>• Data were collecting by linked the 2015 Medical Organizations Survey with the Medical Expenditure Panel Survey</li> <li>• The study included survey participants aged 18-64 with an identified usual source of care and continuous health insurance in 2015. 988 ACO-attributed and 575 non-ACO attributed individuals were included.</li> </ul>	The intervention group comprised 988 non-elderly adults cared for by ACO providers.
To determine whether ACO participation is associated with care transition management, and whether electronic health record functionality mediates this relationship (41)  <i>ACO model:</i> Not specified.	<i>Publication date:</i> 2017  <i>Jurisdictions studied:</i> U.S.  <i>Study period:</i> 2012-2013  <i>Methods used:</i> multivariate linear regression of survey data	<ul style="list-style-type: none"> <li>• Data were collected from the third wave of the National Study of Physician Organizations, conducted in 2012-2013. The survey used a stratified random sample of physician organizations, and achieved a 50% response rate. 1,398 practices participated, 19.3% of which participated in an ACO.</li> </ul>	The intervention group comprised physician organizations that reported participating in an ACO.
Compares total performance score granted under Medicare's Value-Based Purchasing Program for five hospital groups (42)	<i>Publication date:</i> 2019  <i>Jurisdictions studied:</i> U.S.  <i>Study period:</i> 2015-2016  <i>Methods used:</i> multilevel	<ul style="list-style-type: none"> <li>• Data were collected from the Medicare Value-Based Purchasing Program</li> <li>• The study included all hospitals with data for both 2015 and 2016, for a total of 2985 hospitals. Hospitals were divided into six groups: physician-owned surgical hospitals, Kaiser hospitals, University HealthSystem Consortium hospitals, Pioneer Accountable Care</li> </ul>	This study six different types of hospital, including Pioneer ACO hospitals. 121 Pioneer ACO hospitals were included in the study.

Focus of study	Study characteristics	Sample description	Key features of the intervention(s)
<i>ACO model:</i> Pioneer	random coefficient regression model	Organization hospitals, US News and World Report Honor Roll hospitals, and other hospitals. 121 of these hospitals were Pioneer ACO hospitals.	
Compares palliative care use for ischemic stroke patients discharged from ACO and non-ACO hospitals (43)  <i>ACO model:</i> Medicare Shared Savings Program	<i>Publication date:</i> 2019  <i>Jurisdictions studied:</i> U.S.  <i>Study period:</i> 2010-2014  <i>Methods used:</i> Difference-in-differences	<ul style="list-style-type: none"> <li>• Data were collected from linking Medicare claims for 2010-2015, with 2010-2014 data from the national Get With the Guidelines Stroke Registry</li> <li>• The study included 324 959 patients aged 65 and older with an inpatient admission and diagnosis of ischemic stroke</li> </ul>	The study considered both hospital and beneficiary ACO alignment.
Compares end-of-life cancer care for patients attributed and not attributed to an ACO (44)  <i>ACO model:</i> Medicare Shared Savings Program	<i>Publication date:</i> 2019  <i>Jurisdictions studied:</i> U.S.  <i>Study period:</i> 2012-2014  <i>Methods used:</i> propensity score models	<ul style="list-style-type: none"> <li>• Data were collected from Medicare claims from 1012-2014 for fee-for-service beneficiaries in 21 hospital referral regions</li> <li>• The study included individuals aged 66 and older who died in 2013 or 2014 and who had at least one inpatient or two outpatient visits with a diagnosis of cancer in the year before death. Propensity matching was used to generate 9033 matched pairs of ACO and non-ACO patients.</li> </ul>	The intervention group comprised 9033 elderly individuals with cancer who died in 2013 or 2014 and who received care from an MSSP ACO.
To compare hospital readmission rates between hospitals participating in an ACO and hospitals not participating in an ACO (45)  <i>ACO model:</i> Medicare Shared Savings Program	<i>Publication date:</i> 2018  <i>Jurisdictions studied:</i> U.S.  <i>Study period:</i> 2008-2016  <i>Methods used:</i> Difference-in-difference regression analysis	<ul style="list-style-type: none"> <li>• Data on cause-specific and all-cause hospital readmissions were collected from the Centres for Medicare and Medicaid Services Hospital Compare</li> <li>• The study included non-rural hospitals that joined MSSP in 2012-2013, and non-rural hospitals not participating in any ACO</li> </ul>	The intervention group comprised hospitals participating in the MSSP program.
Compared cancer spending and service	<i>Publication date:</i> 2018	<ul style="list-style-type: none"> <li>• Data were collected from Medicare claims from a 20% national random sample of Medicare beneficiaries aged</li> </ul>	The intervention group comprised cancer patients

Focus of study	Study characteristics	Sample description	Key features of the intervention(s)
utilization for ACO and non-ACO beneficiaries (46)  <i>ACO model:</i> Medicare Shared Savings program	<i>Jurisdictions studied:</i> U.S.  <i>Study period:</i> 2011-2015  <i>Methods used:</i> Difference-in-differences linear regression	65 and older <ul style="list-style-type: none"> <li>The study included 388,784 ACO beneficiaries with cancer, and 233,296 non-ACO beneficiaries from propensity-matched practices</li> </ul>	aged 65 and older who were enrolled in an MSSP ACO.
Compared end-of-life cancer spending in ACO and non-ACO practices (47)  <i>ACO model:</i> Medicare Shared Savings program	<i>Publication date:</i> 2019  <i>Jurisdictions studied:</i> U.S.  <i>Study period:</i> 2011-2015  <i>Methods used:</i> Difference-in-differences linear regression	<ul style="list-style-type: none"> <li>Data were collected from Medicare claims from a 20% national random sample of Medicare beneficiaries</li> <li>The study included cancer patients aged 65 and older who died in 2012 (pre-ACO period) and 2015 (post-ACO). 12,248 ACO beneficiaries were sampled, and matched to 12,248 non-ACO beneficiaries.</li> <li></li> </ul>	The intervention group comprised end-of-life cancer patients aged 65 and older who were enrolled in an MSSP ACO.
To describe how cultural change occurs within private sector organizations transitioning to an ACO model (48)  <i>ACO model:</i> private sector ACO	<i>Publication date:</i> 2018  <i>Jurisdictions studied:</i> U.S.  <i>Study period:</i>  <i>Methods used:</i> Grounded theory analysis of semi-structured interviews	<ul style="list-style-type: none"> <li>Four private sector ACO sites were purposively selected to capture a range of features</li> <li>Across the four sites, 148 semi-structured interviews were conducted with 89 key informants including executives, managers, and clinicians</li> </ul>	Not applicable
To compare cost savings between ACO and non-ACO providers, and between hospital-integrated and physician group ACOs (49)  <i>ACO model:</i> MSSP	<i>Publication date:</i> 2018  <i>Jurisdictions studied:</i> U.S.  <i>Study period:</i> 2009-2015  <i>Methods used:</i> Difference-in-difference	<ul style="list-style-type: none"> <li>Data were collected from Medicare claims and enrollment data from 2009-2015.</li> <li>The study used a 20% random sample of Medicare beneficiaries who were continuously enrolled for one year prior to and after ACO implementation</li> </ul>	The intervention group comprised beneficiaries of MSSP ACOs.
Compared use of and	<i>Publication date:</i> 2017	<ul style="list-style-type: none"> <li>Data were collected from Medicare claims for a random</li> </ul>	The intervention group

Focus of study	Study characteristics	Sample description	Key features of the intervention(s)
<p>adherence to medications for cardiovascular disease and diabetes between ACO and non-ACO attributed patients (50)</p> <p><i>ACO model:</i> Medicare Shared Savings Program</p>	<p><i>Jurisdictions studied:</i> U.S.</p> <p><i>Study period:</i> 2009-2014</p> <p><i>Methods used:</i> Difference-in-differences linear regression</p>	<p>20% sample of Medicare beneficiaries for each year from 2009 to 2014</p> <ul style="list-style-type: none"> <li>• The study included patients with diabetic or cardiovascular conditions that would indicate the use of one of six classes of hypoglycemic, anti-hypertensive, or lipid-lowering medications. For each drug class, between 4.5 million and 10 million person-years were available for analysis. Across years a mean of 24.8% of patients in the sample were attributed to ACOs.</li> <li>•</li> </ul>	<p>comprised ACO-attributed patients with diabetes or cardiovascular disease.</p>
<p>Compared rates of recommended and non-recommended cancer screening in ACO beneficiaries and traditional Medicare beneficiaries (51)</p> <p><i>ACO model:</i> Not specified</p>	<p><i>Publication date:</i> 2017</p> <p><i>Jurisdictions studied:</i> U.S.</p> <p><i>Study period:</i> 2013</p> <p><i>Methods used:</i> Chi-square with propensity-weighting</p>	<ul style="list-style-type: none"> <li>• Data were collected from a random 20% sample of 2013 Medicare beneficiaries</li> <li>• The study included patients over the age of 65, excluding those who received a mammogram, breast cancer diagnosis, or prostate cancer diagnosis in 2012. 526,085 non-ACO and 52,975 ACO patients were eligible for breast cancer screening; 814,235 non-ACO and 87,119 ACO patients were eligible for prostate cancer screening.</li> <li>•</li> </ul>	<p>The intervention group comprised 52,975 ACO-attributed patients eligible for breast cancer screening, and 87,119 ACO patients eligible for prostate cancer screening.</p>
<p>Assessed whether hospitals participating in an ACO are associated with reduced post-acute care for all admitted patients (ie. whether reductions in post-acute care for ACO-attributed patients spill over to non-ACO attributed patients at hospitals participating in an ACO) (52)</p>	<p><i>Publication date:</i> 2018</p> <p><i>Jurisdictions studied:</i> U.S.</p> <p><i>Study period:</i> 2010-2013</p> <p><i>Methods used:</i> Difference-in-differences with linear probability models.</p>	<ul style="list-style-type: none"> <li>• Data were collected from Medicare claims for hospital discharge and post-acute care use between 2010 and 2013</li> <li>• The study included all acute care hospitals and Medicare-certified post-acute care providers that served Medicare beneficiaries. 233 ACO hospitals and 3103 non-ACO hospitals were included.</li> <li>• Claims data were analyzed for patients over the age of 65 discharged to skilled nursing facilities, inpatient rehabilitation, home health agencies, or other disposition excluding hospice care, discharge against medical advice, or discharge to prosthesis fitting. 26,503,086 discharges were analyzed.</li> </ul>	<p>The intervention group comprised hospitals participating in MSSP. In this study, disposition data for all patients—including those attributed to an ACO and those not attributed to an ACO—were considered, with hospital rather than patient ACO participation considered the intervention.</p>



Focus of study	Study characteristics	Sample description	Key features of the intervention(s)
<i>ACO model:</i> Medicare Shared Savings Program			
<p>To compare projected cost savings from different ACO models and different quality levels (53)</p> <p><i>ACO model:</i> Pioneer and Medicare Shared Savings Program</p>	<p><i>Publication date:</i> 2018</p> <p><i>Jurisdictions studied:</i> U.S.</p> <p><i>Study period:</i> 2012-2013 with 10 year cost-saving projections</p> <p><i>Methods used:</i> cost-minimization analysis using Markov modelling and Monte Carlo simulations</p>	<ul style="list-style-type: none"> <li>• Data regarding expenditure, number of beneficiaries, and quality were collected from Centre for Medicare and Medicaid Services files for 2012-2013.</li> <li>• 32 Pioneer ACOs and 220 MSSP ACOs were included at baseline. Sampling strategy is not clear.</li> </ul>	<p>Two different categories of intervention were included. The first was ACO model, either Pioneer or MSSP. The second was quality, assessed using a composite score based on four domains (patient and caregiver experience, care coordination and patient safety, preventive health, and at-risk populations) and then categorized as low, medium, or high overall quality.</p>
<p>To determine if physician ACO participation has spillover effects for commercially insured patients (54)</p> <p><i>ACO model:</i> any Centre for Medicare and Medicaid Services ACO</p>	<p><i>Publication date:</i> 2019</p> <p><i>Jurisdictions studied:</i> U.S. (Michigan)</p> <p><i>Study period:</i> 2010-2015</p> <p><i>Methods used:</i> Difference-in-differences</p>	<ul style="list-style-type: none"> <li>• Data were collected the Michigan Value Collaborative, which includes claims data from Blue Cross Blue Shield of Michigan beneficiaries who experience a major clinical event eg. labour and delivery, acute myocardial infarction</li> <li>• The study included beneficiaries between the ages of 18 and 65. 4,750 patients were included who were seen by a provider who participated in an ACO, and 137,883 patients were included whose providers did not participate in an ACO</li> </ul>	<p>The intervention group comprised commercially insured patients of ACO-participating providers.</p>
<p>Compares cancer screening in ACO and non-ACO patients (55)</p> <p><i>ACO model:</i> Medicare Shared Savings</p>	<p><i>Publication date:</i> 2018</p> <p><i>Jurisdictions studied:</i> U.S.</p> <p><i>Study period:</i> 2006-2014</p> <p><i>Methods used:</i> Difference-in-</p>	<ul style="list-style-type: none"> <li>• Data were collected from Medicare claims data for all ACO enrollees and a 20% random sample of non-ACO enrollees</li> <li>• The study included individuals aged 65 years and older. 56,470,997 person-years of observation were included, with 13,460,768 person-years for ACO beneficiaries and</li> </ul>	<p>The intervention group comprised individuals aged 65+ who were attributed to an MSSP ACO.</p>

Focus of study	Study characteristics	Sample description	Key features of the intervention(s)
Program	differences with linear regression	43,010,199 person-years for non-ACO beneficiaries.	
Compares appropriateness of cancer screening in ACO and non-ACO patients (56)  <i>ACO model:</i> Medicare Shared Savings Program	<i>Publication date:</i> 2018  <i>Jurisdictions studied:</i> U.S.  <i>Study period:</i> 2006-2013 <i>Methods used:</i> Difference-in-differences with linear regression	<ul style="list-style-type: none"> <li>Data were collected from Medicare claims from 2006-2013 for a 20% random sample of beneficiaries</li> <li>The study included beneficiaries aged 65 and older</li> </ul>	The intervention group comprised Medicare beneficiaries aged 65+ enrolled in an MSSP ACO
Assessed whether participating in voluntary reforms including ACOs is associated with improvements under the Hospital Readmission Reduction Program (57)  <i>ACO model:</i> Pioneer and Medicare Shared Savings Program	<i>Publication date:</i> 2017  <i>Jurisdictions studied:</i> U.S.  <i>Study period:</i> 2008-2015 <i>Methods used:</i> interrupted time series	<ul style="list-style-type: none"> <li>Hospital-level readmission data were collected for all acute-care hospitals in the U.S. excluding children's hospitals, critical access hospitals, and those without complete data for the study period. Data were collected from the Hospital Compare website.</li> <li>2837 hospitals were included in the study. 18.3% of these were participating in an ACO in 2015.</li> </ul>	This study considered the interaction between three types of voluntary reforms—ACOs, Meaningful Use, and Bundled Payment for Care Initiative—with the Hospital Readmission Reduction program.
Compares early and late cardiovascular disease spending for ACO and non-ACO Medicare beneficiaries (58)  <i>ACO model:</i> Pioneer and Shared Savings Program	<i>Publication date:</i>  <i>Jurisdictions studied:</i> U.S.  <i>Study period:</i> 2010-2014 <i>Methods used:</i> Interrupted time series with longitudinal multivariate fixed effects regression	<ul style="list-style-type: none"> <li>Data were collected from Medicare claims and enrollment information for a random 20% national sample of beneficiaries. Individuals aged 65 and older who were admitted to an acute care hospital for acute myocardial infarction or congestive heart failure between 2010 and 2014 were included.</li> <li>The study included 54800 acute myocardial infarction patients who were admitted to non-ACO hospitals, and 17984 who were admitted to ACO hospitals. It further included 94048 congestive heart failure patients who were admitted to non-ACO hospitals, and 28376 who</li> </ul>	The intervention group included myocardial infarction and congestive heart failure patients admitted to acute care hospitals participating in a Shared Savings Program or Pioneer ACO.

Focus of study	Study characteristics	Sample description	Key features of the intervention(s)
		were admitted to ACO hospitals. •	
Characteristics of public and commercial ACO contracts (59)  <i>ACO model:</i> Public and commercial ACOs	<i>Publication date:</i> 2014  <i>Jurisdictions studied:</i> U.S.  <i>Study period:</i> 2012  <i>Methods used:</i> Cross-sectional analysis of survey results	<ul style="list-style-type: none"> <li>• Most ACOs had only one contract, with half holding a contract with a private provider</li> <li>• The most common private contract was a an up-side shared savings, though most ACOs held some degree of down-side risk</li> <li>• The majority of contracts made shared savings contingent on meeting quality standards, with some including additional bonuses if select metrics are met.</li> </ul>	The intervention group included both public and commercial ACOs in the U.S. who completed the National Survey of Accountable Care Organizations in 2012.

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