APPENDIX A: SEARCH STRINGS

Embase.com: 1215

((((Value* OR variable OR performance OR explicit OR outcome OR quality OR readmission OR mortality OR complication OR coordination OR efficien* OR effectiveness* OR efficac* OR cost-conscious* OR well-coordinat* OR innovat* OR prevent*) NEAR/6 (based OR program* OR evaluat* OR assess* OR model* OR initiative* OR connect*) NEAR/6 (Payment* OR incentive* OR remuner* OR fee OR fees OR reward* OR reimburs* OR financing OR funding OR budget OR capitat* OR bonus OR contract OR contracts OR contracting OR contracted OR spending))):ab,ti) AND ('physician'/exp OR 'medical specialist'/exp OR 'hospital'/de OR 'general hospital'/de OR 'community hospital'/de OR 'geriatric hospital'/de OR 'mental hospital'/exp OR 'pediatric hospital'/de OR 'private hospital'/de OR 'public hospital'/de OR (physician* OR practitioner* OR doctor* OR ((health-care OR healthcare) NEAR/3 provider*) OR hospital* OR clinic OR clinics):ab,ti) NOT ([Conference Abstract]/lim OR [Letter]/lim OR [Note]/lim OR [Editorial]/lim) AND ([english]/lim OR [dutch]/lim) AND [2000-2017]/py

Medline Ovid: 1403

("Value-Based Purchasing"/ OR "Value-Based Insurance"/ OR (((Value* OR variable OR performance OR explicit OR outcome OR quality OR readmission OR mortality OR complication OR coordination OR efficien* OR effectiveness* OR efficac* OR cost-conscious* OR well-coordinat* OR innovat* OR prevent*) ADJ6 (based OR program* OR evaluat* OR assess* OR model* OR initiative* OR connect*) ADJ6 (Payment* OR incentive* OR remuner* OR fee OR fees OR reward* OR reimburs* OR financing OR funding OR budget OR capitat*

OR bonus OR contract OR contracts OR contracting OR contracted OR spending))).ab,ti,kf.) AND (exp "Physicians"/ OR "Specialization"/ OR "hospitals"/ OR "Hospitals, General"/ OR "Hospitals, Community"/ OR "Hospitals, Psychiatric"/ OR "Hospitals, Pediatric"/ OR "Hospitals, Private"/ OR "Hospitals, Public"/ OR (physician* OR practitioner* OR doctor* OR ((health-care OR healthcare) ADJ3 provider*) OR hospital* OR clinic OR clinics).ab,ti,kf.) NOT ((letter OR news OR comment OR editorial OR congresses OR abstracts).pt.) AND (english.la. OR dutch.la.) AND (2000 OR 2001 OR 2002 OR 2003 OR 2004 OR 2005 OR 2006 OR 2007 OR 2008 OR 2009 OR 2010 OR 2011 OR 2012 OR 2013 OR 2014 OR 2015 OR 2016 OR 2017).yr

Cochrane central: 103

((((Value* OR variable OR performance OR explicit OR outcome OR quality OR readmission OR mortality OR complication OR coordination OR efficien* OR effectiveness* OR efficac* OR cost-conscious* OR well-coordinat* OR innovat* OR prevent*) NEAR/6 (based OR program* OR evaluat* OR assess* OR model* OR initiative* OR connect*) NEAR/6 (Payment* OR incentive* OR remuner* OR fee OR fees OR reward* OR reimburs* OR financing OR funding OR budget OR capitat* OR bonus OR contract OR contracts OR contracting OR contracted OR spending))):ab,ti) AND ((physician* OR practitioner* OR doctor* OR ((health-care OR healthcare) NEAR/3 provider*) OR hospital* OR clinic OR clinics):ab,ti)

Web of science: 1160

TS=(((((Value* OR variable OR performance OR explicit OR outcome OR quality OR readmission OR mortality OR complication OR coordination OR efficien* OR effectiveness*

OR efficac* OR cost-conscious* OR well-coordinat* OR innovat* OR prevent*) NEAR/5 (based OR program* OR evaluat* OR assess* OR model* OR initiative* OR connect*) NEAR/5 (Payment* OR incentive* OR remuner* OR fee OR fees OR reward* OR reimburs* OR financing OR funding OR budget OR capitat* OR bonus OR contract OR contracts OR contracting OR contracted OR spending)))) AND ((physician* OR practitioner* OR doctor* OR ((health-care OR healthcare) NEAR/2 provider*) OR hospital* OR clinic OR clinics))) AND DT=(article) AND LA=(english)

APPENDIX B: LIST OF CONSULTED EXPERTS

- Erik Schut (the Netherlands)
- Richard Heijink (the Netherlands)
- Lieven Annemans (Belgium)
- Maria Trottmann (Switzerland)
- Thomas McGuire (US)
- Noaki Ikegami (Japan)

APPENDIX C: OVERVIEW OF INCLUDED ARTICLES/DOCUMENTS

- Acerete, B., Stafford, A., and Stapleton, P. (2011). Spanish healthcare public private partnerships: The 'Alzira model'. *Critical Perspectives on Accounting*, 22, 533-549.
- Afendulis, C., Fendrick, M., Song, Z., Landon, B. E., Safran, D. G., Mechanic, R. E., and Chernew, M. E. (2014). The impact of global budgets on pharmaceutical spending

and utilization: early experience from the Alternative Quality Contract. *Inquiry*, 51, 1-7.

Alderwick, H., Ham, C., and Buck, D. (2015). Population health systems: going beyond integrated care. Retrieved from https://www.kingsfund.org.uk/sites/default/files/field/field_publication_file/populatio n-health-systems-kingsfund-feb15.pdf

Anthem. (2011). Accountable care organization. Presentation, Indiana.

- Bailit, M., and Hughes, C. (2011). Key design elements of shared-savings payment arrangements (Commonwealth Issue Brief No. 1539). Retrieved from http://www.commonwealthfund.org/~/media/Files/Publications/Issue%20Brief/2011/ Aug/1539_Bailit_key_design_elements_sharedsavings_ib_v2.pdf
- Bailit, M., Hughes, C., Burns, M., and Freedman, D. H. (2012). Shared-savings payment arrangement in health care: six case studies (Commonwealth Fund No. 1624).
 Retrieved from http://www.commonwealthfund.org/publications/fund-reports/2012/aug/shared-savings-payment-arrangements
- Barnes, A. J., Unruh, L., Chukmaitov, A., and van Ginneken, E. (2014). Accountable care organizations in the USA: types, developments and challenges. *Health Policy*, 118, 1-7.
- Barry, C. L., Stuart, E. A., Donohue, J. M., Greenfield, S. F., Kouri, E., Duckworth, K., . .
 . Huskamp, H. A. (2015). The early impact of the 'Alternative Quality Contract' on mental health service use and spending in Massachusetts. *Health Affairs*, 34, 2077-2085.

- Bartels, S. J., Gill, L., and Naslund, J. A. (2015). The Affordable Care Act, accountable care organizations, and mental health care for older adults: implications and opportunities. *Harvard Review of Psychiatry*, 23, 304-319.
- Berwick, D. M. (2011). Making good on ACOs' promise the final rule for the Medicare Shared Savings Program. *The New England Journal of Medicine*, 365, 1753-1756.
- Blewett, L. A., Spencer, D., and Huckfeldt, P. (2017). Minnesota Integrated Health Partnership Demonstration: implementation of a Medicaid ACO model. *Journal of Health Politics, Policy and Law*, 42, 1127-1142.
- Bodaken, B. (2014). Increasing the impact and sustainability of California accountable care organizations. *California Journal of Politics and Policy*, 6, 245-247.

Bodaken, B., Bankowitz, R., Ferris, T., Hansen, J., Hirshleifer, J., Kronlund, S., . . . Sandy,
L. (2016). *Sustainable success in accountable care*. Retrieved from https://nam.edu/wp-content/uploads/2016/04/Sustainable-Success-in-Accountable- Care.pdf

Borza, J., Oerline, M. K., Skolarus, T. A., Norton, E. C., Dimick, J. B., Jacobs, B. L., ...

Hollenbeck, B. K. (2018). Association between hospital participation in Medicare Shared Savings Program accountable care organizations and readmission following major surgery. *Annals of Surgery*. Advance online publication. doi: 10.1097/SLA.00000000002737.

Brennan, K. F. (2017). *Geisinger's evolving provider incentive models*. Presentation, New Orleans.

Burns, L. R., and Pauly, M. V. (2012). Accountable care organizations may have difficulty avoiding the failures of Integrated Delivery Networks of the 1990s. *Health* Affairs, 31, 2407-2416.

- Busch, A. B., Huskamp, H. A., and McWilliams, J. M. (2016). Early efforts by Medicare accountable care organizations have limited effect on mental illness care and management. *Health Affairs*, 25, 1247-1256.
- Busse, R., and Stahl, J. (2014). Integrated care experiences and outcomes in Germany, the Netherlands, and England. *Health Affairs*, 33, 1549-1558.
- Caballer-Tarazona, M., and Vivas-Consuelo, D. (2016). A cost and performance comparison of public private partnership and public hospitals in Spain. *Health Economics Review*, 6, 2-7.
- Carlin, C. S. (2014). Patient loyalty in a mature IDS market: is population health management worth it? *Health Services Research*, 49, 1011-1033.
- Casalino, L. P., and Chenven, N. (2017). Independent practice associations: advantages and disadvantages of alternative form of physician practice organization. *Healthcare*, 5, 46-52.
- Centers for Medicare and Medicaid Services, CMS. (2014). *Independence at Home Demonstration shared savings methodology: specifications*. Retrieved from https://innovation.cms.gov/Files/reports/iah-ssmethodologyrpt.pdf
- Centers for Medicare and Medicaid Services, CMS. (2016a). *Accountable care organizations:* what providers need to know (ICN 907406, March 2016). Retrieved from https://www.methodisthealthsystem.org/documents/ACO_Providers_Factsheet_ICN9 07406.pdf
- Centers for Medicare and Medicaid Services, CMS. (2016b). *Medicare Shared Savings Program quality measure benchmarks for the 2016 and 2017 reporting years.*

Retrieved from https://www.cms.gov/Medicare/Medicare-Fee-for-Service-

Payment/sharedsavingsprogram/Downloads/MSSP-QM-Benchmarks-2016.pdf

- Centers for Medicare and Medicaid Services, CMS. (2016c). *Independence at Home Demonstration: fact sheet*. Retrieved from https://innovation.cms.gov/Files/factsheet/iah-fs.pdf
- Centers for Medicare and Medicaid Services, CMS. (2017). *Medicare Shared Savings Program: shared savings and losses and assignment methodology – specifications*. Retrieved from https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/sharedsavingsprogram/Downloads/Shared-Savings-Losses-Assignment- Spec-

V5.pdf

- Chang, A. M., Cohen, D., McCarty, D., Rieckmann, T., and McConnell, K. J. (2015). Oregon's Medicaid transformation – observations on organizational structure and strategy. *Journal of Health Politics, Policy and Law*, 40, 257-264.
- Chernew, M. E., Mechanic, R. E., Landon, B. E., and Safran, D. G. (2011). Private-payer innovation in Massachusetts: the 'Alternative Quality Contract'. *Health Affairs*, 30, 1, 51-61.
- Chien, A. T., Song, Z., Chernew, M. E., Landon, B. E., McNeil, B. J., Safran, D. G., and Schuster, M. A. (2014). Two-year impact of the Alternative Quality Contract on pediatric health care quality and spending. *Pediatrics*, 133, 96-104.

Chien, A. T., Schiavoni, K. H., Sprecher, E., Landon, B. E., McNeil, B. J., Chernew, M. E., and Schuster, M. A. (2016). How accountable care organizations responded to pediatric incentives in the Alternative Quality Contract. *Academic Pediatrics*, 16, 200-207.

Christensen, E. W., and Payne, N. R. (2016a). Pediatric inpatient readmissions in an accountable care organization. *The Journal of Pediatrics*, 170, 113-119.

Christensen, E. W., and Payne, N. R. (2016b). Effect of attribution length on the use and cost of health care for a pediatric Medicaid accountable care organization. *JAMA Pediatrics*, 170, 148-154.

Cohen, A., Klein, S., and McCarthy, D. (2014). *Hill physicians medical group: a market- drive approach to accountable care for commercially insured patients* (Commonwealth Fund No. 1770, vol 23). Retrieved from http://www.commonwealthfund.org/publications/casestudies/2014/oct/hill- physicians-aco-case-study

Colla, C. H., Lewis, V. A., Kao, L. S., O'Malley, A. J., Chang, C. H., and Fisher, E. S. (2016). Association between Medicare accountable care organization implementation and spending among clinically vulnerable beneficiaries. *The Journal of the American Medical Association Internal Medicine*, 176, 1167–1175.

Colorado Department of Health Care Policy and Financing. (Unclear). *The Accountable Care Collaborative*. Presentation, Colorado.

Colorado Department of Health Care Policy and Financing. (2015). Accountable Care

Collaborative phase II concept paper. Retrieved from

https://www.colorado.gov/pacific/sites/default/files/ACC%20Phase%20II%20Concep t%20Paper.pdf

Colorado Department of Health Care Policy and Financing. (2017). *Supporting a culture of coverage: Accountable Care Collaborative 2015 annual report*. Retrieved from

http://leg.colorado.gov/sites/default/files/6__accountable_care_collaborative_2014-15_annual_report.pdf.

- Colorado Health Institute. (2017). *The route to the RAEs: analyzing the next phase of Medicaid's Accountable Care Collaborative in Colorado*. Retrieved from https://www.coloradohealthinstitute.org/sites/default/files/file_attachments/ACC%20 Phase%20Two_0.pdf
- Conrad, D. A., Grembowski, D., Hernandez, S. E., Lau, B., Marcus-Smith, M. (2014).
 Emerging lessons from regional and state innovation in value-based payment reform: balancing collaboration and disruptive innovation. *The Milbank Quarterly*, 92, 568-623.
- Damberg, C. L., Sorbero, M. E., Lovejoy, S. L., Martsofl, G. R., Raaen, L., and Mandel, D.
- (2014). Measuring success in health care value-based purchasing programs: findings from an environmental scan, literature review, and expert panel discussions. Retrieved from https://www.rand.org/content/dam/rand/pubs/research_reports/RR300/RR306/RAND _RR306.pdf

DeJonge, K. E., Taler, G., and Boling, P. A. (2009). Independence at Home: community- based care for older adults with severe chronic illness. *Clinical Geriatric Medicine*, 25, 155-169.

- Delbanco, S. F., Anderson, K. M., Major, C. E., Kiser, M. B., and Toner, B. W. (2011). *Promising payment reform: risk-sharing with accountable care organizations*(Commonwealth Fund No. 1530). Retrieved from
 https://www.chcs.org/media/Creating_ACOs_in_Medicaid.pdf
- DeVore, S., and Champion, R. W. (2011). Driving population health through accountable care organizations. *Health Affairs*, 30, 41-50.

- DuGoff, E. H., Dy, S., Giovannetti, E. R., Leff, B., and Boyd, C. M. (2013). Setting standards at the forefront of delivery system reform: aligning care coordination quality measures for multiple chronic conditions. *Healthcare Quality*, 35, 58–69
- Feldman, R. (2015). The economics of provider payment reform: are accountable care organizations the answer? *Journal of Health Politics, Policy and Law*, 40, 745-760.

Friedberg, M. W., Chen, P. G., White, C., Jung, O., Raaen, L., Hirshman, S., . . . Lipinski, L. (2015). *Effects of health care payment models on physician practice in the United States*. Retrieved from https://www.rand.org/pubs/periodicals/healthquarterly/issues/v5/n1/08.html

Geisinger Health System. (2017). Community Health Needs Assessment Update: 2017. Retrieved from https://www.geisinger.org//media/OneGeisinger/pdfs/ghs/aboutgeisinger/chna/2017-reports/ghs-chna-2017.pdf?la=en

Gilfillan, R. J., Tomcavage, J., and Rosenthal, M. B. (2010). Value and the medical home: effects of transformed primary care. *The American Journal of Managed Care*, 16, 607-614.

- Gleeson, S., Kelleher, K., and Gardner, W. (2016). Evaluating a pay-for-performance program for Medicaid children in an accountable care organization. *JAMA Pediatrics*, 170, 259-266.
- Harris, J. M., Elizondo, I., and Brow, A. M. (2016). Orchestrating ACO success: how top performers achieve shared savings. *Healthcare Financial Management*, 70, 42-50.

Hayen, A. P., van den Berg, M. J., Meijboom, B. R., Struijs, J., and Westert, G. P. (2015).
Incorporating shared savings programs into primary care: from theory to practice. *BMC Health Service Research*, 15, 580-595.

Herrel, L. A., Norton, E. C., Hawken, S. R., Ye, Z., Hollenbeck, B. K., and Miller, D. C. (2016).
Early impact of Medicare accountable care organizations on cancer surgery outcomes. *Cancer*, 122, 2739-2746.

Hildebrandt, H. (2014a). Crossing the boundaries of medical care towards regionalpublichealth. Presentation, Bucharest.

Hildebrandt, H. (2014b). Crossing the boundaries from individual medical care to regional
public health outcomes: the triple aim of Gesundes Kinzigtal – better health + improved care
+ affordable costs. *International Journal of Integrated Care*, 14, none.

Hildebrandt, H., Hermann, C., and Knittel, R. (2010). Gesundes Kinzigtal integrated care: improving population health by a shared health gain approach and a shared savings contract. *International Journal of Integrated Care*, 10, e046-e061.

Hildebrandt, H., Schulte, T., and Stunder, B. (2012). Triple aim in Kinzigtal, Germany:
improving population health, integrating health care and reducing costs of care – lessons
for the UK? *Journal of Integrated Care*, 20, 205-222.

Howard, S. W., Bernell, S. L., Yoon, J., and Luck, J. (2014). Oregon's Coordinated Care Organizations: a promising and practical reform model. *Journal of Health Politics*, *Policy and Law*, 39, 933-940.

Howard, S. W., Bernell, S. L., Yoon, J., Luck, J., and Ranit, C. M. (2015). Oregon's experiment in health care delivery and payment reform: Coordinated Care Organizations replacing managed care. *Journal of Health Politics, Policy and Law*, 40, 246-255.

Huskamp, H. A., Greenfield, S. F., Stuart, E. A., Donohue, J. M., Duckworth, K., Kouri, E. M., .
... Barry, C. L. (2016). Effects of global payment and accountable care on tobacco cessation
service use: an observational study. *Journal of General Internal Medicine*, 31, 1134-11140.

Kaufman, B. G., Spivack, B. S., Stearns, S. C., Song, P. H., and O'Brien, E. C. (2017). Impact of accountable care organizations on utilization, care, and outcomes: a systematic review.*Medical Care Research and Review*. Advance online publication. doi:

10.1177/1077558717745916.

Kelleher, K. J., Cooper, J., Deans, K., Carr, P., Brilli, R. J., Allen, S., and Gardner, W. (2015).
Cost savings and quality of care in a pediatric accountable care organization. *Pediatrics*, 135, e582-e589.

Kim, D. H., Lloyd, C., Fernandez, D. K., Spielman, A., and Bradshaw, D. (2017). A direct experience in a new accountable care organization: results, challenges, and the role of the neurosurgeon. *Neurosurgery*, 80, S42-S49.

Kinosian, B., Taler, G., Boling, P., and Gilden, D. (2016). Projected savings and workforce transformation from converting Independence at Home to a Medicare benefit. *Journal of the American Geriatrics Society*, 64, 1531-1536.

Larson, B. K., van Citters, A. D., Kreindler, S. A., Carluzzo, K. L., Gbemudu, J. N., Wu, F. M., .

... Fisher, E. S. (2012). Insight from transformations under way at four Brookings-Dartmouth accountable care organization pilot sites. *Health Affairs*, 31, 2395-2406.

Lupianez-Villanueva, F., and Theben, A. (2014). Strategic intelligence monitor on personal health systems phase 3: Gesundus Kinzigtal (Germany) case study report

(Report EUR 27057 EN). Sevilla, Spain: European Commission, Joint Research Centre, Institute for Prospective Technological Studies.

Maeng, D. D., Graf, T. R., Davis, D. E., Tomcavage, J., & Bloom F. J. (2012). Can a patient-centered medical home lead to better patient outcomes? The quality

implications of Geisinger's ProvenHealth Navigator. *American Journal of Medical Quality*, 27, 210-216.

Maeng, D. D., Khan, N., Tomcavage, J., Graf, T. R., Davis, D. E., and Steele, G. D. (2015). Reduced acute inpatient care was largest savings component of Geisinger Health System's patient-centered medical home. *Health Affairs*, 34, 636-644.

Makni, N., Rothenburger, A., and Kelleher, K. (2015). Survey of twelve children's hospital-based accountable care organizations. *Journal of Hospital Administration*, 4, 64-73.

Markovich, P. (2012). A global budget pilot project among provider partners and Blue Shield of California led to savings in first two years. *Health Affairs*, 9, 1969-1976.

McConnell, K. J., Chang, A. M., Cohen, D. J., Wallace, N., Chernew, M. E., Kautz, G., . .
Smith, J. (2014). Oregon's Medicaid transformation: an innovative approach to holding a health system accountable for spending growth. *Healthcare*, 2, 163-167.

McConnell, K. J. (2016). Oregon's Medicaid Coordinated Care Organizations. *The Journal of the American Medical Association*, 315, 869-870.

McConnell, K. J., Renfro, S., Chan, B. K., Meath, T. H., Mendelson, A., Cohen, D., . . .
Lindrooth, R. C. (2017). Early performance in Medicaid accountable care organizations:
a comparison of Oregon and Colorado. JAMA *Internal Medicine*, 177, 538-545.

McGinnis, T., and Small, D. M. (2012). Accountable care organizations in Medicaid: emerging practices to guide program design (Policy Brief Center for Health Care Strategies, February 2012). Retrieved from https://www.chcs.org/media/Creating_ACOs_in_Medicaid.pdf McWilliams, J. M., Landon, B. E., and Chernew, M. E. (2013). Changes in health care spending and quality for Medicare beneficiaries associated with a commercial ACO contract. *The Journal of the American Medical Association*, 310, 829-836.

McWilliams, J. M., Landon, B. E., Chernew, M. E., and Zaslavsky, A. M. (2014). Changes in patients' experiences in Medicare accountable care organizations. *The* New England Journal of Medicine, 371, 1715-1724.

McWilliams, J. M., Hatfield, L. A., Chernew, M. E., Landon, B. E., and Schwartz, A. L. (2016). Early performance of accountable care organizations in Medicare. *The New* England *Journal of Medicine*, 374, 2357-2366.

McWilliams, J. M., Gilstrap, L. G., Stevenson, D. G., Chernew, M. E., Huskamp, H. A., and Grabowski, D. C. (2017). Changes in postacute care in Medicare Shared Savings Program. *The Journal of the American Medical Association Internal Medicine*, 177, 518-526.

- Mechanic, R. E., Santon, P., Landon, B. E., and Chernew, M. E. (2011). Medical group responses to global payment: early lessons from the 'Alternative Quality Contract' in Massachusetts. *Health Affairs*, 9, 1734-1742.
- Meyer, H. (2012). Many accountable care organizations are now up and running, if not off to the races. *Health Affairs*, 31, 2363-2367.

Minnesota Department of Human Services Health Care Administration. (2017). *Request for* proposals for a qualified grantee to provide health care services to medical assistance and Minnesota care enrolees under alternative payment arrangements through the Integrated Health Partnerships (IHP) demonstration. Retrieved from https://mn.gov/dhs/assets/2017-ihprfp_tcm1053-294430.pdf Nationwide Children's. (2016). *Partners for Kids: saving money by improving health for our most vulnerable children*. Retrieved from https://www.nationwidechildrens.org/impactquality/partners-for-kids-pediatric- accountable-care

- O'Halloran, K., Depalma, A., Joseph, V., Cobelli, N., and Sharan, A. (2012). The role of accountable care organizations in delivering value. *Current Reviews in Musculoskeletal Medicine*, 5, 283-289.
- OECD. (2016). *Better ways to pay for health care*. Paris, France: OECD Health Policy Studies, OECD Publishing.
- Ouayogodé, M., Colla, C. H., and Lewis, V. A. (2017). Determinants of success in shared savings programs: analysis of ACO and market characteristics. *Healthcare*, 5, 53-61.

Pimperl, A., Hildebrandt, H., Groen, O., Schulte, T., Meyer, I., and Wetzel, M. (2017a). *Case study: Gesundes Kinzigtal, Germany*. Durham, North Carolina: Duke University Margolis Center for Health Policy.

Pimperl, A., Schulte, T., Mühlbacher, A., Rosenmöller, M., Busse, R., Groene, O., . . .
Hildebrandt, H. (2017b). Evaluating the impact of an accountable care organization in population health: the quasi-experimental design of the German Gesundes Kinzigtal. *Population Health Management*, 20, 239-248.

Rodin, D., and Silow-Caroll, S. (2013). *Medicaid payment and delivery reform in Colorado: ACOs at the regional level* (Commonwealth Fund No. 1666, vol 11). Retrieved from http://www.commonwealthfund.org/publications/case- studies/2013/mar/colorado-medicaidpayment Rotenberg, J., Kinosian, B., Boling, P., and Taler, G. (2018). Home-based primary care: beyond extension of the Independence at Home Demonstration. *Journal of the American Geriatrics Society*, 66, 812-818.

Salako, A., Zhu, X., MacKinney, C., Ullrich, F., and Mueller, K. (2015). *Characteristics of* rural accountable care organizations (ACOs) – a survey of Medicare ACOs with rural presence

(Rural Policy Brief No. 2015, 8 May). Retrieved from

https://www.ruralcenter.org/resource-library/characteristics-of-rural-acos- %E2%80%93a-survey-of-medicare-acos-with-rural-presence

Schwartz, A. L., Chernew, M. E., Landon, B. E., and McWilliams, J. M. (2015). Changes in low-value services in year 1 of the Medicare Pioneer accountable care organization program. *JAMA Internal Medicine*, 175, 1815-1825.

Scott, A., Liu, M., and Yong, J. (2018). Financial incentives to encourage value-based health care. *Medical Care Research and Review*, 75, 3-32.

Serrano, C., Ferrer, M., and Toner, A. (2009). Alzira model: Hospital de la Ribera,
Valencia, Spain. In Rechel, B., Erskine, J., Dowdeswell, B. et al. (Eds.), *Capital investment for health: case studies from Europe* (pp. 11-25). Copenhagen, Denmark:
WHO Publications.

Sharp, A. L., Song, Z., Safran, D. G., Chernew, M. E., and Fendrick, M. A. (2013). The effect of bundled payment on emergency department use: Alternative Quality Contract effects after year one. *Academic Emergency Medicine*, 20, 961-964.

Shields, M. (2011). From clinical integration to accountable care. *Annals of Health Law*, 20, 151-164.

- Shields, M. C., Patel, P. H., Manning, M., and Sacks, L. (2011). A model for integrating independent physicians into accountable care organizations. *Health Affairs*, 30, 161-172.
- Shortell, S. M., Colla, C. H., Lewis, V. A., Fisher, E., Kessell, E., and Ramsay, P. (2015). Accountable care organizations: the national landscape. *Health Politics, Policy and Law*, 40, 647-668.
- Silow-Caroll, S., Edwards, J. N., and Rodin, D. (2013). How Colorado, Minnesota, and Vermont are reforming care delivery and payment to improve health and lower costs (Commonwealth Fund No. 1665, vol 10). Retrieved from http://www.commonwealthfund.org/~/media/Files/Publications/Case%20Study/2013/ Mar/1665_SilowCarroll_Medicaid_synthesis_FINAL_v2.pdf
- Song, Z., and Landon, B. E. (2012). Controlling health care spending the Massachusetts experiment. *The New England Journal of Medicine*, 366, 1560-1561.
- Song, Z., Safran, D. G., Landon, B. E., He, Y., Ellis, R. P., Mechanic, R. E., . . . Chernew,M. E. (2011). Health care spending and quality in year 1 of the Alternative QualityContract. *The New England Journal of Medicine*, 365, 909-918.
- Song, Z., Safran, D. B. Landon, B. E., Landrum, M. B., He, Y., Mechanic, R. E., . . . Chernew, M. E. (2012). The Alternative Quality Contract in Massachusetts, based on global budgets, lowered medical spending and improved quality. *Health Affairs*, 31, 1885-1894.
- Song, Z., Fendrick, A. M., Safran, D. G., Landon, B. E., and Chernew, M. E. (2013). Global budgets and technology-intensive medical services. *Healthcare*, 1, 15-21.

Song, Z., Rose, S., Safran, D. G. (2014). Changes in health care spending and quality 4 years into global payment. *The New England Journal of Medicine*, 371, 1704-1714.

Song, Z., Rose, S., Chernew, M. E., and Safran, D. G. (2017). Lower- versus higher-income populations in the Alternative Quality Contract: improved quality and similar spending. *Health Affairs*, 36, 74-82.

Struckmann, V., Boerma, W., and van Ginneken, E. (2015). The Gesundes Kinzigtal programme, Germany. Retrieved from http://www.icare4eu.org/pdf/Gesundes_Kinzigtal.pdf

Struckmann, V., Quentin, W., Busse, R. and van Ginneken, E. (2016). *How to strengthen financing mechanisms to promote care for people with multimorbidity in Europe?*(Policy Brief ICARE4EU 24). Utrecht, the Netherlands: Nivel.

Stuart, E. A., Barry, C. L., Donohue, J. M., Greenfield, S. F., Duckworth, K., Song, Z., . . .

Huskamp, H. A. (2017). Effects of accountable care and payment reform on substance usedisorder treatment: evidence from the initial three years of the Alternative Quality Contract.*Addiction*, 112, 124-133.

The Advisory Board Company. (2016). The business of population health management:

Gesundes Kinzigtal GmbH, Black Forest, Germany. Washington, USA: Advisory Board International.

Weier, R. C., Gardner, W., Conkol, K., Pajer, K., and Kelleher, K. J. (2017). Partners for Kids care coordination: lessons from the field. *Pediatrics*, 139, S109-S116.

Williams, J. (2013). A new model for care population management. *Healthcare Financial Management*, 67, 69-76.

Winblad, U., Mor, V., McHugh, J. P., and Rahman, M. (2017). ACO-affiliated hospitals reduced rehospitalizations from skilled nursing facilities faster than other hospitals. *Health Affairs*, 36, 67-73.

Zimmerman, M. (2015). *Medicaid payment and delivery system innovation: Minnesota's experience*. Presentation, Minnesota.

¹ The VBP model as described in this section shows similarities with the global capitation payment model traditionally used by Health Maintenance Organizations (HMOs). In both models, provider groups receive a fixed payment for the provision of a comprehensive set of care activities for a predefined population, with the goal to increase efficiency by shifting financial risk to providers (Frakt & Mayes, 2012). However, both models differ in two important respects, specifically meant to address the concerns that were often raised against HMOs and global capitation: underprovision and quality skimping (section 2.1; Frakt & Mayes, 2012). First, under VBP, providers and payer share financial risk, while HMOs typically use full capitation models that involve much more ^{financial} risk for providers. Second, under VBP, total compensation is partly dependent on quality performance, while in HMOs this was often not the case or only to a relatively limited extent (Frakt & Mayes, 2012). Thus, the VBP model takes advantage of the benefits of traditional capitation, while trying to avert its main disadvantages.