

**The Triple Aim and Population Health Management:
Future Directions for Medicaid Oversight**

Amy Paul, MJ, BSN, RN, CCM

Abstract

The Centers for Medicare and Medicaid Services (CMS) has expressed a commitment to improvement of population health, identifying population health as a goal in its 2013-2017 strategy roadmap.[i] The means by which the CMS will encourage population health management by states is not yet evident; in September, 2015, only two of 63 documents supporting state applications for Section 1115 Medicaid waivers mentioned population health or the Triple Aim.[ii] The Medicaid program's design as a reimbursement mechanism for health care services does not allow for payment for services that address social determinants of health (SDOH).[iii] Nonetheless, according to a CMS Chief Medical Officer, the CMS could extend its impact on population health management by "aligning our incentives with those of private-sector payers, supporting infrastructure building, and collaborating with public health and social programs." [iv]

This paper will argue that the CMS should issue stronger guidance to state Medicaid programs in the creation of population health initiatives, and that the CMS can influence reduction of health disparity and costs by rewarding collaboration with communities, public health entities, and social services agencies. The paper will begin by describing the history of Medicaid, the role of Medicaid as a payment source for health care services rendered to the indigent, and the ongoing health policy debates about the purpose and scope of Medicaid. Next, population health and SDOH will be defined. Additionally, the critical role of population health management to improve Medicaid beneficiaries' health and decrease health care expenses will be explained. Public health law's impact on integrating population health management programs into Medicaid will be described. Finally, a framework for evaluating results of population health management in Medicaid will be advanced.

Introduction

The quality and financial outcomes reported over thirteen years by CareOregon, an Oregon not for profit Medicaid managed care organization (MCO), tell the story of one organization's journey from struggling safety net provider to leader in the provision of high quality, cost effective care for the poor and disabled.¹ Safety net providers are the mission driven practitioners and institutions that care for underserved and under resourced patients.² CareOregon was founded in 1993 by a public health department, a primary care association, and a university that created a Medicaid managed care organization (MCO).^{3 4 5} In 1993, Oregon's application for a waiver from certain federal Medicaid requirements was approved by the Centers for Medicare and Medicaid Services (CMS), the federal agency that administers Medicaid.⁶ The waiver, granted per the authority of Section 1115 of the Social Security Act, enabled Oregon to expand its Medicaid enrollment by more than 100,000 people who previously did not qualify for the program.⁷ The waiver permitted enrollment of Medicaid beneficiaries in MCOs and restructured provider payment methodology.⁸ When the state of Oregon faced problems financing the demonstration, other MCOs left the market, leaving CareOregon with a larger, more costly membership.⁹ By 2003 the MCO was close to fiscal collapse and was performing poorly on some state quality metrics.¹⁰ CareOregon's board of directors identified quality improvement as an objective, adopting the Institute for Health Care Improvement's (IHI) Triple Aim framework as a guiding principle.¹¹ CareOregon developed an integrated care management program designed to impact the specific population of high emergency room utilizers, and after four months of enrollment in care management, members demonstrated a five percent improvement in functional health status.¹² CareOregon organized care management interventions along five domains specified by Wagner in the MacColl Institute's Chronic Care

¹ S. Klein & D. McCarthy, *CareOregon: Transforming the Role of a Medicaid Health Plan from Payer to Partner*, 50 THE COMMONWEALTH FUND, 4 (July 2010) http://www.commonwealthfund.org/~media/files/publications/case-study/2010/jul/triple-aim-v2/1423_mccarthy_careoregon_triple_aim_case_study_v2.pdf.

² COMMITTEE ON THE CHANGING MARKET, MANAGED CARE, AND THE FUTURE VIABILITY OF SAFETY NET PROVIDERS, AMERICA'S HEALTH CARE SAFETY NET: INTACT BUT ENDANGERED 21 (M.E. Lewin & S. Altman, eds., 2000).

³ *Supra* note 1, at 3.

⁴ A managed care organization (MCO) is an organization that is paid a set dollar amount per beneficiary per month and uses this budget to cover the costs of caring for its population.

⁵ CENTERS FOR MEDICARE AND MEDICAID SERVICES, *Managed Care*, <http://www.medicare.gov/medicaid-chip-program-information/by-topics/delivery-systems/managed-care/managed-care-site.html> (last visited Oct. 3, 2015).

⁶ *Supra* note 1, at 3.

⁷ T. Bodenheimer, *The Oregon Health Plan- Lessons for the Nation. Second of Two Parts*, 337 NEW ENG. J. MED. 651, 652 (1997).

⁸ *Id.* at 652.

⁹ *Supra* note 1, at 3.

¹⁰ *Id.* at 4.

¹¹ *Id.* at 4.

¹² MASSACHUSETTS INSTITUTE FOR HEALTHCARE IMPROVEMENT, *Pursuing the Triple Aim: CareOregon* (Nov., 2008), <http://www.ihl.org/resources/Pages/CaseStudies/PursuingtheTripleAimCareOregonCaseStudy.aspx>.

Model.^{13 14} The Chronic Care Model Social Support System domain was a particular area of focus for CareOregon, which provided members support around social issues that affected their health.¹⁵ Care managers helped members access transportation and locate stable housing, interventions directed at supporting improved control of conditions like chronic obstructive pulmonary disease (COPD) and diabetes mellitus (DM).¹⁶ In 2007 CareOregon realized a 1:4.22 return on investment in care management of its most complex members.¹⁷ The MCO's care management program alone is responsible for a savings of \$400 per member per month over the year after each member's enrollment in care management.¹⁸ After program costs, care management is responsible for a net cost savings of \$3 million to \$5 million annually.¹⁹

The Triple Aim, conceived in 2008 by Donald Berwick and other health policy architects at IHI, is a platform of three health objectives designed to maximize health care quality.²⁰ The three objectives are "improving the individual experience of care; improving the health of populations; and reducing the per capita costs of care for populations."²¹ This paper will focus on the CMS' potential to function as a champion of the second Triple Aim element, population health management.²² Population health, a cornerstone of the Triple Aim, has been defined as "the health of a population as measured by health status indicators and as influenced by social, economic, and physical environments, personal health practices, individual capacity and coping skills, human biology, early childhood development, and health services."²³ Medicaid MCOs like CareOregon use metrics such as the Healthcare Effectiveness Data and Information Set (HEDIS) to monitor health status.²⁴ But measurement of improvement in population health has proven to be elusive because key indicators are tied to evaluation of efforts to prevent disease and impact behavioral, environmental, economic, and other social determinants of health (SDOH).²⁵ The disease prevention interventions that improve the public's health require "societal or behavioral changes that are difficult to achieve," and their effects take years to emerge.²⁶ Economic insecurity, also challenging to impact, results in health disparities, or poorer health in one segment of a population versus another.²⁷ The overall health of Medicaid populations cannot be improved if disparity is not addressed by Medicaid programs.²⁸

¹³ *Id.* at 3.

¹⁴ E.H. Wagner et al., *Improving Chronic Illness Care: Translating Evidence into Action*, 20 HEALTH AFF. 64, 65 (2001).

¹⁵ *Supra* note 1, at 19.

¹⁶ *Id.* at 19.

¹⁷ *Supra* note 12, at 7.

¹⁸ *Supra* note 1, at 17.

¹⁹ *Id.* at 17.

²⁰ D.M. Berwick et al., *The Triple Aim: Care, Health, and Cost*, 27 HEALTH AFF. 759,760 (2008).

²¹ *Id.* at 760.

²² *Id.* at 763.

²³ J. R. Dunn & M.V. Hayes, *Toward a Lexicon of Population Health*, CAN. J. PUB. HEALTH S7, S7 (1999).

²⁴ *Supra* note 1, at 16.

²⁵ J.M. McGinnis et al., *The Case for More Active Policy Attention to Health Promotion*, 21 HEALTH AFF. 78, 84 (2002).

²⁶ L.O. Gostin et al., *Restoring Health to Health Reform: Integrating Medicine and Public Health to Advance the Population's Well-being*, 159 U. PA. L. REV. 1777, 1798 (2011).

²⁷ DONALD A. BARR, HEALTH DISPARITIES IN THE UNITED STATES: SOCIAL CLASS, RACE, ETHNICITY, AND HEALTH 250 (The Johns Hopkins University Press 2008).

²⁸ *Supra* note 25, at 88.

The CMS has expressed a commitment to improvement of population health, identifying population health as a goal in its 2013-2017 strategy roadmap.²⁹ The means by which the CMS will encourage population health management by states is not yet evident; in September, 2015, only two out of 63 documents supporting state applications for Section 1115 waivers mentioned population health or the Triple Aim.³⁰ The Medicaid program's design as a reimbursement mechanism for health care services does not allow for payment for services that address SDOH.³¹ Nonetheless, according to a CMS Chief Medical Officer, the CMS could extend its impact on population health management by "aligning our incentives with those of private-sector payers, supporting infrastructure building, and collaborating with public health and social programs."³²

This paper will argue that the CMS should issue stronger guidance to state Medicaid programs in the creation of population health initiatives, and that the CMS can influence reduction of health disparity and costs by rewarding collaboration with communities, public health entities, and social service agencies. The paper will begin by describing the history of Medicaid, the role of Medicaid as a payment source for health care services rendered to the indigent, and the ongoing health policy debates about the purpose and scope of Medicaid. Next, population health management and SDOH will be defined. Additionally, the critical role of population health management to improve Medicaid beneficiaries' health and decrease health care expenses will be explained. Public health law's impact on integrating population health management programs into Medicaid will be described. Finally, a framework for evaluating results of population health management in Medicaid will be advanced.

American Health Care Spending and Medicaid

The health care system of the early twentieth century was driven by the medical profession's focus on treatment of individuals, who in turn, accepted health care as a "consumption good" best rendered within the narrow confines of hospitals.³³ Beginning in the nineteenth century and continuing into the twentieth, advances in health care became a significant driver of health care costs.³⁴ Aseptic techniques improved surgical outcomes and the demand for surgery increased as the risk of associated complications decreased.³⁵ Advances in radiology and laboratory studies also represented potent additions to hospital-centered medical care.³⁶ Physicians were concentrating their practice around hospitals and encouraged their patients to seek treatment of acute illness there.³⁷

²⁹ CENTERS FOR MEDICARE AND MEDICAID SERVICES, *CMS Strategy: The Road Forward, 2013-2017*, 3 (2013), <https://www.cms.gov/About-CMS/Agency-Information/CMS-Strategy/Downloads/CMS-Strategy.pdf>

³⁰ CENTERS FOR MEDICARE AND MEDICAID SERVICES, *Demonstrations and Waivers*, http://www.medicare.gov/medicaid-chip-program-information/by-topics/waivers/waivers_faceted.html (last visited Sep. 13, 2015).

³¹ W.J. Kassler et al., *Beyond a Traditional Payer- CMS' Role in Improving Population Health*, 372 *NEW ENG.J. MED.* 109, 110 (2015).

³² *Id.* at 110.

³³ C.E. ROSENBERG, *THE CARE OF STRANGERS: THE RISE OF AMERICA'S HOSPITAL SYSTEM* 105 (The Johns Hopkins University Press 1995) (1987).

³⁴ *Id.* at 343.

³⁵ *Id.* at 342.

³⁶ *Id.* at 342.

³⁷ *Id.* at 342.

Questions repeatedly arose about how to pay for the climbing costs of hospital services and physician fees.³⁸ The nineteenth century hospital had been organized around the concept of scientific charity, which emphasized “self-help rather than handouts, private efforts over those of government, and paternalism rather than egalitarianism.”³⁹ Patients were called upon to pay for their care whenever possible, even as charges started to exceed the resources of those with jobs.⁴⁰ In response, employers that could not afford to attract workers by raising wages began offering private, voluntary health insurance plans as a benefit.⁴¹ By the late 1940s, private insurance was effectively distributing health care costs of the middle class across the working population.⁴²

Financing the care of the unemployed poor remained the province of state and local governments, an expectation derived from the Elizabethan Poor Laws on which American public assistance systems are based.⁴³ The Elizabethan system of poor or welfare relief called upon families to support the indigent when possible, while those without families were supported by taxes collected by local governments.⁴⁴ Sustained dependence on government sponsored aid was discouraged by criminalization of refusal to work.⁴⁵ Private charity was expected to play a role in poverty relief, but to this day American philanthropists are wary that long term aid may result in pauperization, or the creation of a permanently dependent underclass unmotivated to work.⁴⁶ In the United States, succor to those impoverished by age or disability has been viewed differently from assistance to so-called paupers, as “impoverished old people, underfed children, and the unemployable blind could scarcely be blamed for their condition nor envied for being the recipients of relief.”⁴⁷

A new term, “medical indigence,” came into usage to describe people whose poverty was caused by medical bills.⁴⁸ Publicly supported medical care had been available to the medically needy since the 1940s through a series of programs designed to pay private sector hospitals and physicians.⁴⁹ Federal cost sharing was introduced by the Social Security Amendments of 1950, which enabled states to access federal funds for payment of medical bills incurred by the poor elderly and paid by state welfare agencies.⁵⁰

The Kerr-Mills Act of 1960 broadened federal subsidy of state programs that funded medical care of the needy aged via an open-ended cost sharing design.⁵¹ The federal and state partnership introduced by the Kerr-Mills Act was important to the conceptualization of the

³⁸ *Id.* at 253.

³⁹ R. STEVENS, IN *SICKNESS AND IN WEALTH: AMERICAN HOSPITALS IN THE TWENTIETH CENTURY* 19 (Basic Books Inc. 1989).

⁴⁰ *Id.* at 19.

⁴¹ R.B. STEVENS AND R. STEVENS, *WELFARE MEDICINE IN AMERICA: A CASE STUDY OF MEDICAID* 19 (Transaction Publishers 2003) (1974).

⁴² *Id.* at 19-20.

⁴³ L.C. Backer, *Medieval Poor Law in Twentieth Century America: Looking Back Towards a General Theory of Modern American Poor Relief*, 44 CASE W. RES. 871, 884-85 (1993).

⁴⁴ *Id.* at 954.

⁴⁵ *Id.* at 959.

⁴⁶ *Supra* note 33, at 21.

⁴⁷ *Supra* note 41, at 6.

⁴⁸ *Id.* at 63.

⁴⁹ *Id.* at 21.

⁵⁰ *Id.* at 23.

⁵¹ *Id.* at 29.

Medicaid payment system, which adopted the same structure in a federalist model that purposely restricted the federal government's influence on individual state programs.⁵²

Medicaid was enacted through the Social Security Amendments of 1965, which also introduced Medicare as an answer to the continued political pressure to create health insurance for the aged through Social Security.⁵³ The federal government dictates optional and mandatory program eligibility criteria and specifies the benefits that must be covered by Medicaid programs, while the states select the optional benefits to be covered and customize programs to the needs of state populations.⁵⁴ Medicaid- Title XIX of the Social Security Act- was the legislative response to state calls for budgetary assistance with financing care of the medically indigent.⁵⁵ Medicaid extends a grant-in-aid program to augment state finance of health care rendered to the medically indigent.⁵⁶ In contrast to Medicare- which is funded by payroll taxes all U.S. workers pay and is an entitlement accessible at age 65 to Americans who have paid the payroll taxes- Medicaid uses general tax revenue to fund health care for those who meet requirements of Medicaid assistance categories.⁵⁷ State participation in Medicaid is voluntary, but no state opts out.⁵⁸ Disbursement of federal funds to the states is conditional on states' acceptance into the program all applicants who meet income requirements and who fit eligibility categories.⁵⁹

Federalism assumes a narrow but ultimately binding federal power, while ceding broad sovereignty to the states.⁶⁰ States exercise their authority to customize their Medicaid programs by applying for waivers from certain federal requirements.⁶¹ Section 1115 was an existing provision of the Social Security Act that was extended to the Medicaid program with the Social Security Amendments of 1965.⁶² Section 1115 waivers authorize research and demonstration projects that have been determined to further Medicaid's goals.⁶³ States use Section 1115 waivers to expand Medicaid eligibility to populations outside the federally mandated enrollment categories.⁶⁴ Passage of the Omnibus Budget Reconciliation Act of 1981 ("OBRA 1981") established Section 1915(b) of the Social Security Act, which authorizes states to use MCOs (such as CareOregon) to administer their Medicaid programs.⁶⁵ ⁶⁶ Dayna Bowen Matthew of the

⁵² *Id.* at 29.

⁵³ *Id.* at 45-46.

⁵⁴ D.B. Matthew, *The New Federalism Approach to Medicaid: Empirical Evidence that Ceding Inherently Federal Authority to the states Harms Public Health*, 90 KY. L.J. 973, 979 (2001).

⁵⁵ N. Huberfeld, *Bizarre Love Triangle: The Spending Clause, Section 1893, and Medical Entitlements*, 42 U.C. DAVIS L. REV. 413, 418 (2008).

⁵⁶ S. Rosenbaum, *Medicaid at Forty: Revisiting Structure and Meaning in a Post-Deficit Reduction Act Era*, 9 J. HEALTH CARE L. & POL'Y 5, 10 (2006).

⁵⁷ *Supra* note 55, at 418.

⁵⁸ E. HERZ, CONG. RESEARCH SERV., RL 33202, MEDICAID: A PRIMER 1 (2012).

⁵⁹ N. Huberfeld, *Federalizing Medicaid*, 14 U. PA. J. CONST. L. 431, 436 (2011).

⁶⁰ J.G. Hodge, *Implementing Modern Public Health Goals Through Government: An Examination of New Federalism and Public Health Law*, 14 J. CONTEMP. HEALTH L. & POL'Y 93, 95 (1997).

⁶¹ *Supra* note 54, at 982.

⁶² J.M. Rosenberg & D.T. Zaring, *Recent Development: Managing Medicaid Waivers: Section 1115 and State Health Care Reform*, 32 HARV. J. ON LEGIS. 545, 546-47 (1995).

⁶³ 42 U.S.C.S. § 1315(a).

⁶⁴ Mandatory Medicaid enrollment categories include the impoverished elderly, the disabled, families with dependent children, pregnant women, women with certain cancers, and certain legal immigrants. See 42 U.S.C. § 1396(a) (10) (A) (ii) (xx). See also *Supra* note 58, at 1.

⁶⁵ *Supra* note 54, at 981.

University Of Kentucky College Of Law argues that “...statutory enactments and regulatory revisions have gradually increased states’ discretion to circumvent the federal oversight that originally characterized [Medicaid]. States that obtain waivers from the Secretary of [the Department of Health and Human Services (DHHS)] are able to revise their Medicaid programs in ways that do not comply with federal guidelines and law.”⁶⁷

Federal oversight of Medicaid is provided by DHHS through the CMS, one of DHHS’ eleven operating divisions.^{68 69} Because the role of DHHS’ predecessor agency was administration of welfare benefits, the Medicaid program was inexorably linked to the welfare system.⁷⁰ The legacy of operationalizing Medicaid through the welfare system has been confusion and conflict regarding the goals of Medicaid.⁷¹ Supporters or critics may describe Medicaid as a form of charity, social insurance, or as a public version of the private health care system enjoyed by the non-poor.⁷²

Whether or not Medicaid fulfills its original goals, the availability of Medicaid as a payment source for care of the poor has become a major driver in the rapid upward trajectory of U.S. health care spending overall.⁷³ By 2013, 36% of all U.S. health care expenses were paid for with federal and state Medicaid funds, in the amount of one trillion forty four billion dollars.⁷⁴ Efforts to control Medicaid costs have centered on narrowing program benefits or eligibility, or on stringent oversight of provider payments.⁷⁵ But health policy theorists are now suggesting that the way American health care dollars are spent is more problematic than the amount of spending.⁷⁶ J. Michael McGinnis of the Institute of Medicine asserts that

...Public policymakers need to begin thinking in terms of a health agenda rather than a health care agenda or- even more narrowly- a health care financing agenda. In prioritizing policy initiatives, health care cost savings should not be the only way to rank the importance of interventions... Instead, quality of life and health status of populations need to be what drives priorities in health policy.⁷⁷

With regard to Medicaid beneficiaries as a population, the CMS’ statutory scope is limited to oversight of funding health care services provided to them.⁷⁸ But as the federal agency charged

⁶⁶ 42 U.S.C.S. § 1396n (b).

⁶⁷ *Supra* note 54, at 982.

⁶⁸ U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES, *HHS Organizational Chart*, <http://www.hhs.gov/about/agencies/orgchart/index.html> (last visited Sep. 26, 2015).

⁶⁹ *Supra* note 58, at 13.

⁷⁰ *Supra* note 41, at 77.

⁷¹ *Id.* at xxxv.

⁷² *Id.* at xxxv.

⁷³ E. H. BRADLEY AND L. A. TAYLOR, *THE AMERICAN HEALTH CARE PARADOX: WHY SPENDING MORE IS GETTING US LESS* 37 (Public Affairs 2013).

⁷⁴ CENTERS FOR MEDICARE AND MEDICAID SERVICES, OFFICE OF THE ACTUARY, NATIONAL HEALTH STATISTICS GROUP. *The nation’s health dollar- where it came from, where it went* (2013), <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NationalHealthAccountsHistorical.html>

⁷⁵ *Supra* note 41, at 183.

⁷⁶ *Supra* note 73, at 182.

⁷⁷ *Supra* note 25, at 89.

⁷⁸ *Supra* note 31, at 110.

with broad authority over state funding of health care for 66.7 million Medicaid recipients, the CMS holds vast power to influence the actual health of that population.^{79 80}

The Importance of Addressing Social Determinants of Health

Medicaid does not differ from other American health programs, public or private, in that the majority of Medicaid resources are spent on medical treatment of conditions that result from behaviors, socio-economic position, environmental factors, and genetics: social determinants of health (SDOH).⁸¹ Per capita income is currently the most prevalent influence on health, far surpassing medical care in consequence to population health.⁸² Closely related to economic resources are other indicators of an individual's social position, such as prestige and power.⁸³ Positions in social hierarchy are not evenly distributed.⁸⁴ Further, a lower position in a social hierarchy correlates to worse health and shorter life expectancy.⁸⁵ A low level of education is another strong predictor of poor health, and signals an inferior position in a social hierarchy.⁸⁶ Social capital- or access to a group that provides an avenue for interpersonal relationships, emotional support, and opportunity to participate in civic activities- supports survival; lack of it corresponds to poor health.^{87 88} Other determinants such as genetics, exposure to environmental toxins, and personal choices to engage in unhealthy or risk taking behaviors may produce illness when compounded by factors like poverty or an unsafe built environment.⁸⁹ Present day illness results more often from multiple intersecting cofactors than from microbial causes.⁹⁰

SDOH as the genesis of illness is an important consideration in the population health management of Medicaid enrollees because as a group, Medicaid enrollees are impoverished and disproportionately affected by SDOH compared to the non-poor.⁹¹ The numbers of Americans covered by Medicaid suggests the prevalence of SDOH as a driver of poor health: 8.8 million disabled citizens are Medicaid beneficiaries, 4.6 million low income seniors are served by the program, and 11 million low income family caregivers and other non-disabled adults receive Medicaid.⁹² 40% of all mothers delivering babies in the U.S. have Medicaid, and 31 million

⁷⁹ CENTERS FOR MEDICARE AND MEDICAID SERVICES, *CMS Fast Facts* (Jul., 2015), <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/CMS-Fast-Facts/index.html>.

⁸⁰ *Supra* note 31, at 110.

⁸¹ *Supra* note 25, at 78.

⁸² V.R. FUCHS, *The HEALTH ECONOMY* 276 (Harvard University Press 1986).

⁸³ M. Marmot, *Achieving Health Equity: From Root Causes to Fair Outcomes*, 370 *THE LANCET* 1153, 1154 (2007).

⁸⁴ *Id.* at 1154.

⁸⁵ M. Renaud, *The Future: Hygeia vs. Panakeia*, 322 *WHY ARE SOME PEOPLE HEALTHY AND OTHERS NOT?* (R.G. Evans et al., eds., Aldine De Gruyter 1994).

⁸⁶ *Supra* note 25, at 81.

⁸⁷ *Id.* at 81.

⁸⁸ I. Kawachi et al., *Social Capital, Income Inequality, and Mortality*, 87 *AM. J. PUB. HEALTH* 1491, 1492 (1997).

⁸⁹ See generally *Supra* note 23, at 80-82.

⁹⁰ W. Mariner, *Law and Public Health: Beyond Emergency Preparedness*, 38 *HOSPLW.* 247, 251 (2005).

⁹¹ J. V. Jacobi, *Multiple Medicaid Missions: Targeting, Universalism, or Both?*, 15 *YALE J. POL'Y L. & ETHICS*, 89, 90 (2015).

⁹² CENTERS FOR MEDICARE AND MEDICAID SERVICES, <http://www.medicare.gov/medicaid-chip-program-information/by-population/by-population.html> (last visited Oct. 24, 2015).

children are Medicaid beneficiaries.⁹³ While the availability of Medicaid as a health insurer for low income children is a critical component to the success of treating their illnesses, the current scope and structure of Medicaid do not alleviate childhood poverty itself; childhood poverty is more prevalent in the U.S. than in 33 other countries.⁹⁴ Favorable influences on poverty and other SDOH in childhood produce immediate health benefits to children and also reduce the incidence of cancer, heart disease, obesity, and behavioral health issues later in their lives.⁹⁵ Because chronic diseases account for 75% of health care spending in the U.S., mitigation of the social and environmental factors that can activate chronic conditions is a necessary population health management tool that can decrease the cost of health care significantly.⁹⁶

Among pediatric Medicaid beneficiaries, asthma is a prominent reason for emergency department care and hospitalization.⁹⁷ Finkelstein et al. found that among 12,935 pediatric members of a staff model health maintenance organization (HMO) who sought care for asthma, Medicaid enrollees were 1.3 times more likely to be hospitalized with asthma exacerbations than were commercial HMO members.⁹⁸ Among adults worldwide, asthma has been found to be the 25th leading cause of lost disability-adjusted life years (DALYs).⁹⁹ The poor housing quality of low income populations is a SDOH with strong ties to asthma exacerbations.¹⁰⁰ Crocker et al. found that community health workers (CHWs) making home visits to help residents of poor neighborhoods ameliorate asthma triggers in their homes improved “overall quality of life and productivity in children and adolescents with asthma.”^{101 102}

The power that SDOH exert early in life extends beyond socioeconomic status and the built environment to other influences like infant nurturing, which lays the foundation for adult socialization.¹⁰³ Lack of socialization skills such as the ability to form trust in others has been found to correlate with increased rates of depression and psychosomatic symptoms like musculoskeletal pain.¹⁰⁴ The ability to trust, cooperate for shared benefit, and form interpersonal

⁹³ See *id.*, last visited Oct. 24, 2015.

⁹⁴ P. BRAVEMAN & S. EGETER, ROBERT WOOD JOHNSON FOUNDATION, OVERCOMING OBSTACLES TO HEALTH IN 2013 AND BEYOND 36 (2013), <http://www.rwjf.org/en/library/research/2013/06/overcoming-obstacles-to-health-in-2013-and-beyond.html>, discussing a graphic illustration of data collected by UNICEF on Organisation for Economic Co-operation and Development (OECD) countries.

⁹⁵ G.R. Wilensky & D. Satcher, *Don't Forget About the Social Determinants of Health*, 28 HEALTH AFF., w194, w195 (2009).

⁹⁶ *Supra* note 94, at 47.

⁹⁷ J.A. Finkelstein et al., *Comparing Asthma Care for Medicaid and non-Medicaid Children in a Health Maintenance Organization*, 154 ARCHIVES OF PED. & ADOLESCENT MED., 563, 563 (2000).

⁹⁸ *Id.* at 563.

⁹⁹ M. Masoli et al., *The Global Burden of Asthma: Executive Summary of the GINA Dissemination Committee Report*, 59 ALLERGY, 471, 469 (2004).

¹⁰⁰ D.D. Crocker et al., *Effectiveness of Home-Based, Multi-Trigger, Multicomponent Interventions with an Environmental Focus for Reducing Asthma Morbidity: A Community Guide Systematic Review*, 41.2 AM. JOUR. PREVENTIVE MED., S5, S6 (2011).

¹⁰¹ *Id.* at S5.

¹⁰² *Id.* at S7. Interventions included home based assessment for asthma triggers in the environment, education, and building trusting relationships with study subjects.

¹⁰³ *Supra* note 25, at 81.

¹⁰⁴ C. Åslund et al., *Social Capital in Relation to Depression, Musculoskeletal Pain, and Psychosomatic Symptoms: A Cross-Sectional Study of a Large Population-Based Cohort of Swedish Adolescents*, 10 BMC PUB. HEALTH, 723, 715-726.

networks suggests high social capital and a tendency toward resilience to disease.¹⁰⁵ In absence of sources of community social capital, the poor are more likely to seek out hospital emergency departments, known to be high cost sites of care.¹⁰⁶ The potential of Medicaid beneficiaries' communities to address SDOH can be leveraged by strengthening provision of social capital by communities.¹⁰⁷ Care managers at CareOregon work to counter low social capital among the MCO's members by employing motivational interviewing, an empowerment technique that teaches participants to identify health objectives and develop adaptive behaviors that enable incremental steps to achieve their objectives.¹⁰⁸ Care plans developed by CareOregon care managers specify the personal and interpersonal strengths members can use to further their health objectives.¹⁰⁹ Members lacking in the social capital necessary for strong interpersonal relationships are supported by the care managers, who use the therapeutic relationship to increase social capital.¹¹⁰

The aftermaths of Hurricanes Katrina and Rita in 2005 provided sharp illustration of the morbidity and mortality that result when a group's low position in social hierarchy collides with external environmental factors.¹¹¹ Poor populations suffered more deaths, injury, and displacement from the two violent storms than did less vulnerable populations.¹¹² The states of Louisiana and Texas exercised SSA Section 1115 waiver authority to simplify Medicaid eligibility verification and cover Medicaid enrollees who were evacuated from their service areas.¹¹³ In Louisiana, the destruction of Charity Hospital revealed the vulnerability of the state's system of health care for the poor, which has depended upon clinics in safety net hospitals instead of expanding Medicaid eligibility.¹¹⁴ Since Hurricane Katrina, policy experts have recognized that shifting care of vulnerable populations from hospital clinics to more cost effective ambulatory settings within the community would provide more comprehensive care to Louisiana residents and would decrease reliance on disproportionate share hospital (DSH) payments, which only hospitals can access.¹¹⁵ The CMS affirmed this strategy at the federal level in 2013, issuing a final rule that reduces federal DSH payments to all states over a six year period.¹¹⁶ CMS Final Rule 2367-F documented an expectation that expanded access to insurance

¹⁰⁵ *Id.* at 715.

¹⁰⁶ ROBERT WOOD JOHNSON FOUNDATION, HEALTH CARE'S BLIND SIDE: THE OVERLOOKED CONNECTION BETWEEN SOCIAL NEEDS AND GOOD HEALTH, 2 (2011), <http://www.rwjf.org/en/library/research/2011/12/health-care-s-blind-side.html>.

¹⁰⁷ T. MCGINNIS & D.M. SMALL, ACCOUNTABLE CARE ORGANIZATIONS IN MEDICAID: EMERGING PRACTICES TO GUIDE PROGRAM DESIGN, CENTER FOR HEALTH CARE STRATEGIES, INC., 4 (2012), www.chcs.org.

¹⁰⁸ *Supra* note 1, at 5.

¹⁰⁹ *Id.* at 6-7.

¹¹⁰ *Id.* at 7.

¹¹¹ U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES, ADDRESSING SOCIAL DETERMINANTS OF HEALTH: ACCELERATING THE PREVENTION AND CONTROL OF HIV / AIDS, VIRAL HEPATITIS, STD AND TB, 2 (2009), <http://www.cdc.gov/socialdeterminants>.

¹¹² B. GAULT ET AL., IWPR #D464, THE WOMEN OF NEW ORLEANS AND THE GULF COAST: MULTIPLE DISADVANTAGES AND KEY ASSETS FOR RECOVERY PART I, (2005), <http://www.iwpr.org/publications/pubs/>.

¹¹³ *Supra* note 58, at 13-14.

¹¹⁴ S. ZUCKERMAN & T. COUGHLIN, AFTER KATRINA: REBUILDING OPPORTUNITY AND EQUITY INTO THE NEW NEW ORLEANS: INITIAL POLICY RESPONSES TO HURRICANE KATRINA AND POSSIBLE NEXT STEPS, 2 (2006), <http://www.urban.org/sites/default/files/alfresco/publication-pdfs/900929-Initial-Health-Policy-Responses-to-Hurricane-Katrina-and-Possible-Next-Steps.PDF>.

¹¹⁵ *Id.* at 4.

¹¹⁶ 78 FED. REG. 57293 (codified at 42 C.F.R. § 447.294(f)).

coverage enabled by the Patient Protection and Affordable Care Act (PPACA) would obviate reliance on public hospital clinics.¹¹⁷ Some health policy pundits suggest that Final Rule 2367-F heralds a trend of stronger federal control in Medicaid program oversight.¹¹⁸

Attention by the CMS to SDOH is appropriate because federal agencies are empowered by their scale to exert influence across many drivers of population health risks.¹¹⁹ In contrast, single disciplines addressing discrete causes of poor health have limited impact on the problems of vulnerable groups.¹²⁰ Many physicians agree; responding to a 2011 Robert Wood Johnson Foundation survey of 1,000 primary care physicians and pediatricians, 80% expressed a lack of confidence in their ability to meet patients' social needs.¹²¹ The physicians surveyed indicated that they felt ill prepared to help patients access transportation services, housing support, or employment assistance, yet unmet needs in those areas complicated medical conditions and frustrated patients' efforts to reach goals.¹²² Concern about medicine's limited ability to affect SDOH prompted IHI faculty to mentor a Socially Complex Workgroup when working with organizations implementing the Triple Aim.¹²³ Organizations that embrace the Triple Aim have achieved success in addressing the SDOH of the at-risk populations they serve by designing person-centered care coordination plans, one individual patient at a time.¹²⁴ Effective care coordination integrates medical care with modalities like social services and housing placement, as was done in New York City with guidance from IHI.¹²⁵ IHI faculty note that "time and again, teams have come to the realization that the needs that individuals have are not complex- they are remarkably simple, but often numerous."¹²⁶

Accumulated unmet needs connected to SDOH result in health disparity, defined by Braveman et al. as "systematic, plausibly avoidable health differences according to race/ethnicity, skin color, religion, or nationality; socioeconomic resources or position (reflected by, e.g., income, wealth, education, or occupation); gender, sexual orientation, gender identity; age, geography, disability, illness, political or other affiliation; or other characteristics associated with discrimination or marginalization."¹²⁷ Braveman et al. add that presence or absence of health disparity is the yardstick by which a society can measure how justly health is distributed across the population.¹²⁸ The World Health Organization (WHO) affirms that just distribution of health produces health equity, a state in which all people "have a fair opportunity to attain their full health potential and... that no one should be disadvantaged from achieving this potential, if it

¹¹⁷ 42 C.F.R. § 447.294(f) (2015).

¹¹⁸ V. Dickson, *Administration Bears Down on States to Expand Medicaid*, MODERN HEALTHCARE 8, 8 (2015).

¹¹⁹ *Supra* note 94, at 54.

¹²⁰ *Id.* at 5.

¹²¹ *Supra* note 104, at 5.

¹²² *Id.* at 7.

¹²³ C. CRAIG ET AL., MASSACHUSETTS INSTITUTE FOR HEALTHCARE IMPROVEMENT, CARE COORDINATION MODEL: BETTER CARE AT LOWER COST FOR PEOPLE WITH MULTIPLE HEALTH AND SOCIAL NEEDS 6 (2011), <http://www.ihl.org/resources/Pages/IHIWhitePapers/IHICareCoordinationModelWhitePaper.aspx>.

¹²⁴ *Id.* at 1.

¹²⁵ *Id.* at 13.

¹²⁶ *Id.* at 1.

¹²⁷ P.A. Braveman et al., *Health Disparities and Health Equity: The Issue Is Justice*, 101 AM. J. PUB. HEALTH S149, S150 (2011).

¹²⁸ *Id.* at S150.

can be avoided.”¹²⁹ The California Health Workers Association (CHWA) has described safety net health care providers as “well positioned” to use the Triple Aim to decrease health disparities.¹³⁰ The CHWA specifically cites the coordination of primary care and prevention efforts, use of multi-disciplinary health care teams, and “the delivery of community-responsive and culturally-appropriate [sic] care” as pivotal elements of the Triple Aim which the CHWA identifies as reducing health disparity.¹³¹ Braveman et al. charge that the most compelling reason for programs like Medicaid to champion the end of health disparities and embrace the pursuit of health equity is that provision of equal opportunity for all Americans is central to American ideals and culture.¹³²

The Triple Aim as a Framework for Medicaid Innovation

Five years after Berwick et al. wrote of the Triple Aim of health care costs, individual patient experience, and population health in 2008, Bradley and Taylor posited in 2013 that “in translating this goal into the regulatory sphere,” the CMS failed to establish meaningful measures of population health, instead designing measures of “cost of care, patient experience, and health care quality.”¹³³ Nonetheless, some MCOs- CareOregon, for example- are able to surmount expectations of the CMS, measuring baseline numbers of avoidable emergency department (ED) visits and repeating the measure post implementation of population health management interventions.¹³⁴ CareOregon also uses the Adjusted Clinical Groups (ACG) System, developed by Johns Hopkins University, to quantify the risk of morbidity posed by condition markers associated with frail health.¹³⁵ Finally, CareOregon applies the Health Utilities Index- Mark 3 (HUI3) instrument to measure members’ cognition, functional ability, and sensory acuity.¹³⁶

In the final report on the quality standards used to gauge Medicare Accountable Care Organization (ACO) performance, the CMS noted that it “listened to industry concerns” when it designed the standards, and adopted standards that providers were already reporting on, such as those in the Physician Quality Reporting System (PQRS), a CMS report employed by certain physicians and physician practices.^{137 138 139} Certainly, aligning reporting requirements across

¹²⁹ M. WHITEHEAD, WORLD HEALTH ORGANIZATION REGIONAL OFFICE FOR EUROPE, THE CONCEPTS AND PRINCIPLES OF EQUITY AND HEALTH 7 (1991).

¹³⁰ California Health Workforce Alliance, Taking Innovation to Scale: Community Health Workers, Promotores, and the Triple Aim, 12 (2013), <http://www.chhs.gov/PRI>.

¹³¹ *Id.* at 12.

¹³² *Supra* note 94, at 54.

¹³³ *Supra* note 73, at 175.

¹³⁴ *Supra* note 1, at 10.

¹³⁵ JOHNS HOPKINS UNIVERSITY BLOOMBERG SCHOOL OF PUBLIC HEALTH (J.P. WEINER & C. ABRAMS, EDS.), THE JOHNS HOPKINS ACG SYSTEM TECHNICAL REFERENCE GUIDE VERSION 9.0, 6-3 (2009), <http://acg.jhsph.org/public-docs/ACGv9.0TechRefGuide.pdf>.

¹³⁶ J. Horsman et al., *The Health Utilities Index (HUI): Concepts, Measurement Properties, and Applications*, 1 HEALTH & QUALITY OF LIFE OUTCOMES 1, 6 (2003).

¹³⁷ The CMS defines ACOs as “groups of doctors, hospitals, and other health care providers, who come together voluntarily to give coordinated high quality care to their Medicare patients... When an ACO succeeds both in delivering high-quality care and spending health care dollars more wisely, it will share in the savings it achieves for the Medicare program.” CENTERS FOR MEDICARE AND MEDICAID SERVICES, <https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/ACO/index.html>.

multiple regulated health care programs is prudent, as reduction of reporting burden will encourage widespread participation in program initiatives and help providers avoid the pitfall of focusing more program resources on data collection than on enrollee services.¹⁴⁰ On the other hand, it is difficult to streamline reporting requirements across multiple different programs and retain meaningful reporting that reveals true successes and opportunities for each program.¹⁴¹ Public health scholars at the National Committee for Quality Assurance (NCQA)- an accrediting body for health plans, providers, and health plan contractors- recommend “pooling administrative data within communities across all health plans, government purchasers, and other entities... to construct a more complete database representing most or all care rendered by that community’s physicians.”¹⁴² Blueprint for Health, the state of Vermont’s multi-payer initiative that includes the state’s Medicaid beneficiaries, is engaged in the Triple Aim and is establishing transparency of operational data (as suggested by NCQA), as well as outcomes data.¹⁴³ In 2016, Blueprint for Health will begin using 30 day unplanned hospital readmission rates as an interim outcomes measure, collecting data via an all payer claims database.¹⁴⁴ Final population health outcomes measured by Blueprint for Health include mortality measures, the Charlson Comorbidity Index, and DHHS’ Hierarchical Condition Categories (HHS-HCC) risk adjustment model.¹⁴⁵ ¹⁴⁶ ¹⁴⁷ Availability of the HHS-HCC instrument- developed by DHHS, the parent agency of the CMS- affords the CMS the opportunity to ensure that participating entities are accountable for measurement of population health management in a way that has not yet gained prominence in benchmarking for Medicare ACO demonstration projects.¹⁴⁸

¹³⁸ RTI INTERNATIONAL, ACCOUNTABLE CARE ORGANIZATION 2012 PROGRAM ANALYSIS: QUALITY PERFORMANCE STANDARDS NARRATIVE MEASURE SPECIFICATIONS FINAL REPORT, 3 (2011), https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/sharedsavingsprogram/downloads/ACO_QualityMeasures.pdf.

¹³⁹ CENTERS FOR MEDICARE AND MEDICAID SERVICES, <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/PQRS/index.html>.

¹⁴⁰ CENTERS FOR MEDICARE AND MEDICAID SERVICES, https://www.cms.gov/eHealth/ListServ_AligningQualityReporting.html.

¹⁴¹ NATIONAL COMMITTEE FOR QUALITY ASSURANCE, <http://www.ncqa.org/HEDISQualityMeasurement/PerformanceMeasurement.aspx>.

¹⁴² S. Hudson Scholle et al., *Availability of Data for Measuring Physician Quality Performance*. 15 AM. JOUR. MANAGED CARE. 67, 70 (2009).

¹⁴³ N. McCall et al., RTI INTERNATIONAL, EVALUATION OF THE MULTI-PAYER ADVANCED PRIMARY CARE PRACTICE (MAPCP) DEMONSTRATION: FIRST ANNUAL REPORT, 184 (2015).

¹⁴⁴ *Id.* at 200.

¹⁴⁵ *Id.* at 184.

¹⁴⁶ The Charlson Comorbidity Index was developed using data collected on 559 patients assigned a weighted index of the risk of death from comorbid disease within one year. Reliability of the index was tested over ten years using a second cohort of 685 patients. “With each increased level of the comorbidity index, there were stepwise increases in the cumulative mortality attributable to comorbid disease...” M.E. Charlson et al., *A New Method of Classifying Prognostic Comorbidity in Longitudinal Studies: Development and Validation*, 40 J. HEALTH CHRONIC DISEASES 373, 373.

¹⁴⁷ The HHS-HCC model uses “health plan enrollee diagnoses and demographics to predict medical expenditure risk.” Diagnoses are grouped into four criteria predictive of high cost, or chronicity subject to risk selection. J. Kautter et al., *The HHS-HCC Risk Adjustment Model for Individual and Small Group Markets under the Affordable Care Act*, 4 MEDICARE & MEDICAID RES. REV. E1, E2-4 (2014).

¹⁴⁸ *Supra* note 94, at 175.

The CMS established an opportunity for ACOs serving Fee-For-Service (FFS) Medicare beneficiaries in 2012.¹⁴⁹ PPACA was the enabling legislation that formed the statutory basis for the initiative, which the CMS implemented through its Medicare Shared Savings Program (MSSP).¹⁵⁰ As of 2015 the CMS has not established dedicated payment mechanisms for ACOs serving Medicaid beneficiaries, although PPACA mandates implementation of ACOs for pediatric Medicaid beneficiaries.¹⁵¹ Health policy analysts affirm the utility of the ACO structure for advancing the Triple Aim in Medicaid populations.¹⁵² However, theorists caution that the success of Medicaid ACOs will depend on a mission that embraces all three tenets of the Triple Aim, including addressing SDOH as part of a population health management strategy.¹⁵³ As Berwick et al. charged in 2008, any health care system using the Triple Aim to better serve its constituents must take a balanced approach to leveraging the Triple Aim framework, recognizing that at times reduction of costs, improvement of patient experience, and improvement in population health may compete with each other for system resources, but that in the long run, equity in health care will result from using all three goals to inform program strategy.¹⁵⁴ California's Molina Health Plan, a MCO and a participant in California's Coordinated Care Initiative for those eligible for both Medicare and Medicaid, employs the Triple Aim in its Community Connector Program.¹⁵⁵ Molina Health Plan uses HEDIS measures as a core metric to evaluate adherence to preventive screening but struggles to measure the impact of plan interventions on SDOH.¹⁵⁷ Molina Health Plan uses emergency department and inpatient hospital utilization as proxy measures for population health.¹⁵⁸

Successful application of the Triple Aim in a Medicaid ACO model will require attention to SDOH in operationalizing all three Triple Aim tenets, especially population health management.¹⁵⁹ McGinnis and Small remind providers that “in low-income populations, poor health outcomes are often driven by poverty and related social issues, including unstable housing and employment, problems getting transportation, and insufficient access to a nutritious diet.”¹⁶⁰ The ACO model demonstrates much potential to impact SDOH because the model can include not just medical providers, but social service agencies with expertise in SDOH, or partnerships

¹⁴⁹ CENTERS FOR MEDICARE AND MEDICAID SERVICES, <https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/sharesavingsprogram/index.html?redirect=/sharesavingsprogram>.

¹⁵⁰ Patient Protection and Affordable Care Act, PUB. L. NO. 111-148, 125 STAT. 119 § 1899 (a)(1)(A) (2010).

¹⁵¹ *Id.* 124 STAT. 325 § 2706 (a)(1) (2010).

¹⁵² *Supra* note 107, at 1.

¹⁵³ *Id.* at 3.

¹⁵⁴ *Supra* note 20, at 760.

¹⁵⁵ CA was selected by the CMS to design a proposal for “that describes how it would structure, implement, and monitor an integrated delivery system and payment model aimed at improving the quality, coordination, and cost-effectiveness of services for dual eligible individuals.” STATE OF CALIFORNIA, PROPOSAL TO THE CENTER FOR MEDICARE AND MEDICAID INNOVATION: COORDINATED CARE INITIATIVE: STATE DEMONSTRATION TO INTEGRATE CARE FOR DUAL ELIGIBLE BENEFICIARIES, 1 (2012), <https://www.cms.gov/medicare-medicaid-coordination/medicare-and-medicaid-coordination-office/downloads/caproposal.pdf>.

¹⁵⁶ *Supra* note 130, at 52.

¹⁵⁷ *Id.* at 55.

¹⁵⁸ *Id.* at 55.

¹⁵⁹ *Supra* note 20, at 760.

¹⁶⁰ *Supra* note 107, at 3.

with public health departments.¹⁶¹ Covering the cost of non-medical interventions aimed at SDOH depends upon innovation in payment models because since its 1965 inception, the statutory scope of Medicaid has remained limited to vendor payment for clinical services like doctor's office visits, hospitalizations, and medications.¹⁶² Any group of providers striving to include SDOH focused programs must finance the inclusion of non-medical programs like adult education support or housing referral services in its care model.¹⁶³ The ACO structure offers a financial model that addresses potential shortfalls of payment for community services by applying shared savings to services not reimbursable by Medicaid.¹⁶⁴ Savings accrued in the setting of global payments- or "fixed payments for the care of patient populations during a specified time period"- can be used to pay for services Medicaid cannot cover.¹⁶⁵ Further, some CMS administrators have encouraged states to apply for Medicaid waivers and demonstration projects to enable inclusion of interventions addressing SDOH in their Medicaid programs.¹⁶⁶ For example, to offer a program that provides a safe, nurturing environment for babies of chemically dependent mothers, the state of Vermont secured a waiver from Medicaid requirements to enable payment for day care.¹⁶⁷

Another innovative Medicaid payment pathway is that taken by the Colorado Medicaid program, which has established contracts with ACOs identified strategically by location.¹⁶⁸ Gourevitch et al. propose that the state of Colorado design incentives for the ACOs that would hold them accountable for population health metrics unique to the Medicaid populations in the specific communities served.¹⁶⁹ Careful design of the metrics to ensure they are true benchmarks of population health and not quality measures only can maintain the Triple Aim as a foundation of the ACOs' systems of care delivery.^{170 171}

The concept of combining ACO structure, global payment design, and the Triple Aim has given rise to an ACO framework tailored to the specific needs of Medicaid beneficiaries: Totally Accountable Care Organizations, or TACOs.¹⁷² Dr. Jeffrey Brenner of the Robert Wood Johnson Medical School in Camden, NJ, has written about the benefits resulting from diverse entities collaborating to form a TACO in Camden.¹⁷³ Camden is a city populated by 79,000

¹⁶¹ M.N. Gourevitch et al., *The Challenge of Attribution: Responsibility for Population Health in the Context of Accountable Care*, 102 AM. JOUR. PUB. HEALTH, S322, S323 (2012).

¹⁶² *Supra* note 31, at 110.

¹⁶³ S. Somers & T. McGinnis, *Broadening the ACA Story: A Totally Accountable Care Organization*, HEALTH AFFAIRS BLOG (Jan. 23, 2014), <http://healthaffairs.org/blog/2014/01/23/broadening-the-aca-story-a-totally-accountable-care-organization/>.

¹⁶⁴ *See id.*

¹⁶⁵ R.E. Mechanic et al., *Medical Group Responses to Global Payment: Early Lessons from the 'Alternative Quality Contract' in Massachusetts*, 30.9 HEALTH AFF., 1734, 1734.

¹⁶⁶ *Supra* note 31, at 110.

¹⁶⁷ *Id.* at 110.

¹⁶⁸ *Supra* note 161, at S323.

¹⁶⁹ *Id.* at S323.

¹⁷⁰ *Id.* at S323.

¹⁷¹ *Supra* note 73, at 175-176.

¹⁷² *Supra* note 163.

¹⁷³ J. Brenner, *Building an Accountable Care Organization in Camden, NJ*, PRESCRIPTIONS FOR EXCELLENCE IN HEALTH CARE 1 (Summer, 2010), <http://jdc.jefferson.edu/cgi/viewcontent.cgi?article=1075&context=pehc>.

people, 44% of whom earn below the federal poverty level.¹⁷⁴ Prior to the 2007 implementation of the Camden Coalition of Healthcare Providers (CCHP), a TACO, the hospitals serving the community billed enough in acute care charges to pay the salaries of 100 nurse practitioners (NPs) to care for ten Camden patients each in an ambulatory setting.¹⁷⁵ Brenner emphasizes the need for a TACO in Camden by pointing out that “systems in urban communities (i.e., public health, safety, education) become insular, self-perpetuating, and resistant to change.”¹⁷⁶ Brenner goes on to caution that sustained change in provider practice behaviors is only possible with many years of effort by an organized group of stakeholders, but he offers strategies that yield results with incremental changes.¹⁷⁷ One early key strategy employed by CCHP was development of a data registry comprised of all acute care claims from the hospitals serving Camden, an innovation that has simultaneously revealed utilization trends, identified high service utilizers for care management interventions, and built support for the TACO from public and private stakeholders.¹⁷⁸ In 2007 CCHP started its Citywide Care Management Project, an interdisciplinary care management team that accepts referrals from all local providers and payer sources, provides “transitional” primary care services to patients who do not have primary care providers (PCPs), and uses social care management to address SDOH like homelessness.¹⁷⁹ In 2009 the CCHP was managing 60-90 patients in its various programs and had meaningful data on 36 patients to make outcomes analysis possible.¹⁸⁰ The time and resource investment required to realize program results on a large scale is not disputed by Brenner, who calls upon policy makers to “lay the groundwork for the new behaviors that must emerge” that nurture care coordination, data transparency, and regional health care systems.¹⁸¹ Brenner laments, “Sadly, organizations capable of facilitating these activities do not exist in most regions.”¹⁸² As a federal government agency, the CMS has not taken a strong position on galvanizing the collaboration of Medicaid providers in order to advance an agenda of population health.¹⁸³ Political controversy over the extent to which the federal government should be involved as a change agent in the public’s health is a deterrent to the CMS as an integrator.¹⁸⁴

IHI scholar John Whittington admits that “the ideal structure” of an integrator is yet to be determined.¹⁸⁵ Whittington adds that “[some] have argued that in the [U.S.], no single entity is naturally positioned to integrate services and resources to accomplish the Triple Aim.”¹⁸⁶ Whittington further argues that the seven months during which collaborator Donald Berwick was Administrator of the CMS showed the most promise for broad application of the Triple Aim

¹⁷⁴ J. Brenner, *Reforming Camden’s Health Care System- One Patient at a Time*, J. Brenner, *Building an Accountable Care Organization in Camden, NJ*, PRESCRIPTIONS FOR EXCELLENCE IN HEALTH CARE 1 (Summer, 2009), <http://jdc.jefferson.edu/cgi/viewcontent.cgi?article=1047&context=pehc>.

¹⁷⁵ *Id.* at 1.

¹⁷⁶ *Id.* at 2.

¹⁷⁷ *Supra* note 173, at 2.

¹⁷⁸ *Id.* at 2.

¹⁷⁹ *Supra* note 174, at 2-3.

¹⁸⁰ *Id.* at 2.

¹⁸¹ *Supra* note 173, at 1.

¹⁸² *Id.* at 1.

¹⁸³ N. Lurie, *What the Federal Government Can Do About the Nonmedical Determinants*, 21.2 HEALTH AFF., 94, 102 (2002).

¹⁸⁴ *Id.* at 102.

¹⁸⁵ J. W. Whittington et al., *Pursuing the Triple Aim: The First Seven Years*, 93 MILBANK Q., 263, 270 (2015).

¹⁸⁶ *Id.* at 271.

across U.S. federal agencies.¹⁸⁷ ¹⁸⁸ Nonetheless, Whittington found evidence of Triple Aim coordination by a federal agency as recently as 2014 when he studied the Chinle Service Unit (CSU), a comprehensive health care program funded and administered by the Indian Health Services (IHS).¹⁸⁹ Like the CMS, the IHS is a DHHS operating division.¹⁹⁰ The CSU is what McCarthy and Klein have termed a “macro-integrator,” a large system with the scale to coordinate many smaller organizations.¹⁹¹ Under the direction of the IHS, the CSU serves 35,000 residents of 31 Navajo communities, using a Triple Aim structure to transform its primary care services for alignment of quality improvement, cost containment, and improvement of population health.¹⁹² Three of the CSU’s outcome measures for its diabetic population are hemoglobin A1c, blood pressure, and low density lipoprotein (LDL).¹⁹³ Four years after implementation of a community health worker program for diabetics, the CSU demonstrated a five per cent overall improvement across the three measures in the diabetes outcome bundle.¹⁹⁴

Building upon the Triple Aim framework launched by Berwick, Whittington, and others at IHI, health care performance improvement scholars have identified use of evidence based care pathways, more sophisticated risk stratification of populations, and transparency of health status data as practices that promote success of all three Triple Aim tenets.¹⁹⁵ To achieve the Triple Aim, Medicaid will need to meet the objective of data transparency across systems.¹⁹⁶ Specific data related objectives for Medicaid programs include widespread adoption of beneficiary and provider portals to enable beneficiary engagement and provider benchmarking; timely transfer of claims data to registries with achievement of solid data analysis; and use of data for accurate risk stratification and successful targeting of health care super utilizers for intervention.¹⁹⁷ McGinnis and Small note that a minimum requirement for improving the individual experience of care, controlling per capital health care costs, and improving population health is an electronic health record (EHR) that feeds registries and provides access to clinical decision support and predictive modeling.¹⁹⁸ Implementation of an effective EHR has emerged as a challenge for some entities; for example, a physician practice had not incorporated the task of analyzing data output from its EHR into any of the organization’s job functions.¹⁹⁹

¹⁸⁷ *Id.* at 297.

¹⁸⁸ President Barack Obama “granted Berwick a ‘recess appointment’ [as Administrator of the CMS] on July 7, 2010, while the Senate was out of session.” Berwick resigned a mere seven months later because strident opposition to his appointment by Republican senators guaranteed that Berwick would never achieve the 60 Senate votes required to confirm his appointment. J.K. Iglehart, *Confirming the CMS Nominee- Overcoming Poisonous Politics*, 366.3 NEW. ENG. J. MED., 204, 204 (2012).

¹⁸⁹ *Supra* note 185, at 285.

¹⁹⁰ *Id.* at 285.

¹⁹¹ D. McCarthy & S. Klein, *The Triple Aim Journey: Improving Population Health and Patients’ Experience of Care, While Reducing Costs* 48 THE COMMONWEALTH FUND, 8 (July 2010) http://bhintegration.org/media/9722/triple_aim_journey.pdf.

¹⁹² *Id.* at 293.

¹⁹³ *Id.* at 293.

¹⁹⁴ *Id.* at 293.

¹⁹⁵ S. DeVore & W. Champion, *Driving Population Health Through Accountable Care Organizations*, 30.1 HEALTH AFF., 41, 44 (2011).

¹⁹⁶ *Id.* at 44.

¹⁹⁷ *Supra* note 107, at 2.

¹⁹⁸ *Id.* at 2.

¹⁹⁹ P.A. Nutting et al., *Appendix Exhibit 1, Practice X- Early Success*, 2, in *Transforming Physician Practices to Patient-Centered Medical Homes: Lessons from the National Demonstration Project*, 30 HEALTH AFF., 439, (2011).

Besides being dependent on data transparency, success of the Triple Aim is reliant on the integration of different health care modalities into a multidisciplinary care team for which patient needs assume primacy over efficiency of physician practice.²⁰⁰ A paradigm shift that is tolerant of new care team leadership structures is required to achieve Triple Aim success.²⁰¹ Nutting et al. noted that practices recruited for the American Academy of Family Physicians' National Demonstration Project, a large scale patient centered medical home (PCMH) implementation, struggled to meet patients' primary care needs using traditional physician directed medical care.²⁰² Nutting et al. caution that "the primary care activities required of medical homes have simply outrun the ability of any one discipline to single-handedly provide comprehensive care."²⁰³

DHHS, too, must master paradigm shifts in order to mobilize the Triple Aim.²⁰⁴ A former DHHS official suggests that federal agencies are often unmotivated to collaborate on programs because return on investment is difficult to demonstrate when interventions performed through one agency lead to accrual of savings by another.²⁰⁵ Budget planning for intra-agency programming also presents a challenge to integration because budget planning is not done across sectors.²⁰⁶ The National Center for HIV/AIDS, Viral Hepatitis, STD and TB Prevention (NCHHSTP)- a task force of the CDC, itself a DHHS operating division- recognizes that a comprehensive federal approach to SDOH necessitates "shifting from the old paradigm of addressing diseases to a new paradigm that incorporates" SDOH.²⁰⁷ In its 2008 Meeting Report, the NCHHSTP identified "encouraging organizations to partner without incentives" as another barrier for integrator agencies to overcome.²⁰⁸ Some public health policy theorists charge that mobilizing partnerships is an essential public health service.²⁰⁹

Legal and Political Influences on Medicaid Program Reform

Because population health management addresses the health status of large groups of people, proponents of population health look to the federal government to encourage and even mandate population health management.²¹⁰ Yet, health policy analysts charge that federal agencies such as the CMS have not leveraged available tools like public health law to advance a strong population health management agenda.²¹¹ Public health law has not been widely used to ensure that population health is part of Medicaid programming because public health is primarily

²⁰⁰ P.A. Nutting et al., *Transforming Physician Practices to Patient-Centered Medical Homes: Lessons from the National Demonstration Project*, 30 HEALTH AFF., 439, 441 (2011).

²⁰¹ *Id.* at 441.

²⁰² *Id.* at 441.

²⁰³ *Id.* at 441.

²⁰⁴ *Supra* note 111, at 11.

²⁰⁵ *Supra* note 183, at 102-3.

²⁰⁶ *Id.* at 103.

²⁰⁷ *Supra* note 111, at 11.

²⁰⁸ *Id.* at 11.

²⁰⁹ H.C. Sox, *Resolving the Tension Between Population Health and Individual Health Care*, 310 JAMA 1933, 1933 (2013).

²¹⁰ *Supra* note 183, at 94-95.

²¹¹ E. Tobin Tyler, *Aligning Public Health, Health Care, Law and Policy: Medical-Legal Partnerships as a Multilevel Response to the Social Determinants of Health*, 8 J. HEALTH & BIOMED. L., 211, 217 (2012).

considered to be a means of addressing only communicable diseases, and also because some legal scholars caution that broad application of public health law would inappropriately restrict personal autonomy.²¹² Supporters of the “new public health” movement counter these arguments by arguing that chronic conditions caused by SDOH have usurped infectious disease as a major cause of morbidity and mortality and should therefore be aggressively attended to by the public health sector.²¹³ In addition, SDOH as a driver of health disparity is a public health law issue because health disparity itself restricts the autonomy of those negatively impacted by SDOH.²¹⁴

The new public health movement charges that responsibility for SDOH-related morbidity and mortality exceeds the personal accountability framework traditionally applied to illnesses like heart disease.²¹⁵ Traditional public health approaches to chronic illness assume that ill health arises from personal choices to engage in risky behavior.²¹⁶ In the U.S., public health has played a prominent role in education directed at encouraging individuals to change behaviors injurious to health.²¹⁷ Reduction of smoking after aggressive anti-smoking campaigns is a striking example of successful public health education.²¹⁸ New public health theorists contend that choices to engage in behaviors that influence health should not be viewed as isolated from the environments in which those choices are made.²¹⁹ For example, residents of poor neighborhoods lacking in access to “safe recreational facilities” cannot be said to have made fully autonomous choices to avoid exercise.²²⁰ Viewing behaviors that influence health in the context of the environments in which they occur is known as the ecological model of health.²²¹ Health policy advocates working in the sphere of the ecological model have found public health law to be a necessary resource because changing the environment may require legal intervention.²²²

Legal intervention in public health law generates political controversy because in contrast to supporting the individualistic American ideal of autonomy, legal intervention in public health invokes paternalism.²²³ A definition of paternalism often used in the field of public health law was put forth by Gerald Dworkin, who called paternalism the “interference with a person’s liberty of action justified by reasons referring exclusively to the welfare, good, happiness, needs, interests, or values of the person being coerced.”²²⁴ In order to avoid conflicts caused by the perception of public health law as a restrictive force over individual choice, some theorists advocate a “soft” paternalism that adjusts the environment to make health affirming decisions

²¹² *Supra* note 26, at 1794.

²¹³ L.F. Wiley, *Rethinking the New Public Health*, 69 WASH & LEE L. REV., 207, 211 (2012), referring to T.H. Tulchinsky & E.A. Varavikova, N. Awofeso, D.E. Beauchamp & B. Steinbock, eds., W. E. Parmet & R. Daynard, and R.A. Epstein.

²¹⁴ *Supra* note 129, at 7.

²¹⁵ *Supra* note 211, at 217.

²¹⁶ *Supra* note 90, at 254.

²¹⁷ *Supra* note 183, at 97.

²¹⁸ *Id.* at 97.

²¹⁹ E. Blacksher, *On Being Poor and Feeling Poor: Low Socioeconomic Status and the Moral Self*, 23 THEORETICAL MED. & BIOETHICS 455, 460 (2002).

²²⁰ E.W. Parento, *Health Equity, Healthy People 2020, and Coercive Legal Mechanisms as Necessary for the Achievement of Both*, 58 LOY. L. REV. 655, 667 (2012).

²²¹ *Supra* note 213, at 222.

²²² S. Burris et al., *Integrating Law and Social Epidemiology*, 30 J.L. MED. & ETHICS 510, 511 (2002).

²²³ *Supra* note 213, at 215.

²²⁴ G. Dworkin, *Paternalism*, 56 THE MONIST 64, 65 (1972).

more likely.²²⁵ Others assert that soft paternalism is a suboptimal approach to improving population health because “the costs of permitting people to continue to make bad choices are not justifiable when a hard approach would simply eliminate the bad choice.”²²⁶ Recommendations of hard paternalism in public health involve espousal of coercion.²²⁷

Hard paternalism and coercion have been suggested as necessary elements of federal initiatives to address population health.²²⁸ Writing in 2012, Emily Whelan Parento challenged DHHS to employ coercion in application of its Healthy People 2020 (HP 2020) objectives.²²⁹ The Healthy People Project is DHHS’ initiative to set health improvement objectives for the U.S.²³⁰ The Project is renewed every ten years, and the most recent iteration- HP 2020- for the first time includes goals related to SDOH.²³¹ While Whelan Parento notes that HP 2020 does advocate hard paternalism and coercion in some areas such as anti-smoking legislation, she argues that coercion- in the form of direct regulation- is only employed by HP 2020 when use of coercion is unlikely to stimulate political controversy.^{232 233} Berwick et al. would likely agree that addressing SDOH can be controversial, having written of Triple Aim implementation that “the remaining barriers are not technical; they’re political.”²³⁴ Whelan Parento states that “the [SDOH] are the only topics for which [DHHS] has not yet set objectives and indicators.”²³⁵ According to Whelan Parento, lack of SDOH metrics in HP 2020 results from the fact that SDOH are not under the jurisdiction of DHHS.²³⁶ Some scholars contend that federal health care programs should and can act to resolve health disparity, and that examples of successful integration of health care and interventions directed at SDOH are available.²³⁷ For example, the U.S. Department of Veterans Affairs (VA) is a single agency that provides health care to veterans and also finances their education.²³⁸ “Separate but parallel” systems like Medicaid and the education system could be linked in collaborative efforts to further the health of Medicaid beneficiaries.²³⁹

The extent of health disparity varies so much between different geographic locations and communities that a concerted federal effort may be the only pathway toward resolution of disparity.²⁴⁰ The Centers for Disease Control and Prevention (CDC), like the CMS an agency under the jurisdiction of DHHS, has recognized that interagency collaboration is required to decrease health disparity by addressing SDOH.²⁴¹ Under the auspices of the CDC, the

²²⁵ D.A. Friedman, *Public Health Regulation and the Limits of Paternalism*, 46. CONN. L. REV., 1687, 1690 (2014).

²²⁶ *Id.* at 1691.

²²⁷ *Supra* note 220, at 657.

²²⁸ *Id.* at 659.

²²⁹ *Id.* at 660.

²³⁰ *Id.* at 659-660.

²³¹ *Id.* at 660.

²³² *Id.* at 660.

²³³ Emily Whelan Parento lists motorcycle helmet laws as an example of public health legislation that provokes relatively little controversy. *Id.* at 660.

²³⁴ *Supra* note 20 at 768.

²³⁵ *Supra* note 220, at 674.

²³⁶ *Id.* at 674.

²³⁷ *Supra* note 209, at 1933.

²³⁸ *Id.* at 1933.

²³⁹ *Id.* at 1933.

²⁴⁰ *Supra* note 183, at 103.

²⁴¹ *Supra* note 111, at 12.

NCHHSTP prepared recommendations to target SDOH that prescribe partnerships between four other DHHS agencies plus state and local health departments, community agencies, private foundations, and interest groups.²⁴² The CMS is notably absent from the list of DHHS agencies named as partners, though the NCHHSTP consultation report makes broad reference to inclusion of “other... federal... agencies” toward the end of its list of suggested collaborators.²⁴³ The fact that the CMS was not specifically charged with partnership in efforts to impact SDOH suggests that DHHS continues to struggle with what Emily Whelan Parento calls DHHS’ “jurisdictional issue” of patchwork regulatory responsibility for population health management.²⁴⁴

DHHS is, however, attempting to unify other federal departments and agencies through its partnership with the Office of Minority Health (OMH).²⁴⁵ Together, DHHS and the OMH created the National Partnership for Action to End Health Disparities (NPA), an alliance of 12 federal departments and agencies charged with defining an overall stakeholder approach to resolution of health disparities; urging consideration of SDOH in efforts to transform health care; providing technical assistance to member agencies working on issues related to health disparity; and establishing measures of success.²⁴⁶ Entities aligned in the NPA include the U.S. Department of Commerce (DOC), the Department of Housing and Urban Development (HUD), the VA, and the Department of Labor (DOL).²⁴⁷ The NPA has produced the HHS Action Plan to Reduce Racial and Ethnic Health Disparities, a set of five goals: transformation of health care; improving the health and human services infrastructure; supporting scientific innovation; increasing efficiency, transparency, and accountability of HHS programs; and improving the health and wellbeing of the American people.²⁴⁸

DHHS is charged with maximizing the health and wellbeing of all Americans, not just the impoverished beneficiaries of Medicaid.²⁴⁹ According to Fabienne Peter, “In the case of population health, a maximizing approach implies that we are indifferent between health benefits to... the poor and to the rich, as long as these benefits have the same impact on overall population health.”²⁵⁰ The “maximizing approach” described by Peter is a variation of utilitarianism, which urges “the maximal balance of positive value over disvalue...”²⁵¹ One limitation of utilitarianism is that it considers only the total balance of benefits and can ignore inequitable distribution of benefits.²⁵² Peter embraces the alternative of Derek Parfit’s “priority view” of health equity, in which the primary concern is alleviation of “absolute deprivation... Improving the lot of those who suffer most will yield the greatest gain in social utility or well-

²⁴² *Id.* at 13.

²⁴³ *Id.* at 13.

²⁴⁴ *Supra* note 220, at 674.

²⁴⁵ M.R. Beadle & G.N. Graham, *Collective Action to End Health Disparities*, 101 AM. JOUR. PUB. HEALTH, S16, S17 (2011).

²⁴⁶ *Id.* at S17.

²⁴⁷ *Id.* at S17.

²⁴⁸ U.S. DEPT. OF HEALTH & HUMAN SERVICES, HHS ACTION PLAN TO REDUCE RACIAL AND ETHNIC HEALTH DISPARITIES: A NATION FREE OF DISPARITIES IN HEALTH AND HEALTH CARE, 15-34 (2011), <http://minorityhealth.hhs.gov/omh/>.

²⁴⁹ F. Peter, *Health Equity and Social Justice*, 18 JOURNAL OF APPLIED PHILOSOPHY, 159, 162 (2001).

²⁵⁰ *Id.* at 162.

²⁵¹ T.L. BEAUCHAMP AND J.F. CHILDRESS, *PRINCIPLES OF BIOMEDICAL ETHICS*, 5TH ED. 341 (Oxford University Press 2001).

²⁵² *Id.* at 213.

being.”²⁵³ Health law theorists and health policy scholars further the imperative that equitable distribution of opportunity for vulnerable populations to achieve health is a public health issue, stating, “The philosophy of public health is social justice.”²⁵⁴

Measuring the Health of Medicaid Populations

Describing Medicaid as a means to an end concerning health equity, Karen Davis wrote in 1991 that Medicaid has been used to rectify health disparities in the elderly insured by Medicare.²⁵⁵ PPACA takes the biggest strides yet toward linking public health initiatives, including population health, with Medicaid.²⁵⁶ Section 4302 of PPACA mandates that “for each federally conducted or supported health care or public health program or activity, the Secretary shall analyze data collected... to detect and monitor trends in health disparities... at the Federal and State levels.”²⁵⁷ The CMS is specifically named as an agency that must collect data on health disparities pertaining to beneficiaries of its programs.²⁵⁸ In recommendations directed at HP 2020, Emily Whelan Parento suggests a “health in all policies (HiAP) paradigm and the use of health impact assessments to guide policy decisions,” a method that can be applied by any public or private entity seeking to assess the effect of its programs on population health.²⁵⁹

Gostin et al. write of HiAP,

A Health-in-All-Policies (HiAP) or "All of Government" approach requires the government to consider the impact of all of its policies on the population's health status and the impact of health on other sectors of society. A strategy to strengthen the link between health and other social policies, HiAP addresses the effects on health of areas as diverse as agriculture, education, the environment, urban planning, fiscal policy, housing, and transport. The fundamental insight of HiAP is that health is not just a function of medical care or even broader public health; health status is also determined by food, income, environmental, and other policies.²⁶⁰

Use of the HiAP approach in Medicaid policy development would knit together multiple stakeholders in policy development and include consideration of SDOH in the design of health program interventions.²⁶¹

In HiAP, the tool used to measure the impact of a policy on health is the health impact assessment (HIA).²⁶² HIA is “any combination of procedures or methods by which a proposed

²⁵³ *Supra* note 249, at 163, F. Peter quoting D. Parfit, Equality or Priority, The Lindley Lecture, University of Kansas (Nov. 21, 1991).

²⁵⁴ W.H. Foege, *Public Health: Moving From Debt to Legacy*, Address Before the American Public Health Association (Sept. 29, 1986), in 77 AM. J. PUB. HEALTH 1276, 1277 (1987).

²⁵⁵ K. Davis, *Inequality and Access to Health Care*, 69 MILBANK Q. 253, 267 (1991).

²⁵⁶ L. Gable, *The Patient Protection and Affordable Care Act, Public Health, and the Elusive Target of Human Rights*, 39 J.L. MED. & ETHICS 340, 344-345 (2011).

²⁵⁷ *Supra* note 150, 124 STAT. 580 § 3101(c)(1)(E) (2010).

²⁵⁸ *Supra* note 150, 124 STAT. 580 § 3101(b)(1) (2010).

²⁵⁹ *Supra* note 220, at 713.

²⁶⁰ *Supra* note 26, at 1819.

²⁶¹ INSTITUTE OF MEDICINE, FOR THE PUBLIC'S HEALTH: REVITALIZING LAW AND POLICY TO MEET NEW CHALLENGES 8 (The National Academies Press 2011).

policy or program may be judged as to the effects it may have on the health of a population.”²⁶³ HIA has utility in measuring population health in the context of environment because this method includes multilevel modeling techniques to analyze drivers of population health.^{264 265} An advantage of HIA over the quantitative evaluation employed by scientific research is that HIA considers subjective as well as objective data.²⁶⁶ HIA may be applied as a six step process, or may be streamlined into a two-step process- called rapid appraisal- that can be integrated with program interventions.²⁶⁷ The WHO developed an early rapid appraisal technique to collect qualitative data from many health workers deployed over geographical areas.²⁶⁸ The rapid appraisal technique used by the WHO is called participatory rapid appraisal, incorporating qualitative data from a variety of stakeholders, including members of the community.²⁶⁹ Researchers acknowledge that potential weaknesses of rapid appraisal may include reticence of stakeholders to participate in assessment due to a lack of understanding of HIA, or, where non-participatory rapid appraisal is used, output limited to the perspectives of few stakeholders.^{270 271} However, benefits of rapid appraisal are thought to outweigh limitations of rapid appraisal.²⁷² One key benefit of rapid appraisal is that stakeholders gain understanding of the opportunities being addressed by interventions.²⁷³ Another benefit of rapid appraisal is the reinforcement of health as an important issue that is within the scope of both health-related and other organizations.²⁷⁴ HIA is a means of gathering meaningful data on health disparity from relevant stakeholders across organizations and communities.²⁷⁵ Application of HIA lags in the U.S., but has gained prominence as a part of policy development in Europe and in Canada.²⁷⁶

HIA is used as part of a HiAP approach to environmental impact assessment (EIA) in the province of Quebec, Canada.²⁷⁷ Quebec’s Public Health Act of 2001 mandates that before implementation, all public policies are submitted for rigorous screening of their potential impact

²⁶² *Supra* note 220, at 714.

²⁶³ P.A. Ratner et al., *Setting the Stage for Health Impact Assessment*, 18 JOUR. PUB. HEALTH PO’LY, 67, 68 (1997).

²⁶⁴ J. Kemm & J. Parry, *What is HIA? Introduction and Overview*, in HEALTH IMPACT ASSESSMENT: CONCEPTS, THEORY, TECHNIQUES, AND APPLICATIONS (KEMM, J., PARRY, J., & PALMER, S., EDS.) 4 (Oxford University Press 2004).

²⁶⁵ In the multi-level modelling method of data analysis, “regression intercepts and slopes at the individual level may be treated as random effects of a higher (ex., organizational) level.” Garson, G.D. *Fundamentals of Hierarchical Linear and Multilevel Modeling*, in HIERARCHICAL LINEAR MODELING: GUIDE AND APPLICATIONS (GARSON, G.D., ED.) 4 (Sage Publications, Inc. 2013).

²⁶⁶ *Supra* note 26, at 4.

²⁶⁷ E. Ison, *Rapid Appraisal Techniques*, in HEALTH IMPACT ASSESSMENT: CONCEPTS, THEORY, TECHNIQUES, AND APPLICATIONS (KEMM, J., PARRY, J., & PALMER, S., EDS.) 115 (Oxford University Press 2004).

²⁶⁸ *Id.* at 116.

²⁶⁹ *Id.* at 119.

²⁷⁰ Non participatory rapid appraisal is assessment without the direct input of stakeholders, as with a desktop review. *Id.* at 116.

²⁷¹ *Id.* at 121.

²⁷² *Id.* at 121-122.

²⁷³ *Id.* at 121.

²⁷⁴ *Id.* at 122.

²⁷⁵ *Supra* note 264, at 6.

²⁷⁶ J. Collins et al., *Health Impact Assessment: A Step Toward Health in all Policies*, 302.3 J. AM. MED. ASS’N, 315, 315 (2009).

²⁷⁷ R. Banken, *HIA of Policy in Canada*, in HEALTH IMPACT ASSESSMENT: CONCEPTS, THEORY, TECHNIQUES, AND APPLICATIONS (KEMM, J., PARRY, J., & PALMER, S., EDS.) 169-70 (Oxford University Press 2004).

on health determinants.²⁷⁸ Screening criteria may include either rapid or full HIA, and a statement of impact made by the Minister of Health, who is empowered to direct any policy changes he or she sees fit for compliance with the Public Health Act.²⁷⁹ Slovenia has become the first country to utilize HIA in an agriculture and food policy, which it did to fulfill a requirement for entrance into the European Union (EU) in 2004.²⁸⁰

Where health promotion is concerned, assurance is demanded that future savings will accrue from public investment.²⁸¹ However, proof of cost savings has never been required to garner acceptance of, and even demand for, medical treatments.²⁸² Evidence of safety and clinical effect has been the only requirement for widespread adoption of drugs and treatments. In 1970, only four years after the enactment of Medicaid, administrators at the Office of Economic Opportunity wrote that researchers must emphasize that “socially desirable actions” like ensuring quality health care “need no further justification.”²⁸³ Criticizing overreliance on the biomedical model of health, Harvard School of Public Health ethicist Norman Daniels warned in 1985 that American health care systems are centered too much on acute care of disease, and not enough on “preventive and holistic care.”²⁸⁴ In 2013 Bradley and Taylor criticized American grant-making bodies for funding precise, easily quantifiable medical interventions and avoiding “large, unwieldy programs addressing systemic and structural issues.”²⁸⁵ Gostin et al. note that even as public health funding diminishes overall, a large percentage of public health funding is dedicated to the treatment of individuals.²⁸⁶ But as the federal and state program that provides health insurance to almost 67 million vulnerable Americans, Medicaid can use data on the health of that population to determine drivers of health disparity.²⁸⁷

Conclusion

By the middle of the 20th century, the steady growth of medicalization and technology in American health care threatened to leave large parts of the population without health care because they had no means of paying for it.²⁸⁸ Medicaid was conceived as a vehicle for financing the health care services rendered to the poor and disabled.²⁸⁹ Medicaid is federalist in its design, which comprises broad program oversight by the federal government while each state retains the power to design benefits and delivery systems most appropriate to the needs of its

²⁷⁸ *Id.* at 169-70.

²⁷⁹ *Id.* at 169, referring to PUBLIC HEALTH ACT, C.Q.L.R. C S-2.2 ART. 54 (Can.).

²⁸⁰ K. Lock & M. Gabrijelcic-Blenkus, *HIA of Agriculture and Food Policies*, in HEALTH IMPACT ASSESSMENT: CONCEPTS, THEORY, TECHNIQUES, AND APPLICATIONS (KEMM, J., PARRY, J., & PALMER, S., EDS.) 379 (Oxford University Press 2004).

²⁸¹ *Supra* note 25, at 84.

²⁸² *Id.* at 84.

²⁸³ Sparer, G., et al., *Consumer Participation in OEO-assisted Neighborhood Health Centers*, 60 AM. JOUR. PUB. HEALTH AND THE NATIONS HEALTH, 1091, 1093 (1970).

²⁸⁴ Daniels, N., JUST HEALTH CARE 29 (Cambridge University Press, 1985).

²⁸⁵ *Supra* note 73, at 190.

²⁸⁶ *Supra* note 26, at 1796.

²⁸⁷ *Supra* note 79.

²⁸⁸ *Supra* note 41, at xxxv.

²⁸⁹ *Id.* at xxxv.

citizens.²⁹⁰ But local actors are ill equipped to influence outcomes beyond their jurisdictions, so despite the availability of Medicaid to vulnerable persons across the U.S., wide disparity in health exists from state to state.²⁹¹

The Triple Aim is a framework that has potential to reduce health disparity resulting from SDOH, provided that the CMS sets objectives for improving population health as well as controlling Medicaid program costs and improving the care experiences of individual beneficiaries.²⁹² Barriers to realizing Triple Aim objectives on a federal scale include leveraging compartmentalized program budgets and accurate attribution of cost savings to the different agencies contributing interventions.²⁹³ As a federal agency with a public health imperative, the CMS is appropriately charged with active partnership with other federal agencies and the private sector to address SDOH.²⁹⁴ In the form of ACOs, innovative care designs that shift health care from expensive acute care settings to communities are already available to the CMS.²⁹⁵ An action the CMS can take to encourage population health management in Medicaid populations is using demonstration projects to incentivize states to direct care of Medicaid beneficiaries to TACOs.²⁹⁶

Ensuring total accountability for care of Medicaid populations requires the CMS to position itself as a macro-integrator of large systems.²⁹⁷ As a macro-integrator, the CMS should then retain accountability for supporting data transparency across systems to enable accurate predictive modeling and risk stratification, and thus the direction of resources to the most vulnerable Americans.²⁹⁸ Measurement of interventions designed to improve population health through attention to SDOH is challenging when attempted using the tools of biomedical research models, but alternative outcome measurement methodologies are available that account for the environmental context of illness and ensure engagement of all stakeholders.²⁹⁹

The CMS can and must assume the role of an integrator entity that works to improve the health of Medicaid populations using the Triple Aim.³⁰⁰ Failure to do so is also failure to build a just health care system for all Americans.³⁰¹

²⁹⁰ *Id.* at 57-58.

²⁹¹ *Supra* note 183, at 103.

²⁹² *Supra* note 73, at 175.

²⁹³ *Supra* note 183, at 102-103.

²⁹⁴ *Supra* note 73, at 175.

²⁹⁵ *Supra* note 107, at 12.

²⁹⁶ See *Supra* note 163.

²⁹⁷ *Supra* note 191, at 8.

²⁹⁸ *Id.* at 7.

²⁹⁹ *Supra* note 220, at 713.

³⁰⁰ *Supra* note 20, at 763.

³⁰¹ *Supra* note 127, at S150.

References

- Åslund, C., Starrin, B., & Nilsson, K. W. (2010). Social capital in relation to depression, musculoskeletal pain, and psychosomatic symptoms: A cross-sectional study of a large population-based cohort of Swedish adolescents. *BMC Public Health, 10*(1), 715.
- Backer, L. C. (1993). Medieval poor law in twentieth century America: Looking back towards a general theory of modern American poor relief. *Case Western Reserve Law Review, 44*, 871-1041.
- Barr, D. A. (2014). *Health disparities in the United States: Social class, race, ethnicity, and health*. Baltimore, MD: Johns Hopkins University Press.
- Beadle, M. R., & Graham, G. N. (2011). Collective action to end health disparities. *American journal of public health, 101*(S1), S16-S18.
- Beauchamp, T.L., & Childress, J.F. (2001). *Principles of biomedical ethics* (5th ed.). New York, NY: Oxford University Press.
- Berwick, D. M., Nolan, T. W., & Whittington, J. (2008). The triple aim: Care, health, and cost. *Health Affairs, 27*(3), 759-769.
- Blacksher, E. (2002). On being poor and feeling poor: Low socioeconomic status and the moral self. *Theoretical Medicine and Bioethics, 23*(6), 455-470.
- Bodenheimer, T. (1997). The Oregon health plan—lessons for the nation. *New England Journal of Medicine, 337*(10), 720-3.
- Bradley, E. & Taylor, L. (2013). *The American health care paradox: Why spending more is getting us less*. New York, NY: Public Affairs.
- Braveman, P. & Egeter, S. (2013). *Obstacles to health in 2013 and beyond*. Robert Wood Johnson Foundation
- Braveman, P. A., Kumanyika, J., Fielding, T., LaVeist, L. N., Borrell, R., Manderscheid, R., & Troutman, A. (2011). Health disparities and health equity: The issue is justice. *American Journal of Public Health, 101*(S1), S149-S155.
- Brenner, J. (2010, Summer). *Building an accountable care organization in Camden, NJ*. Prescriptions for Excellence in Health Care. 1. Retrieved from <http://jdc.jefferson.edu/cgi/viewcontent.cgi?article=1075&context=pehc>
- Brenner, J. (2009, Summer). *Reforming Camden's health care system - One patient at a time*. Prescriptions for Excellence in Health Care. 1. Retrieved from <http://jdc.jefferson.edu/cgi/viewcontent.cgi?article=1047&context=pehc>
- Burris, S., Kawachi, I., & Sarat, A. (2002). Integrating law and social epidemiology. *Journal of Law, Medicine & Ethics, 30*, 510-518.

- California Health Workforce Alliance (2013). *Taking innovation to scale: Community health workers, promotores, and the triple aim*. 52. Retrieved from <http://www.chhs.gov/PRI>
- Centers for Medicare and Medicaid Services (CMS). *Accountable care organizations*. Retrieved from <https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/ACO/index.html>
- Centers for Medicare and Medicaid Services (CMS). *Aligning quality reporting programs at CMS*. Retrieved from https://www.cms.gov/eHealth/ListServ_AligningQualityReporting.html
- Centers for Medicare and Medicaid Services (CMS). (2015, July). *CMS fast facts overview*. Retrieved from <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/CMS-Fast-Facts/index.html>
- Centers for Medicare and Medicaid Services (CMS). (2013). *CMS strategy: The road forward, 2013-2017*. [PDF document]. 3. Retrieved from <https://www.cms.gov/About-CMS/Agency-Information/CMS-Strategy/Downloads/CMS-Strategy.pdf>
- Centers for Medicare and Medicaid Services (CMS). *Demonstrations and waivers*. Retrieved on September 13, 2015, from http://www.medicare.gov/medicaid-chip-program-information/by-topics/waivers/waivers_faceted.html
- Centers for Medicare and Medicaid Services (CMS). *Managed care*. Retrieved on October, 3, 2015, from <http://www.medicare.gov/medicaid-chip-program-information/by-topics/delivery-systems/managed-care/managed-care-site.html>
- Centers for Medicare and Medicaid Services (CMS). *Medicaid.gov: Keeping America healthy*. Retrieved from <http://www.medicare.gov/medicaid-chip-program-information/by-population/by-population.html>
- Centers for Medicare and Medicaid Services (CMS), Office of the Actuary, National Health Statistics Group. *The nation's health dollar- where it came from, where it went*. Baltimore, MD: Author. (2013). <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NationalHealthAccountsHistorical.html>
- Centers for Medicare and Medicaid Services (CMS). *Physician quality reporting system*. Retrieved from <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/PQRS/index.html>
- Charlson, M. E., Pompei, P., Ales, K. L., & MacKenzie, C. R. (1987). A new method of classifying prognostic comorbidity in longitudinal studies: development and validation. *Journal of chronic diseases*, 40(5), 373-383.
- Collins, J., & Koplan, J. P. (2009). Health impact assessment: a step toward health in all policies. *JAMA*, 302(3), 315-317.

- Craig, C., Eby, D., Whittington, J. (2011). *Care coordination model: Better care at lower cost for people with multiple health and social needs*, Massachusetts Institute for Healthcare Improvement,
<http://www.ihl.org/resources/Pages/IHIWhitePapers/IHICareCoordinationModelWhitePaper.aspx>
x
- Crocker, D.D., Kinyota, S., Dumitru, G.G., Ligon, C.B., Herman, E.J., Ferdinands, J.M., ... & Task Force on Community Preventive Services. (2011). Effectiveness of home-based, multi-trigger, multicomponent interventions with an environmental focus for reducing asthma morbidity: A community guide systematic review. *American Journal of Preventive Medicine*, 41(2), S5-S32.
- Daniels, N. (1985). *Just healthcare*. Cambridge, United Kingdom: Cambridge University Press.
- Davis, K. (1991). Inequality and access to health care. *The Milbank Quarterly*, 69(2), 253-273.
- Dickson, V. (2015). Administration bears down on states to expand Medicaid. *Modern Healthcare*, 45(17), 8-9.
- Dunn, J. R., & Hayes, M. V. (1999). Toward a lexicon of population health. *Canadian Journal of Public Health*, 90, S7.
- Dworkin, G. (1972). Paternalism. *The Monist*, 64-84.
- Finkelstein, J.A., Barton, M.B., Donahue, J.G., Algatt-Bergstrom, P., Markson, L.E., & Platt, R. (2000). Comparing asthma care for Medicaid and non-Medicaid children in a health maintenance organization. *Archives of Pediatrics and Adolescent Medicine*, 154(6), 563-568.
- Foege, W.H. (1987). Public health: Moving from debt to legacy. *American Journal of Public Health*, 77, 1277.
- Friedman, D.A. (2014). Public health regulation and the limits of paternalism. *Connecticut Law Review* 46, 1687-1770.
- Fuchs, V. R. (1986). *The health economy*. Cambridge, MA: Harvard University Press.
- Gable, L. (2011). The Patient Protection and Affordable Care Act, public health, and the elusive target of human rights. *The Journal of Law Medicine and Ethics* 39, 340-354.
- Garson, G. D. (2013). Fundamentals of hierarchical linear and multilevel modeling. Pp. 3-25 in Garson, G.D. (ed.), *Hierarchical linear modeling: Guide and applications*. Thousand Oaks, CA: Sage Publications Inc.
- Gault, B., Hartmann, H., Jones-DeWeever, A., Werschul, M. & Williams, E. (2005). *The women of New Orleans and the Gulf Coast: Multiple disadvantages and key assets for recovery part I: Poverty, race, gender, and class*. Institute for Women's Policy Research,
<http://www.iwpr.org/publications/pubs/>

- Gostin, L. O., Jacobson, P. D., Record, K. L., & Hardcastle, L. E. (2011). Restoring health to health reform: Integrating medicine and public health to advance the population's well-being. *University of Pennsylvania Law Review*, 159, 1777-1823.
- Gourevitch, M. N., Cannell, T., Boufford, J. I., & Sommers, C. (2012). The challenge of attribution: Responsibility for population health in the context of accountable care. *American Journal of Public Health*, 102.S3, S322-S324.
- Herz, E. J. (2012, July 18). *Medicaid: A primer* (Publication RI33202). Congressional Research Service
- Hodge, J. G. (1997). Implementing modern public health goals through government: An examination of new federalism and public health law. *Journal of Contemporary Health Law & Policy*, 14, 93-125.
- Horsman, J., Furlong, W., Feeny, D., & Torrance, G. (2003). The Health Utilities Index (HUI®): concepts, measurement properties and applications. *Health and quality of life outcomes*, 1(1), 1-13.
- Huberfeld, N. (2008). Bizarre love triangle: The spending clause, section 1983, and Medicaid entitlements. *UC Davis Law Review*, 42, 413-470.
- Huberfeld, N. (2011). Federalizing Medicaid. *University of Pennsylvania Journal of Constitutional Law*, 14, 431-484.
- Hudson Scholle, S., Roski, J., Dunn, D. L., Adams, J. L., Dugan, D. P., Pawlson, L. G., & Kerr, E. A. (2009). Availability of data for measuring physician quality performance. *The American journal of managed care*, 15(1), 67.
- Iglehart, J. K. (2012). Confirming the CMS Nominee—Overcoming Poisonous Politics. *New England Journal of Medicine*, 366(3), 204-205.
- Institute of Medicine (IOM). 2011. *For the public's health: Revitalizing law and policy to meet new challenges*. Washington, DC: The National Academies Press.
- Jacobi, J.G. (2015). Multiple Medicaid missions: Targeting, universalism, or both? *Yale Journal of Health Policy, Law & Ethics*, 15, 89-109.
- Kassler, W. J., Tomoyasu, N., & Conway, P. H. (2015). Beyond a traditional payer—CMS's role in improving population health. *New England Journal of Medicine*, 372(2), 109-111.
- Kautter, J., Pope, G. C., Ingber, M., Freeman, S., Patterson, L., Cohen, M., & Keenan, P. (2014). The HHS-HCC Risk Adjustment Model for Individual and Small Group Markets under the Affordable Care Act. *Medicare & Medicaid research review*, 4(3), E1-E46.
- Kawachi, I., Kennedy, B.P., Lochner, K., & Prothrow-Stith, D. (1997). Social capital, income inequality, and mortality. *American Journal of Public Health*, 87, 1491-1498.

- Kemm, J., Parry, J., & Palmer, S. (Eds.) (2004). *Health impact assessment: Concepts, theory, techniques, and applications*. New York, NY: Oxford University Press.
- Klein, S., & McCarthy, D. (2010). *CareOregon: Transforming the role of a Medicaid health plan from payer to partner*. Commonwealth Fund
- Lewin, M. E., & Altman, S. (Eds.). (2000). *America's Health Care Safety Net: Intact but endangered*. National Academies Press
- Lurie, N. (2002). What the federal government can do about the nonmedical determinants. *Health Affairs* 21(2), 94-106.
- Mariner, W. Law and public health: Beyond emergency preparedness. *Journal of Health Law*, 38, 247-270.
- Marmot, M. (2007). Achieving health equity: From root causes to fair outcomes. *The Lancet*, 370, 1153-1163.
- Masoli, M., Fabian, D., Holt, S., & Beasley, R. (2004). The global burden of asthma: Executive summary of the GINA Dissemination Committee report. *Allergy* 59(5), 469-478.
- Massachusetts Institute for Healthcare Improvement. (2008). *Pursuing the triple aim: CareOregon*. Cambridge, MA: Author.
- Matthew, D. B. (2001). The new federalism approach to Medicaid: Empirical evidence that ceding inherently federal authority to the states harms public health. *Kentucky Law Journal*, 90, 973.
- McCall, N., Haber, S., & Van Hasselt, M. (2015). Evaluation of the Multi-Payer Advanced Primary Care Practice (MAPCP) Demonstration: First Annual Report (CMS Contract No. HHSM-500-2010-00021). *Research Triangle Park, NC, RTI International*
- McCarthy, D., & Klein, S. (2010). The triple aim journey: improving population health and patients' experience of care, while reducing costs. Commonwealth Fund
- McGinnis, J. M., Williams-Russo, P., & Knickman, J. R. (2002). The case for more active policy attention to health promotion. *Health Affairs*, 21(2), 78-93.
- McGinnis, T. & Small, D. M. (2012). Accountable care organizations in Medicaid: Emerging practices to guide program design. *Center for Health Care Strategies, Inc.*, www.chcs.org
- Mechanic, R. E., Santos, P., Landon, B. E., & Chernow, M. E. (2011). Medical group responses to global payment: Early lessons from the 'Alternative Quality Contract' in Massachusetts. *Health Affairs* 30(9), 1734-1742.
- National Committee for Quality Assurance, *HEDIS and performance measurement*. Retrieved from <http://www.ncqa.org/HEDISQualityMeasurement/PerformanceMeasurement.aspx>

- Nutting, P. A., Crabtree, B. F., Miller, W. L., Stange, K. C., Stewart, E., & Jaén, C. (2011). Transforming physician practices to patient-centered medical homes: lessons from the national demonstration project. *Health Affairs*, 30(3), 439-445.
- Parento, E. W. (2012). Health equity, healthy people 2020, and coercive legal mechanisms as necessary for the Achievement of both. *Loyola Law Review* 58, 655-719.
- Parfit, D. (1991, November 21). Equality or priority: The Lindley lecture. [Lecture transcript]. University of Kansas
- Patient Protection and Affordable Care Act, PUB. L. NO. 111-148, 125 STAT. 119 § 1899 (a)(1)(A)
- Patient Protection and Affordable Care Act § 4302, 42 U.S.C. 300kk. § 3101(b)(1) (2010)
- Patient Protection and Affordable Care Act § 4302, 42 U.S.C. 300kk. § 3101(c)(1)(E) (2010)
- Peter, F. (2001). Health equity and social justice. *Journal of Applied Philosophy*, 18(2), 159-170.
- Public Health Act, C.Q.L.R. c. S-2.2 ART. 54 (2001) (Canada)
- Ratner, P.A., Green, L.W., Frankish, C.J., Chomik, T., & Larsen, C. (1997). Setting the stage for health impact assessment. *Journal of Public Health Policy*, 67-79.
- Renaud, M. (1994). The future: Hygeia vs. panakeia. Pp. 317-34 in Evans, R.G., Barer, M.L., & Marmor, T.R. (eds.), *Why are some people healthy and others not?* New York, NY: Aldine De Gruyter.
- Robert Wood Johnson Foundation. (2011). *Health care's blind side: The overlooked connection between social needs and good health*. Retrieved from <http://www.rwjf.org/en/library/research/2011/12/health-care-s-blind-side.html>
- Rosenbaum, S. (2006). Medicaid at forty: Revisiting structure and meaning in a post-deficit reduction act era. *Journal of Health Care Law & Policy*, 9, 5-47.
- Rosenberg, C.E. (1995). *The care of strangers: The rise of America's hospital system*. Baltimore, MD: Johns Hopkins University Press.
- Rosenberg, J. M. & Zaring, D. T. (1995). *Harvard Journal on Legislation*, 32, 545-556.
- RTI International. (2011). *Accountable care organization 2012 program analysis: Quality performance standards narrative measure specifications final report* [PDF document]. 3. Retrieved from https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/sharesavingsprogram/downloads/ACO_QualityMeasures.pdf
- Social Security Act § 1115, 42 U.S.C.S. § 1315(a) (2015)
- Social Security Act § 1915(b), 42 U.S.C.S. § 1396n(b) (2015)

- Somers, S. & McGinnis, T. (2014). *Broadening the ACA story: A totally accountable care organization*. Health Affairs Blog. Retrieved from <http://healthaffairs.org/blog/2014/01/23/broadening-the-aca-story-a-totally-accountable-care-organization/>
- Sox, H. C. (2013). Resolving the tension between population health and individual health care. *Journal of the American Medical Association*, 310, 1933-1934.
- Sparer, G., Dines, G.B., & Smith, D. (1970). Consumer participation in OEO-assisted neighborhood health centers. *American Journal of Public Health and the Nation's Health* 60(6), 1091-1102.
- State of California, *Proposal to the Center for Medicare and Medicaid Innovation: Coordinated Care Initiative: State demonstration to integrate care for dual eligible beneficiaries*, (2012). [PDF document]. 1. Retrieved from <https://www.cms.gov/medicare-medicare-coordination/medicare-and-medicare-coordination/medicare-medicare-coordination-office/downloads/caproposal.pdf>
- Stevens, R. (1989). *In sickness and in wealth: American hospitals in the twentieth century*. New York, NY: Basic Books.
- Stevens, R. B., & Stevens, R. (2003). *Welfare medicine in America: A case study of Medicaid*. New Brunswick: Transaction Publishers.
- Tobin Tyler, E. (2012). Aligning public health, health care law, law and policy: Medical-legal partnership as a multilevel response to the social determinants of health. *Journal of Health and Biomedical Law*, 8, 211-247.
- U.S. Department of Health and Human Services, *Addressing social determinants of health: Accelerating the prevention and control of HIV / AIDS, viral hepatitis, STD and TB*, (2009), <http://www.cdc.gov/socialdeterminants>
- U.S. Department of Health and Human Services. (2011). HHS action plan to reduce racial and ethnic health disparities: A nation free of disparities in health and health care, <http://minorityhealth.hhs.gov/omh/>
- U.S. Department of Health and Human Services, <http://www.hhs.gov/about/agencies/orgchart/index.html> (last visited Dec. 6, 2015)
- Wagner, E.H., Austin, B.T., Davis, C., Hindmarsh, M., Schaefer, J., & Bonomi, A. (2001). Improving chronic illness care: Translating evidence into action. *Health Affairs*, 20(6), 64-78.
- Weiner, J. P., & Abrams, C. (2009). The Johns Hopkins ACG system: technical reference guide, version 9.0. *Baltimore: Johns Hopkins University Bloomberg School of Public Health*.
- Wilensky, G.R. & Satcher, D. (2009). Don't forget about the social determinants of health. *Health Affairs*, 28, w194-w198.
- Wiley, L. F. (2012). Rethinking the new public health. *Washington & Lee Law Review*, 69, 207-272.
- Whitehead, M. (1991). *The concepts and principles of equity and health*. World Health Organization Regional Office for Europe

Whittington, J. W., Nolan, K., Lewis, N., & Torres, T. (2015). Pursuing the triple aim: the first 7 years. *Milbank Quarterly*, 93(2), 263-300.

Zuckerman, S. & Coughlin, T. (2006). *After Katrina: Rebuilding opportunity and equity in the new New Orleans: Initial health policy responses to hurricane Katrina and possible next steps*. [PDF document]. 2. The Urban Institute. Retrieved from <http://www.urban.org/sites/default/files/alfresco/publication-pdfs/>

42 C.F.R. § 447.294(f) (2015)

78 Fed. Reg. 57293 (codified at 42 C.F.R. § 447.294(f))