MASSACHUSETTS HEALTH POLICY COMMISSION

SEPTEMBER 2018

ACO POLICY BRIEF

Transforming Care: How ACOs in Massachusetts Manage Population Health

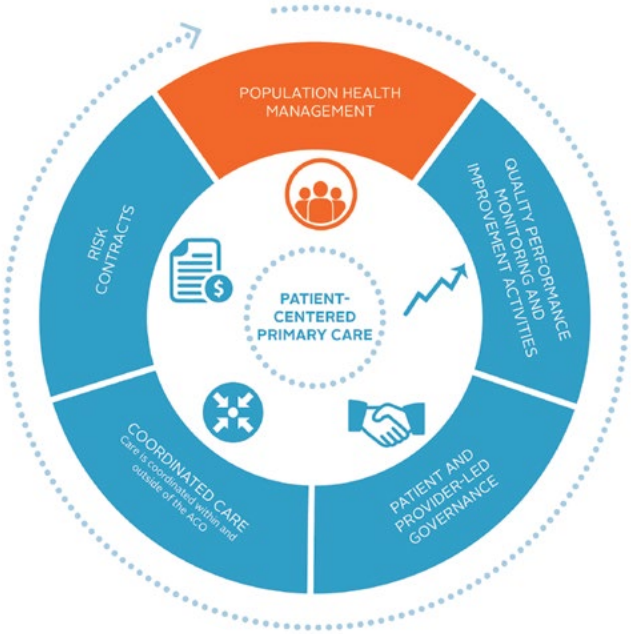
As health care providers organize as accountable care organizations (ACOs) and assume responsibility for the total cost of care and health outcomes for their patients, successful providers and payers alike are implementing strategies to improve the underlying health of the population served. This emerging focus on addressing the needs of a defined population, as opposed to those of an individual patient, is reflected in the development of population health management (PHM) programs. These programs are commonly delivered by an ACO and its community partners, informed by an assessment of the risk and health needs of the populations, and supported by reformed payment and claims data from health plans.

As ACOs more effectively assess the health and needs of their patients, there is an increasing focus on addressing non-medical needs of the population through the integration of physical, behavioral, and social determinants of health (SDH). [1,2,3] The SDH are "the structural determinants and conditions in which people are born, grow, live, work and age,"[4] and mounting evidence suggests that addressing patients' social needs impacts health outcomes and total health care spending.[5,6,7,8,9] This is particularly true for the most complex patients—those with additive risk of comorbid medical, behavioral, and social needs, such as a patient with cardiovascular disease, substance use disorder, and unstable housing. One study found that environmental surroundings, socio-economic factors, and individual activity account for nearly two-thirds of morbidity and premature mortality.[10]

The Health Policy Commission (HPC) recognized the importance of improving population health in issuing statewide standards for certifying Massachusetts ACOs, under which the HPC certified 17 ACOs in 2017.[i] These standards require ACOs to demonstrate all-payer capabilities in population health, including risk stratification of the patient population and program implementation to address identified needs regarding behavioral health and the SDH.

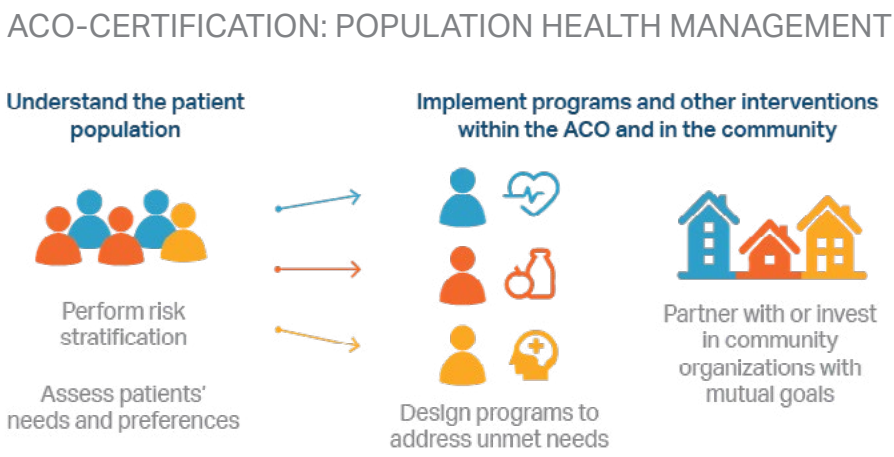
This policy brief, the second in a series,[11] defines the HPC's PHM requirements for ACO Certification, summarizes the certified ACOs' responses to those requirements, and concludes with a discussion of the policy implications of the findings.[12]

HPC's standards require ACOs to demonstrate all-payer capabilities in **population health,** including **risk stratification** of the patient population and **program implementation** to address identified needs regarding behavioral health and the SDH



i The 2017 certified ACOs are: Atrius Health, Inc.; Baycare Health Partners, Inc.; Beth Israel Deaconess Care Organization; Boston Accountable Care Organization, Inc.; Cambridge Health Alliance; Children's Medical Center Corporation; Community Care Cooperative, Inc.; Health Collaborative of the Berkshires, LLC; Lahey Health System, Inc.; The Mercy Hospital, Inc.; Merrimack Valley Accountable Care Organization, LLC; Partners HealthCare System, Inc.; Reliant Medical Group, Inc.; Signature Healthcare; Southcoast Health System, Inc.; Steward Health Care Network, Inc.; Wellforce, Inc. For more information on the certified ACOs and the ACO Certification program, visit: https://www.mass.gov/service-details/the-hpc-accountable-care-organization-aco-certification-program

Risk stratification is a critical tool for ACOs to better **predict** health risks in the patient population, **prioritize** interventions, and **prevent** negative health outcomes



HPC ACO CERTIFICATION PHM REQUIREMENTS

The HPC's 2017 ACO Certification standards require that ACOs routinely stratify their patient population.[13] Risk stratification is a critical tool for ACOs to better predict health risks in the patient population, prioritize interventions, and prevent negative health outcomes.[14] To meet the certification standards, ACOs provided information to the HPC on the factors considered in stratification, the sources of stratification data, the frequency of stratification, and whether their methodologies vary by payer subpopulation (e.g., Medicare, Medicaid, commercial).

Further, the ACO Certification standards require ACOs to report on how they assess the needs and preferences of their patient population with regard to demographic and socioeconomic characteristics such as race, language, housing status, and food insecurity history.[15] Such patient assessment activities can support more effective risk stratification and PHM by enhancing ACOs' holistic understanding of individual patients as well as the patient population as a whole and informing development of appropriate programs.[16,17] ACOs must also report how they use patient assessment data to develop and support community-based policies and programs that address the SDH to reduce health disparities within the ACO population.[18]

Behavioral health conditions and **social factors** are **key drivers** of health outcomes and costs

Finally, the certification standards require that ACOs use the results of risk stratification to implement programs targeted at improving health outcomes for their highest need patients, including at least one program that addresses behavioral health needs and at least one program that addresses the SDH.[19,20] The HPC prioritized the capability to design and implement effective PHM programs that address these needs, recognizing that behavioral health conditions and social factors are key drivers of health outcomes and costs, and that the health care system has historically delivered medical care separately from behavioral health and social services.[21,22,23,24]

FINDINGS FROM ACO CERTIFICATION: TRENDS IN PHM STRATEGIES AMONG HPC-CERTIFIED ACOS

Understanding the Patient Population: ACO Approaches to Risk Stratification and Needs Assessments

Stratification Data Sources and Methodology

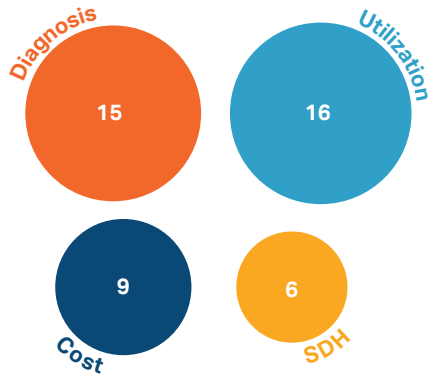
ACOs reported using a variety of data sources for risk stratification, with payer reports and claims data being the most frequently cited sources. Nine ACOs indicated that they use

Two ACOs reported the ability to use **real-time data** in their stratification process, such as **admissions, discharge**, and **transfer (ADT) feeds**

clinical data to inform their stratification methods. Four ACOs also described using pharmacy data, including claims, for stratification. Two ACOs reported the ability to use real-time data in their stratification process, such as admissions, discharge, and transfer (ADT) feeds.

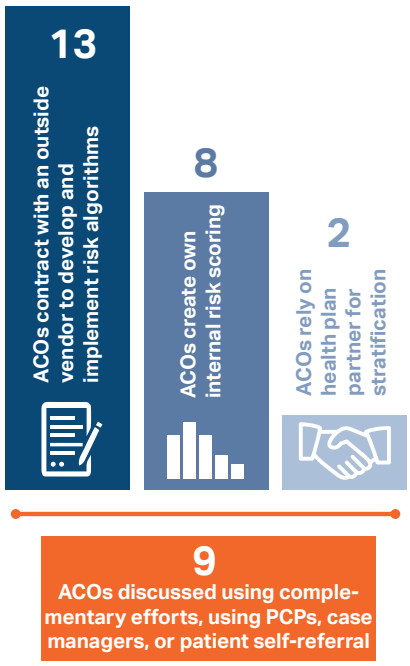
As depicted in **Figure 1**, the factors used to stratify the patient population vary among the ACOs. Almost all of the ACOs cited utilization and diagnosis as factors for stratification, and about half of the ACOs cited cost. Approximately a third of ACOs specifically described stratifying on behavioral health-related factors, such as mental health or substance use disorder diagnosis. About a third of ACOs reported using SDH markers, such as social isolation or housing instability, for stratification.

Figure 1: Factors used to stratify the patent population



Methods for risk stratification also vary. Thirteen HPC-certified ACOs reported that they contract with an outside vendor to develop and implement risk algorithms. Eight ACOs create their own internal risk scoring methodologies in place of or in addition to contracting with a vendor. Two ACOs rely primarily on a health plan partner to identify high-risk patients. In addition to risk modeling, nine ACOs indicated that they have developed complementary efforts using PCPs, care managers, or patient self-referral to identify high-risk patients that may not be captured by the risk algorithm alone (**Figure 2**).

Figure 2: Methods for risk stratification

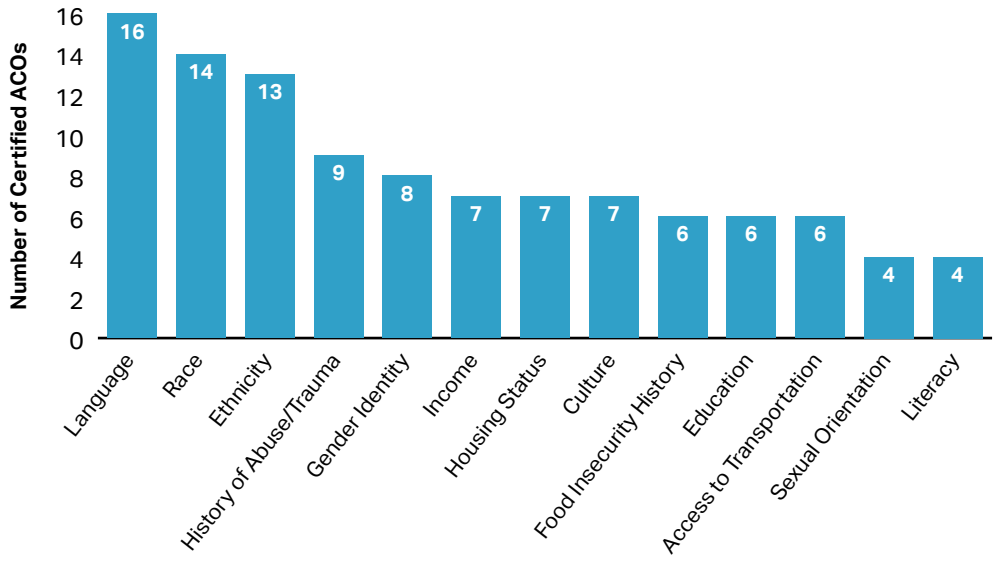


Some ACOs described using different methods of risk stratification for commercial, Medicare, and MassHealth patients. Six ACOs use a different product, internal analytic process, or risk algorithm for their MassHealth patients compared to their commercial and Medicare patients. Most commonly, these risk stratification differences for MassHealth patients include adding SDH variables derived from clinical data or patient assessments. A few ACOs also measure different utilization and cost metrics when stratifying certain populations. For example, one ACO stratifies its Medicare population by admission rates, its MassHealth population by emergency department usage, and its commercial population by cost and chronic disease status.

Assessment of Patient Needs and Preferences

As a requirement of certification, ACOs reported whether they collect patient information on 14 demographic and socioeconomic factors. As shown in **Figure 3** below, more than three-quarters of ACOs collect information on patients' language, race, and ethnicity while

Figure 3: Patient Population Factors Assessed by HPC-certified ACOs



approximately half collect information on history of abuse and trauma, and gender identity. However, less than a third collect information on other factors, such as food insecurity, access to transportation, and literacy. Overall, 82% of ACOs reported that they use information collected through patient assessments to inform operations and care delivery. Six ACOs reported aligning and comparing patient panel-specific characteristics with broader population health data from hospital community health needs assessments (CHNAs).[25]

For **13** of the **27 PHM programs** described in the applications, ACOs reported **identifying patients** through physician or primary care team referral

PHM Programs to Address Behavioral Health and the Social Determinants of Health

ACOs described a variety of types of PHM programs offered to address the behavioral health and SDH needs of their patients, and a range of ways of identifying patients to participate in those programs.

Identifying Patients for Inclusion in PHM Programs

Many ACOs use multiple approaches to identify patients for PHM programs. For 13 of the 27 PHM programs described in the applications, ACOs reported identifying patients through physician or primary care team referral. For ten PHM programs, the ACO uses emergency department visits or hospital admissions data to target patients; for a subset of those programs, a patient must also have a specific diagnosis or health need to qualify. Additionally, seven programs use screening tools as a method of connecting patients to programs and four consider historic cost of care for patients. Only a small number of programs limit participation to patients covered by one specific payer.

MASSACHUSETTS HEALTH POLICY COMMISSION CHART INVESTMENTS

Descriptions of PHM Programs: HPC CHART Programs

To address the certification requirements, several ACOs highlighted programs previously funded through an HPC Community Hospital Acceleration, Revitalization, and Transformation (CHART) grant as an example of a program offered within the ACO that addresses behavioral health and/or the SDH. CHART is an HPC investment program that made phased investments from 2013-2018 in eligible Massachusetts community hospitals to enhance their delivery of efficient, effective care by building their PHM capabilities, particularly for patients with social, medical, and behavioral health com-

Fourteen
ACOs reported using new members of the care team such as **CHWs, care coordinators,** and **resource specialists** to coordinate and facilitate connections to community resources

plexity.[26] Patients identified as eligible for these programs are typically connected with interdisciplinary teams that provide behavioral health services, coordinate care, and facilitate patient engagement with external behavioral health, primary care, and social service organizations in order to prevent a future acute care visit or admission. With CHART grants ending this year, a number of hospitals are working with their certified ACO partners to continue or replicate these programs in the service of the ACO population, often with the anticipated support of Delivery System Reform Incentive Payment (DSRIP) funding.[27]

Descriptions of PHM Programs: Behavioral Health

To meet the HPC's behavioral health PHM program requirement, many ACOs described processes and staffing models aimed at integrating behavioral health services into primary care. For example, one ACO reported integrating services into two primary care practices through activities such as screening patients for behavioral health conditions in the primary care setting, co-locating behavioral health providers in primary care sites, performing warm handoffs from primary care to behavioral health providers, and providing medication-assisted treatment for individuals with opioid use disorder. The integrated teams at these practices have approximately 400 patient visits per month.

Other ACOs reported more targeted initiatives that integrate behavioral health services into primary care for high-risk patients or patients with specific diagnoses. For instance, one program promotes medication adherence for a cohort of 186 patients with major depression by embedding clinical pharmacists in primary care sites. Additionally, one ACO manages care for approximately 500 patients through a "reverse integration" approach that integrates primary care services into a specialty mental health clinic.

Descriptions of PHM Programs: Social Determinants of Health

To address the SDH of their patient populations, some ACO PHM programs focus on identifying individuals at high risk based on previous utilization of medical care and then addressing underlying SDH that might be contributing to their risk. Other ACOs have developed programs targeted at a specific SDH such as exposure to violence, food insecurity, and lack of transportation causing isolation at home. In addition, two ACOs are developing resource directories to support patient referrals to community organizations as a core strategy for addressing patients' SDH needs. Many ACOs' SDH programs rely on interdisciplinary care teams with both clinical and non-clinical staff. Fourteen ACOs reported using new members of the care team such as CHWs, care coordinators, and resource specialists to coordinate and facilitate connections to community resources.

Example of a PHM Program to Promote Asthma Control

One ACO runs a program for patients with poorly controlled asthma. The program aims to enroll 80-120 patients who receive care at a particular community health center. Once a patient is identified for the program, a CHW visits the patient at home to provide education on managing asthma and reducing exposures, assess the home for any asthma triggers, and make referrals to medical providers or community resources. This program is also able to support patients and families by providing items such as an allergen-resistant mattress and a HEPA vacuum cleaner.

Supporting Community-based Programs

In addition to offering their own PHM programs, nearly all ACOs reported investing in community-based programs, running programs in collaboration with community organizations, or supporting policy changes to address the SDH. For example, one ACO described partnering with a local prepared meal provider at a low-income housing development to serve lunch to residents and others at local facilities, parks, and churches. In addition to providing food service support, ACO staff hold monthly workshops to educate families in the community on proper nutrition.

Example of an ACO-Community Partnership: Merrimack Valley Accountable Care Organization (MVACO) and Lawrence Mayor's Health Task Force (MHTF)

MVACO's participation on the City of Lawrence Mayor's Health Task Force (MHTF) is one example of an ACO collaborating with community organizations and local governments to address health and social needs in the community. MVACO is a partnership between Greater Lawrence Family Health Center (GLFHC) and Lawrence General Hospital (LGH), the two largest providers of health care in the Lawrence area. Both GLFHC and LGH serve on the Executive Committee of the MHTF, a multi-sector coalition with more than 80 partner organizations. The MHTF promotes health equity through advocacy, education, capacity building, and networking. It also supports the data collection process for local community health needs assessments, and assists with the implementation of population health improvement plans in five priority areas: 1) adolescent health and youth leadership; 2) behavioral health; 3) healthy active living; 4) homelessness; and 5) research.[28] Through this work, MVACO is able to access data and robust stakeholder feedback on its PHM programs and strategy.

CONCLUSIONS AND POLICY IMPLICATIONS

As the Commonwealth moves toward a value-based, accountable health care system, health care providers and their partners have important opportunities to develop and advance innovative PHM strategies to integrate behavioral, social, and medical care. Partnerships across government, the health care system, and community-based organizations are foundational to truly improving population health in the Commonwealth and achieving value-based care. Specifically, information collected through the HPC's ACO Certification program supports the following findings and policy implications.

Risk Stratification, PHM Program Development, and Patient Needs Assessment

- The inclusion of SDH and behavioral health factors in ACO risk stratification of the patient population is not yet common practice, and risk stratification results do not appear to consistently inform the development of behavioral health- or SDH-focused PHM programs.
- While some ACOs are developing PHM programs with a broad scope, others are still primarily targeting patients that have utilized a specific facility or who are insured by a specific payer.
- While ACOs are increasingly supporting community-based programs and leveraging hospital Community Benefits programs and CHNAs to improve population health, there are opportunities for further alignment and shared learning.
- While ACOs are collecting a wide range of information about their patients' and families' needs and preferences, only a minority of ACOs capture information about housing status, sexual orientation, food insecurity, and other important factors and develop programs based on that information.
- To further incentivize and support ACOs to address both behavioral health and SDH needs in risk stratification and PHM programs, payers, providers, and policymakers should consider a multi-faceted, collaborative approach.

Provider Approaches to Address the SDH and Behavioral Health Needs

- Providers should have a broad, strategic approach to PHM across their risk lives and continue to develop approaches to working collaboratively with community-based organizations to address behavioral health needs and the SDH. There is a particular opportunity for ACOs to expand offerings to address the SDH, as ACO Certification information suggests that ACOs' programming and linkages to SDH supports are often less advanced than their behavioral health

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ABOUT THE HPC:

The Massachusetts Health Policy Commission, an independent state agency, strives to advance a more transparent, accountable, and innovative health care system through its independent policy leadership and investment programs.

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offerings. A starting point for further developing SDH-focused PHM programs would be to collect more information about patients' and families' SDH, which is not collected robustly today.

- There also may be a particular opportunity for ACOs that include hospitals to align their required Community Benefits programs and CHNAs with ACO assessments of their patients, risk stratification, and PHM programs. Along with collecting more information, aligning these initiatives could help ACOs better understand their patient populations and develop effective programming in collaboration with community organizations.

Payer Incentives and Support

- Payers should enhance incentives for ACOs to address both behavioral health and the SDH in their PHM strategies, and support providers in understanding their patient populations through shared data. For example, under the recent section 1115 Demonstration Waiver,[29] MassHealth's ACO program has pushed provider systems to address a broader set of population needs through its financial model, quality measures, and requirements to partner with community-based long-term services and supports and behavioral health providers. Commercial payers should adopt similar approaches to budget setting and quality measurement to incentivize ACOs through aligned incentives. Without such alignment, population-wide progress may be limited.
- Payers should enhance data-sharing with ACOs, including member-level enrollment and other demographic data (e.g., race, ethnicity, language, income) to better enable the use of that data for risk stratification. Equipped with more data about their populations, particularly on demographic and socio-economic factors, ACOs would have a greater capacity to develop and utilize risk stratification models and provide targeted and efficient PHM programs.

Partnerships with Community-Based Organizations

- In their applications, most ACOs indicated that they are currently collaborating with community-based organizations to address the SDH, but are not as far along in using those relationships to develop and implement a PHM strategy. The Commonwealth should broadly consider policies to foster relationships between ACOs and community-based partners to support integration of behavioral health, the SDH, and medical care. MassHealth is again leading the way through its Community Partners program, which requires ACOs to partner with community-based providers, and through DSRIP, which supports that collaboration through investments to bolster data-sharing and other infrastructure needs.

ENDNOTES

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8 Berkowitz SA, Hulberg AC, Standish S, Reznor G, Atlas SJ. Addressing unmet basic resource needs as part of chronic cardiometabolic disease management. JAMA internal medicine. 2017 Feb 1;177(2):244-52.

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10 McGinnis JM, Williams-Russo P, Knickman JR. The Case for More Active Policy Attention to Health Promotion. Health Affairs. 2002:21(2):78-93.

11 The HPC is issuing a series of policy briefs and other resources regarding the current landscape of certified ACOs based on the information submitted in 2017 by applicants for ACO Certification, and combined with other publicly available information. For more information and to read the first brief in this series, visit: https://www.mass.gov/service-details/transforming-care-aco-briefs-and-other-resources

12 This brief is based on the information submitted by applicants for ACO Certification in 2017, prior to the full launch of the MassHealth ACO program in March 2018.

13 Massachusetts Health Policy Commission. Application requirements and platform user guide (PUG). 2017. Available from: https://www.mass.gov/media/1623711

14 Gordon, P, et al. Predict, prioritize, prevent: nine things practices should know about risk stratification and panel management [Internet]. Colorado Beacon Consortium. 2013; Issue Brief Vol 2 (2). Available from: https://www.rmhpcommunity.org/sites/default/files/resource/Vol.%202%20Issue%202%20Predict,%20Prioritize,%20Prevent.pdf

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16 Berwick, D, et al. The triple aim: care, health, and cost. Health Affairs. 2008; 27 (3).

17 Making CLAS happen: six areas for action, Chapter 3 [Internet]. Boston (MA). Massachusetts Department of Public Health. 2013. Available from: https://www.mass.gov/lists/making-clas-happen-six-areas-for-action

18 Massachusetts Health Policy Commission. Application requirements and platform user guide (PUG). 2017. Available from: https://www.mass.gov/media/1623711

19 The HPC ACO Certification program defines behavioral health care as mental health and substance use disorder services and supports. Social determinants of health are environmental conditions in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning and quality-of-life outcomes and risks.

20 Massachusetts Health Policy Commission. Application requirements and platform user guide (PUG). 2017. Available from: https://www.mass.gov/media/1623711

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25 Community Health Needs Assessments (CHNAs) are a component of the community benefit reports submitted to the Massachusetts Attorney General's Office (AGO). In order to inform the mission statement and community benefits plan sections of these reports, all non-profit hospitals or HMOs must perform a comprehensive review of the unmet health care needs of the community. This information is collected through soliciting community input, analyzing public health data, and developing an inventory of existing programs. See the AGO website for more information on CHNAs and the community benefits guidelines: https://www.mass.gov/nonprofit-hospital-and-hmo-community-benefits.

26 For more information, see the CHART website, available here: http://www.mass.gov/anf/budget-taxes-and-procurement/oversight-agencies/health-policy-commission/investment-programs/chart/

27 DSRIP is a program authorized through federal Medicaid Section 1115 waivers that provides funding to states to test innovative ways to improve care delivery and payment models. In Massachusetts, MassHealth was granted an 1115 Waiver that supports four main funding streams over a five-year period. These streams are: ACO investments in PCPs, infrastructure, capacity building, flexible services, and expansion of the ACO model to safety net providers; Community Partner (CP) care coordination, CP and Community Service Agency infrastructure and capacity building, and new funding to community-based organizations; statewide investments to scale up the state infrastructure and workforce capacity, including workforce development, training, and TA to ACOs and CPs; and implementation and oversight for the DSRIP program.

28 This information was described during the HPC's May 2018 public event: "*Partnering to Address the Social Determinants of Health: What Works?*" A video of this event can be found here: https://youtu.be/WLxxVulScxk

29 For information about the 1115 waiver and approved documents, see: https://www.mass.gov/service-details/1115-masshealth-demonstration-waiver