A CASE STUDY SYNTHESIS AND ANALYSIS

# NAVIGATING THE JOURNEY UPSTREAM

**Four healthcare organizations and their experience with strategic frameworks to address social determinants of health in California**

Rishi Manchanda
Sonali Saluja
Diana Rios
Sneha Panganamamula
Michael Hochman
Lauren Taylor

# ACKNOWLEDGMENTS

# CONTENTS

# Executive Summary

The move from fee-for-service to value-based payment models has led to greater accountability for health outcomes among healthcare organizations serving vulnerable populations, including Medicaid beneficiaries. Because of the strong links between social determinants of health (SDH) and health outcomes, **Medicaid health plans, hospitals, philanthropies, and others are developing and refining strategies to address "upstream" social determinants of health**, such as food insecurity, domestic violence, and unstable housing. As we learn more about novel service models and financing mechanisms to support these efforts, little is known about the conceptual and strategic frameworks that healthcare stakeholders are using to shape their approach to this uncertain and complex environment in the first place.

**This report synthesizes four healthcare organizations' experiences using strategic frameworks to improve population health**. Our research suggests that, as an industry, healthcare organizations: a) lack a clear, shared definition of "strategic frameworks" as well as "SDH"; b) use a variety of models and frameworks to shape their understanding of SDH and their role in addressing them; and c) experience challenges including framework overload when trying to find and use a strategic framework to fit their specific needs and circumstances vis-a-vis SDH. As organizations navigate the journey upstream to improve health and healthcare by addressing social determinants of health, we provide recommendations for a five-step process to help healthcare leaders select the strategic frameworks and tools that fit their needs and circumstances.

# Introduction

With recent moves from fee-for-service to value-based payment models and a growing understanding of non-clinical drivers of population health, healthcare leaders are now recognizing that adopting a strategy to address social determinants of health (SDH) is important, especially for vulnerable populations such as Medicaid beneficiaries. While this is a new and complex area, there has been an increase of healthcare-supported initiatives that purportedly address SDH. According to recent surveys, more than **8 in 10** healthcare payers are reportedly integrating SDH into their member programs (Leventhal, 2018). **A 2017 report** found that 88% of hospitals and health systems across the country were committed to addressing SDH (Deloitte Center for Health Solutions, 2017). Some of these initiatives are characterized by cross-sector partnerships and place-based efforts to advance shared community health priorities. There has been little review of the frameworks that healthcare stakeholders are using to develop strategies to address SDH. As healthcare stakeholders repurpose operating models and resources to address SDH, even less is known about how, if at all, these organizations are evaluating and selecting strategic frameworks to shape their upstream strategies in the first place.

In his seminal 1962 book *Strategy and Structure*, business historian Alfred Chandler introduced an idea that is now a norm in contemporary business culture: organizational structure follows strategy (Chandler, 1962). Since then, a variety of conceptual frameworks have emerged to help leaders and managers choose the strategies that can advance their mission. These "strategic frameworks" are supposed to help leaders better understand and manage the environment in which they operate. They create opportunities for "strategic thinking," which involves creativity, intuition, and an explicit goal to challenge assumptions. Using these frameworks, leaders can more clearly define a strategy and select operating models, which determine how to organize and manage resources to execute their strategy (Garton, 2017).

In this report, we describe four not-for-profit healthcare organizations – a large multi-state health system, a philanthropy active at the intersection of healthcare and community health, a regional hospital association, and a Medicaid managed care organization (MCO). This report focuses on the strategic frameworks they used to shape their strategies in the first place. We use the term **"strategic frameworks"** to refer to conceptual frameworks or models that help leaders and senior managers choose a strategy for their organization. We highlight features of their strategic approach to SDH, the organizational context that shaped their respective strategies, and the strategic frameworks they used to develop their SDH strategies.

# Methods

We conducted case studies of four organizations that recently developed, or are in the final stages of completing, strategic plans to address social determinants of health for vulnerable populations, including Medicaid beneficiaries, in California. The study sites were selected for this series based on input from experts familiar with their work. Sites selected were either actively engaged in or had recently completed a strategic planning process to address social determinants of health. Information was obtained from interviews with organization leaders and documents supplied by the study sites.

We used a mixed, inductive and deductive approach to examine our qualitative interviews. Deductive codes were based on the research team's diverse experience in healthcare and our existing understanding of how healthcare entities are addressing social determinants of health. Inductive codes emerged from our research team's discussions after the interviews as well as after listening to interviews and reading through interview transcripts. After developing a taxonomy of codes, two researchers independently coded a sample of the documents and resolved any inconsistencies in code definitions and application. We used Dedoose version 8.0.35 web application[1] to apply our codes to transcripts and organize the data. We then analyzed our coded data for patterns including themes and subthemes related to our research questions.

[i]Dedoose Version 8.0.35, web application for managing, analyzing, and presenting qualitative and mixed method research data (2018). Los Angeles, CA: SocioCultural Research Consultants, LLC www.dedoose.com.

# SITE PROFILES

## Providence St. Joseph Health
### *(PSJH)*

In 2016, Providence Health & Services and St. Joseph Health came together to form Providence St. Joseph Health, a Catholic not-for-profit organization. With 51 hospitals, over 800 primary care and specialty physician clinics, senior services, supportive housing and other health and educational services, the health system and its partners employ nearly 120,000 employees across seven states — **Alaska, California, Montana, New Mexico, Oregon, Texas, and Washington.**

After the merger in 2016, PSJH system and regional leaders began drafting a five-year Integrated Strategic and Financial Plan (ISFP) to guide system transformation. In parallel, PSJH created a system-wide Medicaid strategy to improve financial performance and improve care for complex populations. Metrics for the ISFP, including a new set of SDH-related metrics, and metrics for the Medicaid Strategy are tracked across the system and supported with regional scorecards.

# SITE PROFILES

## Blue Shield of California Foundation
### *(BSCF)*

Funded by Blue Shield of California, a nonprofit health plan, BSCF's grantmaking typically ranges from $25 million to $35 million a year and is focused on California issues. Grantmaking traditionally focused on supporting healthcare organizations working in the safety net and on community-based programs to address domestic violence. In 2017, BSCF approved a new strategic plan that aims to broaden and deepen its grantmaking impact by investing in long-term solutions that address the root causes of poor health and violence. To achieve this vision, BSCF recast its portfolio into three areas of work: Breaking the Cycle of Domestic Violence; Collaborating for Healthy Communities; and Designing the Future of Health.

# SITE PROFILES

## Hospital Association of Southern California (HASC)

The Hospital Association of Southern California (HASC) is a not-for-profit 501(c)(6) regional trade association. Comprised of 184 member hospitals and 40 health systems, plus related professional associations and associate members, HASC works closely with the California Hospital Association (CHA) to advance the interests of hospitals in Los Angeles, Orange, Riverside, San Bernardino, Santa Barbara, and Ventura counties. In 2017, HASC partnered with a consulting firm and a membership alliance representing local public health departments to create Communities Lifting Communities (CLC). As a HASC subsidiary, CLC is focused on reducing disparities and improving community health across Southern California in three key focus areas: diabetes, homelessness, and pre-term birth outcomes.

# SITE PROFILES

## Inland Empire Health Plan
*(IEHP)*

Inland Empire Health Plan (IEHP) is a not-for-profit Medicaid and Medicare health plan. With a network of more than 6,000 providers and 2,000 staff, IEHP provides comprehensive managed health care coverage to more than 1.2 million residents of Riverside and San Bernardino counties who are enrolled in Medicaid or a dual Medicare-Medicaid Plan known as Cal Medi-Connect. IEHP was the first Medicaid HMO in California to earn NCQA accreditation and, in recent years, has adopted LEAN principles across all levels of leadership and operations. Its strategic priorities now focus on six areas: member experience, team culture, operational excellence through LEAN, partnerships, fostering innovative use of technology, and financial stewardship. In 2017, IEHP began a process to update its population health strategy and develop a more cohesive approach to social determinants of health for defined populations and communities.

# RESULTS

## I.     Features of Organizational Strategies to address SDH

The areas of focus, priority populations, target social determinants of health, and main outcomes of interest that characterized the strategic approach to SDH of each study site are summarized in Table 1. As a reflection of the site selection process, the strategies of all organizations focused on vulnerable populations, including both adult and pediatric Medicaid beneficiaries. While Medicaid beneficiaries were an implicit focus for one of the sites based on its organizational charter (IEHP), other sites varied in the degree to which this population was a specific strategic priority for the organization. Providence St. Joseph Health, for instance, recently developed a comprehensive multi-state strategy to improve performance and outcomes among Medicaid beneficiaries in parallel with the development of a system-wide integrated strategic and financial plan. Other sites (BSCF and HASC) developed strategies to improve outcomes for low-income adults and children but did not frame or focus their strategies based on Medicaid eligibility per se.

While a growing awareness and desire to address the social determinants of health (SDH) clearly informed strategic planning efforts for all study sites, the ways in which each organization described its strategic approach to SDH varied. With the exception of housing insecurity and homelessness, which was a priority SDH domain for three sites (PSJH, HASC, and IEHP), no common set of SDH domains emerged as a shared strategic priority among all four study sites. Outcomes of interest for organizations' respective SDH approaches ranged widely. With the exception of the philanthropy (BSCF), study sites focused on patient experience, healthcare utilization, and cost outcomes — or more specifically, improved patient engagement and satisfaction as well as reduced inappropriate healthcare utilization and total costs of care for high-need, high-cost, and "rising risk" populations.

Only two study sites (BSCF, HASC) specifically identified improved cross-sector collaboration among healthcare, public health, and social service institutions as a specific outcome of interest. Within outcomes of interest for their respective SDH strategies, study sites have not yet identified specific KPI or metrics, although some sites aim to have those metrics identified soon. PSJH, for instance, calls on system and regional leaders to "engage with partners in addressing the social determinants of health, with a focus on education, housing, and the environment" in its strategic plan, updated in 2017. PSJH regions are on track to identify specific long-term SDH-related metrics by the end of 2018.

All sites identified health improvements for defined patient or member populations as outcomes of interest for their SDH strategies. Several sites also identified community-wide improvements in health status as an outcome of interest. For instance, PSJH's new strategic plan, known as the ISFP, calls on leaders and managers across seven states to identify and report on specific long-term, community-health improvements in at least one of four SDH domains – housing insecurity, food insecurity, transportation, and social isolation. HASC's Communities Lifting Communities (CLC) initiative seeks to leverage and align hospital processes across southern California, including each hospital's community health needs assessment (CHNA), to improve outcomes for defined communities and not only defined subsets of patients. At IEHP, senior managers and leaders involved in a recent population health strategic planning process endorsed that their target population includes not only plan members and their families, but also non-member residents of the Inland Empire.

# RESULTS

## II.   Organizational Context Shaping SDH Priorities and Strategies

### Internal Drivers

To describe the organizational context that shaped the respective SDH priorities and strategies of each site, we assessed internal drivers and external drivers.

#### *Mission and Values*

Stakeholders from each study site cited the mission and values of the organization as a fundamental internal driver of their SDH strategy. At BSCF, for instance, core values of "integrity, partnership, possibility, and equity" emerged early on as leaders and managers began to update their strategic plan. Leaders identified these values as key drivers as they contemplated their role and strategic approach to addressing social determinants of health.

At PSJH, the merger of two large health systems in 2016 pushed senior managers and leaders across the new system to identify shared values - compassion, dignity, justice, excellence, and integrity. Leaders then translated these values into three system-wide promises: "Know me, Care for me, Ease my way." As one interviewee described, these values and promises became "the fundamental core behind our strategic plan" and helped drive a commitment to address social determinants of health for patients and communities served by the multi-state health system.

## Availability of SDH Data

All study sites indicated that increased access to SDH data, especially more timely and relevant data, helped expand their understanding of communities' health needs, thereby reinforcing organizational commitments to address SDH in more robust ways. Two sites, PSJH and HASC, specifically identified community health needs assessments (CHNAs), which tax-exempt hospitals are now required to complete under the Patient Protection and Affordable Care Act, as both an input and key driver for their new SDH strategies. As one interviewee described: "[Because of the CHNA], it's not just our own experience [as a hospital system] but what our communities are telling us are the challenges in their communities." PSJH also looked to each of their regions to conduct these needs assessments with the understanding that SDH priorities may vary across communities. HASC noted that CHNAs have been formative in their strategic goals and priorities. In fact, HASC's recognition of the importance of the CHNA, both as a process and as a data source, spurred them to find partners and create Communities Lifting Communities to help member hospitals optimize CHNAs and improve their understanding of community needs.  Apart from CHNAs, other SDH-related data influenced study sites to adopt a strategy to address SDH.  IEHP, for instance, made key decisions to focus more on SDH, especially housing insecurity, "after looking at the data… [from] county health assessments" including County Health Rankings and local public health department information. County and state level data on SDH also informed BSCF as it sought to update and optimize its strategic role as a statewide philanthropy.

### *Leadership and Organizational Culture*

Organizations sited their previous work around SDH as influencing their current priorities and strategies. One HASC leader noted that homelessness was an issue the organization had "been involved with from an advocacy and association perspective… for ten years." Similarly, BSCF described their "work in the past has been around building the field… in areas of access to healthcare and domestic violence services". The organization also alluded to their strategies being "grounded…in the foundation's history [and] its focus on innovation"

Several sites also identified leadership and organizational culture as a key internal driver of SDH-related strategies. In several instances, interviewees indicated that leadership, the ability to set direction and galvanize support, was critical to ensure that SDH strategic frameworks were translated to action. As one interviewee shared,

> "leaders always bring about…change, lots of change, ideas. As a result of all of that change there needs to be even more of a focus on team member engagement… it's easy for leaders to come in and have great ideas and forget that if team members feel like change is being done to them they'll have a very different experience of that change."

Another interviewee at a different study site said:

> "We have some early adopters and leaders within our organization who were already there and ready to embrace that and have those conversations [about SDH], and we have other folks that need a little more time to be brought around.

Leadership was also identified as a key driver at times when various roadblocks emerged during strategic planning. For instance, while more relevant data on SDH is available than ever before, some sites indicated that limitations in the granularity, recency, and quality of SDH data for defined populations and communities can stymie SDH strategic planning. Bold leadership, along with an organizational culture that values continuous improvement and tolerates some degree of risk, were key factors to break through those barriers. For instance, one interviewee shared"

> "You know it's one thing to map all this out on a framework, it's quite another thing to then say, okay, so what? So I do think there is a need, and I do think it's especially important for leadership, and then it's also important for the team. It's the meaning making [that takes] what we would see in a strategic framework of any kind... and then there's some direction setting or definition of actions that are going to be taken."

## External Drivers

### *Financial Incentives*

Across all sites, the move toward value-based payment was chief among external drivers of the development of a SDH strategy. Organizations cited declining reimbursements for patients with Medicaid and expectations that health care delivery systems increasingly absorb financial risk as an impetus for change. HASC noted that "keeping people out of the hospitals is the business of the future." For PSJH, HASC, and IEHP, specific metrics of interest under these emerging financial models included decreasing hospital length of stay, reducing hospital readmissions, and preventing avoidable emergency department utilization. All four organizations shared that these emerging financial models have played a role in how they view populations and population health.

### *Policy Environment*

Most of the organizations pointed to both state and federal policies, in particular the Affordable Care Act (ACA), as factors that influenced their SDH priorities and strategies. Aside from the financial value-based payment models ushered in by the ACA, the legislation encouraged health care organizations to better integrate with public health and placed a stronger emphasis on reducing disparities.

Two organizations, BSCF and PSJH, described developing strategic priorities in advance of the 2016 election in anticipation of an administration that would accelerate value-based payment reforms, expansion of Medicaid, and stabilization of the insurance market. Since the 2016 election, as threats to the ACA emerged, these organizations decided to continue to place a high priority on vulnerable patients. One leader at BSCF stated they felt a "critical need as a foundation to focus on protecting vulnerable communities. ... Maintaining gains made through the ACA... needed to be an element of our new strategy."

# RESULTS

## III.   Experience with Strategic Frameworks

We use the term **"strategic frameworks"** to refer to conceptual frameworks or models that help leaders and senior managers choose a strategy for their organization. In contrast, we use the term "operating models" to refer to approaches that leaders then use to execute their chosen strategy. In this case study synthesis, we assessed the strategic frameworks healthcare leaders used to shape their SDH strategies for vulnerable populations, including Medicaid beneficiaries.

### *List of Frameworks*
In our interviews, leaders and senior managers from study sites cited several strategic frameworks that were useful in their SDH-related planning. We highlight some of these frameworks in the Appendix. We also summarize sites' experience with various frameworks in Table 1.

### Benefits
All study sites derived some value from strategic frameworks for population health, though some organizations found them to be more useful than others. Benefits of frameworks ranged from increasing understanding of SDH within the organization, to greater appreciation of SDH within a larger public health and social context, to encouraging the creation of novel strategies around SDH, to unifying efforts within an organization and ultimately giving organizations more structure and confidence to begin addressing challenges around SDH.

### *Challenge Norms*

Several sites indicated that some strategic frameworks were useful in encouraging senior managers and leaders to challenge the status quo. One interviewee from BSCF mentioned, "[Frameworks have] pushed our thinking away from the norm, … making us really step back and say this way that we've been trying to do things is not what's going to make people healthier." The organization noted that one particular strategic framework, the Liberating Structures Framework (McCandless & Lipmanowicz, n.d.), was especially instrumental in this regard, freeing the team from "self-imposed constraints," engaging departments and staff who don't typically engage in strategic planning to participate, and promoting "new ideas on how we can best address the social determinants."

In a similar manner, some sites indicated that frameworks such as the Upstream Strategy Compass and the Portfolio of Population Health framework were useful in challenging norms in healthcare that focus organizational thinking and planning on individual-level services for patients or clients with diseases or severe behavioral or social challenges. Instead, interviewees identified that frameworks such as these helped challenge stakeholders to think "upstream" in terms of levels of primary and secondary prevention. Indeed, in one instance during their strategic planning, a group of leaders and senior managers at BSCF drew a picture of a river on a whiteboard and went through an interactive exercise of mapping their current-state and desired future-state portfolio of grantmaking activities, from downstream to upstream.

Interviewees also identified that frameworks such as these helped key influencers and internal stakeholders to consider different roles, across different levels of institutional and community intervention, that healthcare organizations can play to improve population health. Lastly, instead of accepting cultural norms in healthcare that focus attention exclusively on defined patients or subpopulations, interviewees appreciated strategic frameworks that challenged them to consider their responsibility for improving health for larger communities, including but not limited to their own patients or plan members.

### *Align Sectors and Stakeholders*

Most organizations found that strategic frameworks were useful in bringing together diverse sectors to collaboratively address SDH. By increasing the understanding of other sectors, such as public health, transportation, and housing agencies, and the role they can play in improving population health, these frameworks help healthcare leaders build or strengthen cross-sector partnerships. As one leader at BSCF said, "I think they're really helpful to get groups all on the same page and kind of analyzing things through the same filter."

Sites also indicated that these strategic frameworks helped align internal stakeholders with population health approaches to SDH. Leaders at PSJH, for instance, found the Upstream Strategy Compass was helpful in explaining the value of addressing SDH to internal stakeholders, namely clinicians and staff. One said:

> "It [demonstrated] a care pathway that went across the spectrum of prevention; community investments are not independent or random acts of kindness, [they are] connected to our clinical quality."

IEHP found the NCQA PHM Model to be similarly helpful. As one leader described, the PHM Model "aligns key quality work and processes and domains for a health plan with the larger picture of population health."

### Build Focus and Engagement

Across all sites, there was a consensus that strategic frameworks were critical to helping organizations concentrate their efforts to address SDH and mobilize. At PSJH, some leaders and senior managers were actively involved in the development and review of the IHI Portfolios for Population Health framework. As such, they highlighted its usefulness to drive engagement and buy-in for a SDH-related population health strategy: "We're starting to roll out Pathways to Population Health. I think it's going to be a great conversation starter." Some of the leaders we interviewed at IEHP concurred, stating that the framework is helping senior managers to "really be thinking about our interventions in a more balanced way."

Another leader at IEHP described her experience with the Upstream Strategy Compass: "It was really good, from that start-up perspective, in getting a focus and figuring out what are all the different things you could do, and then which ones are you gonna do." Another leader at HASC found the same

framework to be helpful in thinking through potential barriers and solutions: "It takes you beyond what is sensational, what is getting a lot of play, and into what can really help you stay focus and be most productive." Study sites endorsed that SDH-related strategic frameworks such as those described above influenced the development of their strategic plans for vulnerable populations, including Medicaid beneficiaries. As Exhibit 1 indicates, these organizations' strategic plans now incorporate and address SDH, and do so in more robust ways than before.

## Challenges

### *Defining Social Determinants of Health*

While study sites generally agreed that social determinants referred to non-medical factors such as food insecurity, housing instability, or transportation, we found a lack of definitional clarity or agreement about the reference point implied by the term "social determinants of health."

In some cases, interviewees defined social determinants in reference to healthcare. For example, does a patient or plan member experience transportation barriers that prevent a visit to their doctor or local hospital? In other cases, social determinants were defined in reference to healthy community activity. Using our prior example, does a patient or health plan member lack affordable transportation to their job, to child care, or to a park? Lastly, in a few interviews, social determinants were defined in reference to health equity. For example, why are there fewer safe, affordable transportation options for patients in one part of our community than in others?

When describing SDH, we also found that study sites sometimes referenced and used the term health-related social needs (HRSNs) and SDH interchangeably. Drawing on the research and literature, our view is that patient HRSNs are individual-level phenomena, manifestations of broader social influences and factors — known as SDH — that shape health within and across families, communities, and generations.

## *Framework Overload*

While some leaders appreciated that certain frameworks were not overly prescriptive, others found those same frameworks to be too broad. Across the board, organizations indicated that a lack of available guidance on how to translate these strategic frameworks into specific strategic plans and, ultimately, the operating models to execute these strategies was a particular challenge.

Sites identified that these challenges were compounded by a sense of frustration due to the sheer number of frameworks available and seemingly arbitrary trends that create "framework churn." As one leader put it:

> "It like there's always framework overload; anytime somebody hears a new framework you come back and apply it, and the last one's gone."

While interviewees endorsed that some strategic frameworks were especially useful during our interviews, it is noteworthy that each of the study sites'

written strategic plans neither identifies nor captures the conceptual or strategic frameworks that informed their SDH strategy in the first place.

### *Framework Confusion*

At the beginning of interviews, the research team defined the term "strategic frameworks" and asked interviewees to identify those strategic frameworks that were useful to understand SDH and guide the development of their strategy to address SDH. Of note, several interviewees, across all study sites, required additional discussion to better understand and distinguish what the term "strategic frameworks" referred to. In other cases, instead of describing strategic frameworks, some interviewees highlighted organizational structures, clinical treatment models, and service delivery frameworks.

For instance, when asked about conceptual or strategic frameworks that influenced the development of organizational strategy to address SDH, a handful of interviewees described treatment and practice redesign models such as trauma-informed care and the Chronic Care model, care models for complex patients such as the hotspotting work from the Camden Coalition, and models of integrated behavioral health and primary care, such as the Collaborative Care model or the Cherokee Integrated Care model.

As mentioned in this report's introduction, we define these types of approaches as "operating models" since they largely reflect different ways in which organizations can structure and manage resources to execute a strategy, rather than shaping a strategy in and of itself. Of note, many of the

operating models that sites shared with the research team are different models of clinical care delivery. To the extent that social factors are included at all in these models, they are largely considered as health-related social needs (HRSNs) that manifest and must be understood and addressed at the level of the individual patient.

# IV.    Discussion

## *Growing Demand for Strategic Frameworks*

At a time of increasing interest to address the social determinants of health, this case study synthesis finds that healthcare organizations are developing and pursuing strategies to address SDH in more robust ways. To shape these strategies, healthcare leaders and senior managers are finding and using a variety of conceptual models to refine their mission and better understand and navigate a complex and uncertain environment.

While our recruitment methodology likely selected organizations that are more actively engaged and further along in the SDH strategic planning process than many healthcare organizations, their experience selecting and adapting SDH strategic frameworks may not be unique. A survey by the Deloitte Center for Health Solutions found that 88% of hospitals and health systems were committed to addressing SDH (Deloitte Center for Health Solutions, 2017).

Despite this widespread expression of interest, the majority of respondents (72%) in that survey had not yet made any investments in SDH. Among those

who had made strategic investments to address SDH, 40% were not measuring outcomes for these initiatives. Assuming that widespread expressions of interest and commitment by healthcare payers and systems to address SDH are authentic, this data suggests that a large gap exists between the level of interest and actual investments in SDH. Closing this gap will require healthcare organizations to create, if not refine, SDH strategies that meet their needs and ambitions. **As a result, the demand for strategic frameworks to help healthcare leaders understand their role and opportunities to address SDH is likely to increase significantly.**

Our case study interviews and analysis suggest that healthcare organizations have two fundamental needs when it comes to developing a strategy to address SDH for vulnerable populations, including Medicaid beneficiaries. First, healthcare leaders and senior managers require frameworks that help expand and clarify their conceptual understanding of population health, and, more importantly, their strategic role in helping to advance population health alongside community stakeholders and partners in public health and the social sector. Ideally, these population health strategic frameworks incorporate and reflect the latest science, not only on social determinants of health but also on social determinants of health equity, i.e. the structural factors that shape the distribution of housing, food, transportation, and other social determinants within society over time.

Second, our case study interviews indicate that healthcare leaders not only require appropriate population health strategic frameworks, **they also need to understand how to link and translate population health strategic frameworks**

**to fit their unique business environment and needs.**

When discussing strategic frameworks such as the Upstream Strategy Compass, the Portfolios of Population Health, or the 3.0 Transformation Framework, the leaders and senior managers we interviewed underscored the importance of clearly linking these frameworks to the overarching strategy and culture of the organization. As one leader described:

> "I think frameworks are most helpful when they are not used just one time and then put back on the shelf. If they really become living supports for an organization, I think that they can support interesting insights and reflections and then really promote decision making in a way that can have lots more of the staff and team understand and get behind whatever direction's being taken."

### *A Crowded Market*

As demand for population health strategic frameworks grows, significant challenges in a crowded market of frameworks will need to be addressed in order to help healthcare organizations find and use the SDH-related strategic frameworks that fit their needs. We highlight three key challenges to emerge from our four case studies.

First, as described in the Results section, the challenge of **framework overload** and associated churn is daunting. By some estimates, there are at least

seventy (70) different healthcare population health frameworks that have been used by healthcare systems and their partners (Chang, 2018). If even half of these frameworks have relevance to understanding SDH, it can feel overwhelming for healthcare leaders to try to find the right strategic framework. This challenge is compounded by the emerging importance of cross-sector collaboration, which means that population health strategic frameworks for SDH not only have to fit the needs of healthcare organizations, but also their community-based organizations and/or public health agency partners. Finally, our research suggests that a lack of shared definitions for SDH, HRSNs, and health equity can exacerbate the sense of framework overload among healthcare organizations. We believe broader efforts to increase awareness and adoption of shared definitions is required.

A second challenge in meeting the growing demand for SDH-related strategic frameworks is a lack of understanding of the **diverse strategy environments** in which healthcare organizations operate. While we found some common features and experiences in our case studies of four different types of healthcare organizations, their business and strategic environments related to SDH are significantly different from each other. To a large extent, the business and strategic environments for healthcare investments in SDH differ based on the organization's role as a payer or as provider. Beyond the type of healthcare organization, other aspects of the strategy environment may be important to understand in finding the right strategic framework to address SDH.

Our research suggests one last significant challenge to meeting the growing demand for SDH-related strategic frameworks – **the lack of time for strategic thinking**. As a reflection of our selection process, leaders and senior managers at our study sites each indicated that their organizations dedicated a significant portion of time and energy to learning and thinking about the social determinants of health as they considered their strategic priorities. Outside the skewed sample of our study sites, it is unclear, if not unlikely, that the majority of healthcare organizations in the U.S. are devoting large amounts of time to strategic thinking about SDH for vulnerable populations. This may be a low priority since many healthcare organizations are still not largely facing downside risk in value-based payment models.

Strategic thinking is different than strategic planning. Business management theory suggests that strategic thinking, which involves creativity, intuition, and an explicit goal to challenge assumptions, is distinct from strategic planning, which...

> *by its very analytical nature, has been and always will be dependent on the preservation and rearrangement of established categories — the existing levels of strategy (corporate, business, functional), the established types of products (defined as "strategic business units"), overlaid on the current units of structure (divisions, departments, etc.).* (Mintzberg, 1994)

Healthcare boards, leaders, and senior managers still struggle to engage in proactive, strategic thinking. They are not alone. In a 2017 survey of over 600 directors of publicly traded companies, for instance, the top priority for boards was "meaningful contribution in the development" of the company's strategy. Despite this, the majority of survey respondents indicated that they lacked

adequate time during board meetings for in-depth discussions about strategy. As a result, the researchers found that "many boards still struggle to move from a traditional review and concur approach to deep and continual engagement with strategy." (Keckley, 2018)

As many of the strategic frameworks used by our study sites imply, any meaningful strategy to improve SDH requires transformation of organizational relationships, structures, and activities. If the boards and leaders of healthcare organization don't have time to engage in deep strategic thinking about social determinants of health, we posit that conventional assumptions, structures, and approaches in healthcare will largely remain unchallenged, resulting in strategic planning efforts that produce aspirational but largely irrelevant plans that end up preserving established ways in which healthcare organizations relate to other sectors.

# V.    Recommendations

> "It's not that we lack powerful ways to approach strategy; it's that we lack a robust way to select the right ones for the right circumstances." (Reeves, Haanaes & Sinha, 2015)

Each of the organizations we studied developed a robust strategy to improve SDH among vulnerable populations, including Medicaid beneficiaries. Our research suggests that, as an industry, healthcare organizations:

> a) lack a clear, shared definition of "strategic frameworks" as well as "SDH," "health-related social needs," and "health equity";
> b) use a variety of models and frameworks to shape their understanding of SDH and their role in addressing SDH;
> c) experience challenges including framework overload and framework confusion when trying to find and use a strategic framework to fit their specific needs and circumstances vis-a-vis SDH.

While the robust SDH-related strategies developed by each of our case study sites are noteworthy, we also wish to highlight the approach they used to formulate their strategies. The field of management science

indicates that there are three different approaches that organizations use to formulate strategy. Formal strategic planning is a linear, step-by-step, analytical, and adaptive process that is best suited for predictable environments. Opportunistic strategic decision-making is a more reactive approach, used by organizations to effectively respond to unexpected problems or opportunities. Strategic thinking, by contrast, is an entrepreneurial approach that questions assumptions and generates new ideas (Gluck, P.Kaufman, & Walleck, 2000). This approach involves creativity, intuition, and an explicit goal to challenge assumptions, and is distinct from strategic planning, a formal process that tends to preserve and rearrange established organizational structures and service. The purpose of strategic thinking is to discover novel, imaginative strategies which can challenge if not rewrite rules of the game, and to envision potential futures significantly different from the present (Heracleous, 1998). We found that, to varying degrees, each of the organizations we studied engaged in strategic thinking at key points on its journey to developing SDH interventions for vulnerable populations.

Based on our research, we conclude that leaders and senior managers in healthcare organizations that seek to address SDH at scale and with rigor will benefit from a five-step process for SDH strategy development (see Figure 1). At each step in the process, we strongly encourage healthcare leaders to invite and support authentic engagement of their community partners (i.e. CBOs, public health agencies, local business) and their constituents (i.e. patients, community residents).

Figure 1. Five Steps to develop your organization's SDH strategy

## Step 1: Question assumptions and generate ideas

- Healthcare leaders seeking to address SDH for vulnerable populations can start by dedicating more time for **"strategic thinking."** As leaders at some of our case study sites acknowledged, meaningful efforts to improve SDH for historically marginalized populations generally require new types of transformational, cross-sector, and equity-based relationships and service models that challenge conventional, biomedical, and mechanistic assumptions about health.

- With dedicated time for strategic thinking, healthcare leaders, senior managers, and frontline staff can convene and review relevant strategic frameworks and other tools to better understand SDH and to think creatively about new ways to work together to improve SDH and population health.

- We recommend that healthcare organizations invite their community partners (i.e. CBOs, public health agencies, local business)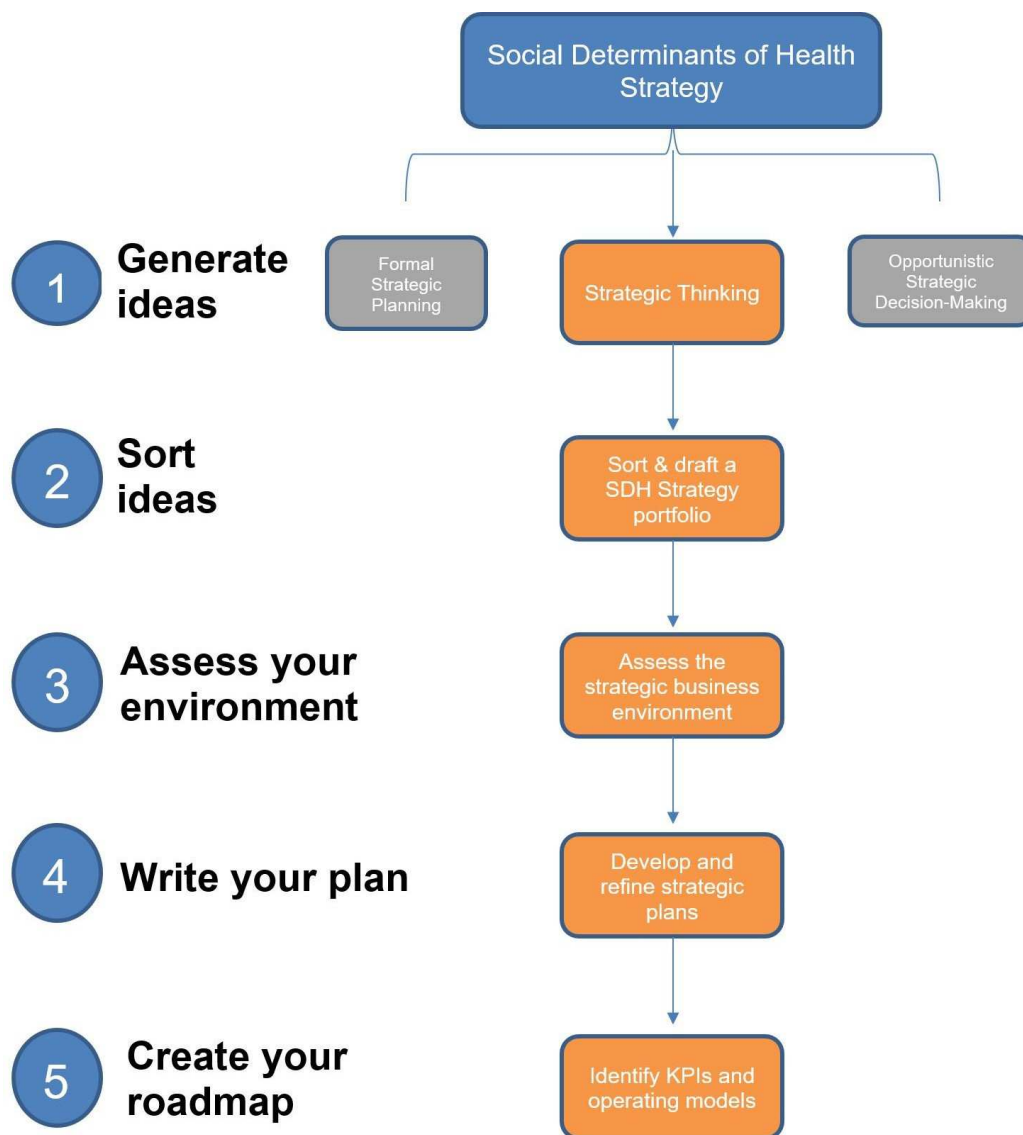 and their constituents (i.e. patients, community residents) to participate and contribute to creative strategic thinking about SDH and population health.

### Step 2: Draft an initial SDH strategy portfolio

- We recommend healthcare leaders and managers engage in an internal process to sort the output of their creative strategic thinking and consider what their organization's initial portfolio of strategies to improve SDH and population health could look like. Several of the case study sites profiled here indicated that some strategic frameworks (e.g. the Upstream Strategy Compass, Pathways to Population Health framework) helped leaders more deeply consider and categorize the range of SDH-related ideas generated in their strategic thinking.

- At this stage, healthcare leaders should engage a variety of internal stakeholders, from senior executives and managers to frontline staff, to provide input and endorse and/or challenge assumptions about the potential impact and feasibility of SDH approaches generated in the strategic thinking phase. Healthcare leaders can then draft an initial portfolio of SDH-related strategies that are suited to their mission.

## Step 3: Assess the strategic environment

- At this step in the process, we recommend healthcare leaders pause to review their draft portfolio of SDH-related strategies against the backdrop of their business environment. Healthcare leaders manage different types of organizations in complex business environments across a variety of settings. As Martin Reeves and colleagues described in 2015, business environments generally differ along three dimensions — predictability (can you forecast it?), malleability (can you, either alone or with others, shape it?), and harshness (can you survive it?) (Reeves, Haanaes & Sinha, 2015). Combining these dimensions leads to five strategy environments, each of which requires a different strategic approach.

- As such, healthcare organizations engaged in SDH-related strategic thinking and planning will need to identify how their desired portfolio of interventions is suited to their unique strategic environment. This may be especially important for leaders interested in driving transformational changes in the community — in the systems, policies, and environments that define SDH.

## Step 4: Develop and refine strategic plans

- After engaging in creative strategic thinking about SDH and population health, drafting an initial portfolio of activities, and considering their business environment, healthcare leaders can then refine their strategy portfolio. This step in the process provides healthcare leaders and community partners with an important opportunity to dive deeper and explore relevant frameworks and models for each component of their desired portfolio of interventions. At Blue Shield of California

Foundation, for example, a strategic thinking process led senior managers to develop ideas to identify and address SDH at each stage of an individual's life. As a result, leaders fundamentally shifted and refined their approach to domestic violence prevention through a SDH lens using the life course health development framework (Halfon, Forrest, Lerner & Faustman, 2018).

- Perhaps most importantly, it is at this stage that healthcare organization leaders should avoid the temptation of allowing existing operating models to dictate or override the strategy they developed in earlier steps. As an article in *Harvard Business Review* highlighted in 1994:

   > *Real strategic change requires inventing new categories, not rearranging old ones* (Mintzberg, 1994).

## Step 5: Create a roadmap to operationalize the SDH portfolio

- At this step in the process, healthcare leaders and senior managers should select the operating models that they will use to implement their SDH strategy. In this context, we use the term "operating models" to refer to the structure, service models, care pathways, and partnerships that an organization uses to organize and manage resources to execute its SDH strategy. At this stage, healthcare leaders should more clearly define a relevant set of SDH-related aims, key performance indicators, and metrics. When PSJH came to this stage in its strategic planning process, for example, leaders decided to elevate SDH-related goals into their system-wide Integrated Strategic & Financial Plan (ISFP).

## Make it easy to find the right strategic frameworks

Finally, our research indicates that healthcare leaders need help to find the right strategic frameworks to support them at each step in the process of developing a robust SDH strategy. There are a variety of strategic frameworks available to help healthcare and community partners better understand and manage the environment in which they operate, especially in relation to SDH and population health goals. The challenge is in finding the right SDH-related strategic framework to support their needs.

- Since there are no fewer than 70 different population health frameworks currently available, we recommend that philanthropies and other funders support the development of an easy-to-use, searchable, online database that allows healthcare organizations and their partners to quickly find and understand a small number of SDH-related strategic frameworks that best fit their circumstances.

- Combined with a navigable, online database of population health and SDH-related frameworks, technical assistance providers should target their support to make it easier for healthcare organizations to understand which frameworks to use based on their strategy environment.

- In tandem with targeted technical assistance and online tools, evaluators and researchers have an opportunity to use this step-wise approach to assess if different population health strategic frameworks are better suited for different strategy environments. Further segmentation — by organization size, setting, or exposure to risk-based contracting — may be helpful to reveal differences in the strategic interests of healthcare organizations related to SDH and population health. Finally, we believe the intersection of management sciences with public health, social science, and health services research creates opportunities for meaningful research and action on the best ways to shape social determinants of health strategy.

Addressing social determinants of health for vulnerable populations requires healthcare organizations to engage in meaningful transformation — of operating models, organizational structures, and relationships with community partners. These changes, as Alfred Chandler first described in 1962 and as our case study sites now illustrate, will require and flow from a meaningful transformation of strategy. With support and a step-by-step process described above, healthcare organizations and community partners can find the strategic frameworks that fit their needs and enable them to transform their approach to social determinants of health.

# Appendix

**Upstream Stategy Compass**

Developed by HealthBegins, the Upstream Strategy Compass (Figure 2) was designed to help diverse clinical and community stakeholders identify clear, shared population health priorities. As a basic matrix, this strategic framework uses three levels of prevention (i.e. primary, secondary, and tertiary) and three levels of intervention (i.e. individual, organizational, community). Working with community partners, healthcare organizations are encouraged to use the Upstream Strategy Compass's basic taxonomy of clinical-community partnerships, first to categorize unmet social needs for priority populations, and second to identify a portfolio of opportunities to intervene on social determinants of health in concrete, actionable ways. (Manchanda, 2018)

**Portfolios of Population Health**

Developed by the partners involved in the Institute for Healthcare Improvement's (IHI) 100 Million Healthier Lives network and its Pathways to Population Health approach, this strategic framework builds on six foundational concepts to present a set of four Portfolios of Population Health (Figure 3) to support healthcare organizations in their efforts to improve population health (Stout, Loehrer & Cleary-Fishman, 2018). These Portfolios are first organized into two domains of work: efforts focused on the health of defined populations for whom healthcare organizations feel directly responsible, and efforts focused on the health and wellbeing of communities. These domains of work are further subdivided into four portfolios, or interconnected areas of improvement work (Physical and/or Mental Health;

Social and/or Spiritual Well-Being; Community Health and Well-Being; Communities of Solutions). This framework encourages healthcare leaders and senior managers to consider their roles and relationships in each portfolio, and to evaluate how to shape a population health strategy that balances activities within and across the four portfolios. Portfolio 4 (Communities of Solutions), for instance, encourages healthcare leaders to consider their organization's role as an "anchor institution" in their community and opportunities to advocate for cross-sector, systems-level transformation.

## 3.0   Transformation Framework

Developed by a team of academics, consultants, and philanthropic leaders, the 3.0 Transformation Framework (Figure 4) was designed to "stimulate thinking and support the planning and development of the new roadmap for the next generation of U.S. healthcare" (Halfon, et al., 2014). This strategic framework describes three historic eras of U.S. healthcare and the defining features and goals for each era, including the time period from 2000 to present day (the 3.0 era). The framework then highlights design elements that define each era, ranging from the ways in which health services are organized and the process of care delivery to payment methodologies and approaches to population health improvement. In this framework, healthcare leaders and senior managers are encouraged to consider how 3.0 systems can incorporate a growing emphasis on primary prevention, health promotion, and cross-sector capacity and collaboration.

**The Health Impact Pyramid**

Developed by Thomas Frieden, the Health Impact Pyramid (Figure 5) describes the impact of different types of public health interventions along five tiers (Frieden, 2010). This strategic framework places efforts to address social and economic determinants of health at the base of a pyramid, the first tier, followed by public health interventions that change the context for health (clean water, safe roads), protective interventions with long-term benefits (e.g. immunizations), direct clinical care, and, at the top, individual counseling and education. As one moves up the tiers from the base to the top of the pyramid, the level of individual efforts required increases while the level of population impact decreases. This strategic framework is intended to help healthcare leaders and managers understand the relative role of clinical interventions in a broad public health context (i.e. tier 4). In the current environment, this framework can also help healthcare organizations identify opportunities to leverage their position to support SDH-related efforts in other tiers, e.g. tiers 1 and 2.

**National Committee for Quality Assurance (NCQA) Population Health Management (PHM) Model**

Developed by the NCQA, the 2018 PHM Standards for Health Plan Accreditation (HPA) and the associated NCQA PHM Model (Figure 6) are intended to reflect the accrediting body's desire to help health plans shift from a disease-centered approach to a whole person-focus (National Committee for

Quality Assurance (NCQA), 2018). While one of our study sites (IEHP) cited this as an important "strategic framework" that informed its SDH strategy, we recognize that the 2018 PHM standards can also be viewed as an "operating model" based on our definition of terms. Indeed, the NCQA affirms that the 2018 PHM standards are designed to help "health plans describe their strategy for addressing the needs of their members, then demonstrate effective execution of that strategy." The PHM model places a member/population at the center surrounded by what the NCQA consider to be seven (7) key components of a successful population health strategy. These include population identification, data integration, stratification, measurement, care delivery systems, health plans and payers, and community resources. To be successful, these components should be organized to support the needs of members in four different areas of focus along a continuum of care, from healthiest to least healthy populations. An associated NCQA resource guide for health plans emphasizes the importance of collecting and integrating SDH data and partnering with community resources to address SDH.

| The Upstream Strategy Compass™ *Solution Map* | Patient /Client Level of Intervention | Organization Level of Intervention | Community Level of Intervention |
|---|---|---|---|
| **Primary Prevention** | Financial literacy, support, & nutrition programs for low-income families with family history of DM | Provide on-site Farmers' Market, gym, walking trails, or financial counseling for employees and dependents | Support ban on trans fats or a tax on refined grain products with added sugar, with subsidy support for healthier foods |
| **Secondary Prevention** | Poverty screening & financial assistance for DM patients at-risk of end-of-month hypoglycemia | Subsidize vouchers to a farmer's market, incorporate the DPP into benefits plan for prediabetic employees | Change timing and content WIC & school food programs to avoid food insecurity among DM |
| **Tertiary Prevention** | Reduce hospital use among high-utilizer diabetics using medically-tailored meals | Coordinate with local banks, collectors, lenders, to reduce debt burden for utilizer diabetics | Support legislation/ regulations to provide financial and "hotspotter" services to severe diabetics |

**Figure 2. Upstream Strategy Compass – Solutions Map**
The Upstream Strategy Compass uses levels of prevention and levels of intervention to help healthcare systems and their community partners understand local needs as well as the opportunities to improve specific social determinants of health for priority populations. Copyright 2018 by HealthBegins. Reprinted with permission. Abbreviations: DM, diabetes mellitus. DPP, Diabetes Prevention Program. Grey boxes represent "early wins.") (Manchanda, 2018)



**Figure 3. IHI Pathways to Population Health**
By dividing domains of work into four portfolios, or interconnected areas of improvement work, the Pathways to Population Health framework encourages healthcare leaders to consider their roles and relationships in each portfolio, and to evaluate how to shape a population health strategy that balances activities within and across the four portfolios. (Stout, Loehrer & Cleary-Fishman, 2018)
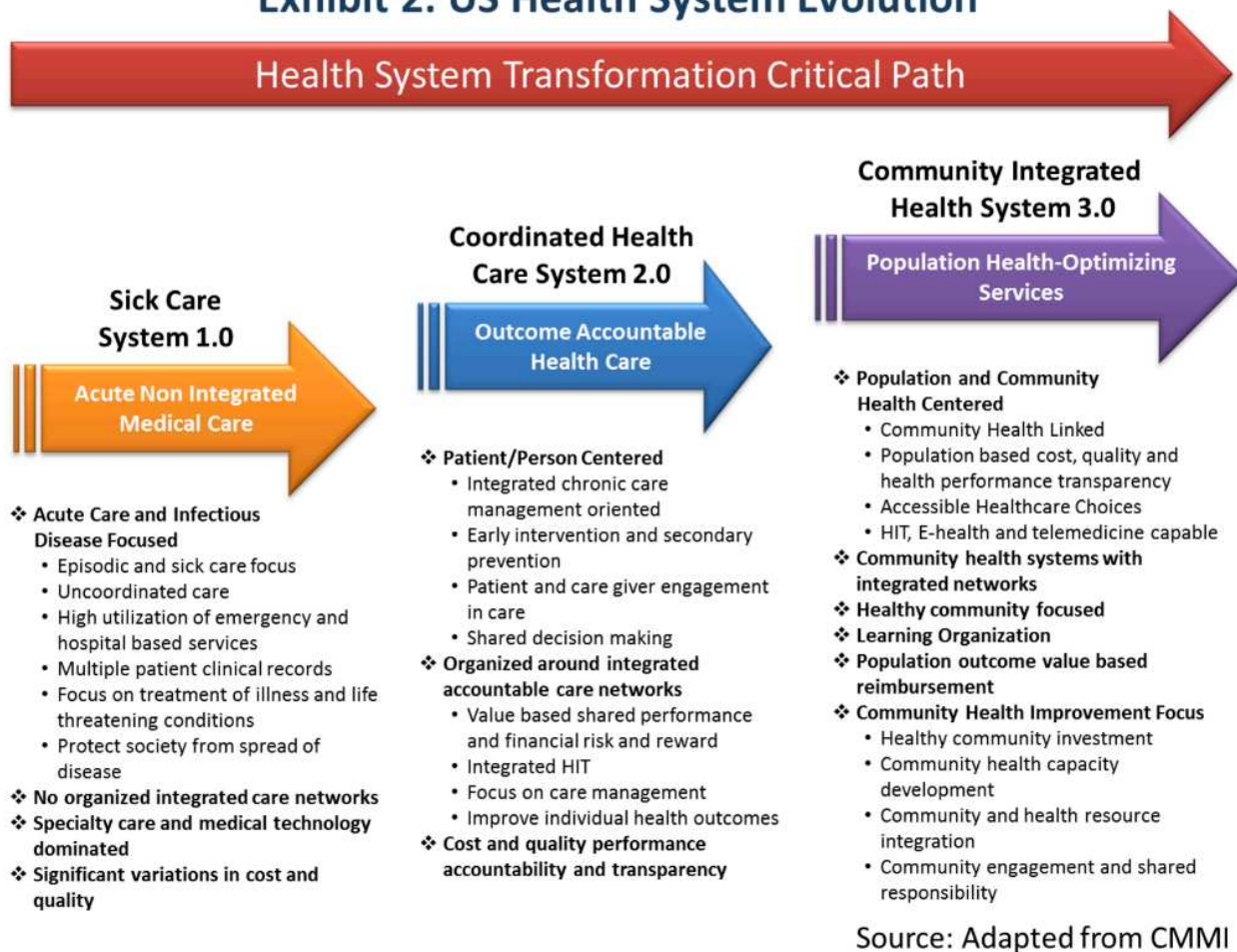
**Exhibit 2: US Health System Evolution**

**Health System Transformation Critical Path**

**Sick Care System 1.0**

Acute Non Integrated Medical Care

❖ Acute Care and Infectious Disease Focused
  • Episodic and sick care focus
  • Uncoordinated care
  • High utilization of emergency and hospital based services
  • Multiple patient clinical records
  • Focus on treatment of illness and life threatening conditions
  • Protect society from spread of disease
❖ No organized integrated care networks
❖ Specialty care and medical technology dominated
❖ Significant variations in cost and quality

**Coordinated Health Care System 2.0**

Outcome Accountable Health Care

❖ Patient/Person Centered
  • Integrated chronic care management oriented
  • Early intervention and secondary prevention
  • Patient and care giver engagement in care
  • Shared decision making
❖ Organized around integrated accountable care networks
  • Value based shared performance and financial risk and reward
  • Integrated HIT
  • Focus on care management
  • Improve individual health outcomes
❖ Cost and quality performance accountability and transparency

**Community Integrated Health System 3.0**

Population Health-Optimizing Services

❖ Population and Community Health Centered
  • Community Health Linked
  • Population based cost, quality and health performance transparency
  • Accessible Healthcare Choices
  • HIT, E-health and telemedicine capable
❖ Community health systems with integrated networks
❖ Healthy community focused
❖ Learning Organization
❖ Population outcome value based reimbursement
❖ Community Health Improvement Focus
  • Healthy community investment
  • Community health capacity development
  • Community and health resource integration
  • Community engagement and shared responsibility

Source: Adapted from CMMI

**Figure 4. Health 3.0 Transformation Model**
This strategic framework describes three historic eras of U.S. healthcare and the defining features, goals, and design elements for each era. With this framework, leaders are encouraged to consider how 3.0 systems can incorporate a growing emphasis on primary prevention, health promotion, and cross-sector capacity and collaboration. (Halfon, et al., 2014)
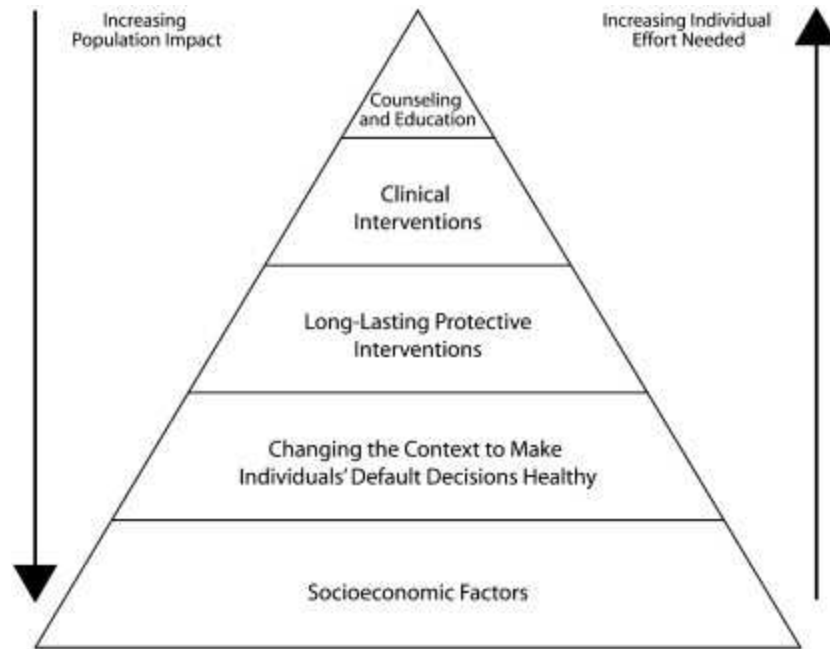
**Figure 5. Health Impact Pyramid**
This strategic framework describes the impact of different types of public health interventions along five tiers. With this framework, healthcare leaders can better understand the relative role of clinical interventions in a broad public health context and identify opportunities to support interventions in other tier levels to address social determinants of health. (Frieden, 2010)



**Figure 6. NCQA Population Health Management (PHM) Model**
Developed by the NCQA, this model describes activities necessary for a comprehensive population health management (PHM) strategy and is intended to support any entity engaged in PHM. This "whole person" model intends to help healthcare leaders, especially health plan leaders, better understand how activities across entities can support population health.
(Population Health Management - Resource Guide, Content reproduced from HEDIS® 2018, Volume 2: Technical Specifications for Health Plans by the National Committee for Quality Assurance (NCQA).)  Accessed October 20, 2018

## Table 1 : Case Study Organizational Features

| | Providence St.Joseph Health System (PSJH) | Blue Shield of California Foundation (BSCF) | Hospital Association of Southern California (HASC) | Inland Empire Health Plan (IEHP) |
|---|---|---|---|---|
| **Type** | Large multi-state hospital system | Philanthropic foundation | Regional hospital association | Medicaid and Medicare health plan |
| **Strategic Planning** | Completed 2017 (Integrated Strategic and Financial Plan) | Completed 2017 | Completed 2017, launched community health subsidiary in 2017 | Completed 2017; currently updating population health strategy |
| **Strategic Areas of Focus** | Strengthen the Core (optimize clinical, quality, operational, financial performance); Be our Communities' Health Partner (Improve mental health & wellbeing, engage partners to address SDH); Transform our Future (Grow brand, diversify revenue) | Breaking the Cycle of Domestic Violence; Collaborating for Healthy Communities; Designing the Future of Health . | Diabetes; Homelessness; and pre-term birth outcomes (Note: areas of focus listed are for the recently formed subsidiary, Communities Lifting Communities (CLC) | Member Experience; Team Culture; Operational Excellence through LEAN; Partnerships with Members; Providers and Community; Fostering Innovative use of Technology; and Financial Stewardship |
| **Target population** | Pregnant women, homeless individuals, person with mental illness and substance use disorder, veterans, the poor, elderly persons | Survivors of domestic violence, persons at risk for violence | Persons with diabetes, Pregnant African American women, homeless and unstably housed individuals | Persons with chronic conditions, substance use disorder or living in long term care, pregnant women, homeless and unstably housed individuals, children |
| **Priority SDH** | For 2019, regions are asked to focus improvement projects on one of four SDH – Housing Insecurity, Food Insecurity, Transportation, and Social Isolation | Domestic violence; Stated goal to focus grantmaking on root causes/SDH of health | Homelessness/housing insecurity in LA County; Food Insecurity in Ventura County; other SDH priorities are TBD in other Southern California regions | Homelessness, Housing Insecurity |

## Table 2 : SDH-related Strategic Frameworks used by case study sites

| SDH-related Strategic Framework | Description | Study sites citing framework | Developer and year developed |
|---|---|---|---|
| Pathways to Population Health | Identifies 4 portfolios of activity—physical and mental health, social and spiritual well-being, community health, and communities of solution—to help health care orgs identify and intervene at different leverage points | PSJH, IEHP | Institute for Healthcare Improvement, 2018 |
| Mobilizing Action Through Planning and Partnership | Strategic framework intended for public health officials to improve population health through forming partnerships, identifying goals and strategies, and utilizing assets and resources available in the community | BSCF | National Association of County & City Health Officials, 2013 |
| Upstream Strategy Compass | Allows organizations to map out interventions to address social needs on an individual, organizational, and community level using three levels of prevention (primary, secondary and tertiary), with the goal of helping healthcare and community partners create a portfolio of interventions to improve SDH for defined populations. | PSJH, IEHP, BSCF, HASC . | Dr. Rishi Manchanda, HealthBegins, 2017 |
| Health 3.0 Transformation Model | Envisions a shift in the current healthcare system that treats illnesses to one that optimizes health and well-being, integrates community resources and data, and addresses social determinants of health | BSCF | BCSF, 2014 |
| NCQA Population Health Management Model | Roadmap for health plans to improve population health with a five-pronged approach involving member health, risk stratification, targeted interventions, delivery system improvement, and outcome measurement | IEHP | National Committee for Quality Assurance, 2018 |
| Health Impact Pyramid | A framework for creating public health change which proposes a pyramid with the base being where one can impact the most people with the least individual effort (socioeconomic factors) and the apex being where one can create the least impact with the most effort (counseling and individual education) | HASC, IEHP | Dr. Thomas Frieden, 2010 |
| Advocacy Strategy Framework | Identifies target audiences that are main actors in policy change process and offers strategies to effect change based on audience awareness, motivation, and mode of action | BSCF | Center for Evaluation Innovation, 2015 |
| Gardener's Tale | A theoretical framework that utilizes the allegory of planting flowers in soil of varying quality to underscore the impact of institutionalized racism on health disparities | BCSF . | Dr. Camara Jones, 2000 |
| Framework for Health Equity | Provides a methodology to improve health equity by driving change at a social-ecological level (institutions, discriminatory beliefs, etc.) as well as at the medical level (behavior, health care access, etc.) | BSCF | Dr. Anthony Iton, 2008 |

# References

Chandler, A. D. (1962). *Strategy and structure: chapters in the history of the industrial enterprise*. Cambridge: M.I.T. Press.

Chang, C. (2018, September 19). Director, RWJF Enhancing Hospitals' Role in Improving Population Health Program, New York University (NYU). (R. Manchanda, Interviewer)

Dahlberg, L., & Krug, E. (2002). *Violence-A global public health problem. In: Krug E, Dahlberg LL, Mercy JA, Zwi AB, Lozano R, eds. World Report on Violence and Health*. Geneva, Switzerland: World Health Organization.

Deloitte Center for Health Solutions. (2017). *Social determinants of health: How are hospitals and health systems investing in and addressing social needs?* Deloitte. Retrieved from https://www2.deloitte.com/us/en/pages/life- sciences-and-health care/articles/addressing-social-determinants-of-health-hospitals-survey.html

Frieden, T. (2010). A framework for public health action: the health impact pyramid. *American Journal of Public Health, 100*(4), 590 595.

Garton, E. (2017). Is your company actually set up to support your strategy? *Harvard Business Review*.

Gluck, F. W., P.Kaufman, S., & Walleck, A. S. (2000, June). Thinking Strategically. *McKinsey Quarterly*. Retrieved from https://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/thinking-strategically

Halfon, N., Forrest, C., Lerner, R., & Faustman, E. (Eds.). (2018). *Handbook of Life Course Health Development*. Cham, Switzerland: Springer International Publishing.

Halfon, N., Long, P., Chang, D. I., Hester, J., Inkelas, M., & Rodgers, A. (2014). Applying a 3.0 Transformation Framework to Guide Large-Scale Health System Reform. *Health Affairs*, 33(No. 11), 2003-2011. Retrieved 10 8, 2018, from https://www.healthaffairs.org/doi/10.1377/hlthaff.2014.0485

Heracleous, L. (1998, June). Strategic thinking or strategic planning? *Long Range Planning, 31*(3), 481-487. Retrieved from https://www.researchgate.net/publication/222122446_Strategic_thinking_or_strategic_planning

Keckley, P. (2018, March 27). *Is Strategic Planning Getting Adequate Attention in Hospital Boards?* Retrieved November 10, 2018, from American Hospital Association News & Insights: https://www.aha.org/news/insights-and- analysis/2018-03-27-strategic planning-getting-adequate-attention-hospital-boards

Leventhal, R. (2018, February 14). *Survey: 8 in 10 Payers Now Putting Social Determinants of Health into Programs*. Retrieved from Healthcare Innovation: https://www.hcinnovationgroup.com/population-health- management/news/13029804/survey-8-in-10 payers-now-putting-social-determinants-of-health-into-programs

*Liberating Structures*. (n.d.). Retrieved October 21, 2018, from Liberating Structures: http://www.liberatingstructures.com/

Manchanda, R. (2018, June). *Charting a Course for Social Determinants of Health*. Retrieved from Practical Playbook Blog: https://www.practicalplaybook.org/blogs/charting-course-social-determinants-health

McCandless, K., & Lipmanowicz, H. (n.d.). *Liberating Structures*. Retrieved October 21, 2018, from http://www.liberatingstructures.com/home/

Mintzberg, H. (1994, Jan-Feb). The Fall and Rise of Strategic Planning. *Harvard Business Review*. Retrieved November 12, 2018, from https://hbr.org/1994/01/the-fall-and-rise-of-strategic-planning

National Committee for Quality Assurance (NCQA). (2018). *Population Health Management - Resource Guide*. Washington DC. Retrieved October 20, 2018, from https://www.ncqa.org/white-papers/population-health- management-resource-guide/

Reeves, M., Haanaes, K., & Sinha, J. (2015). Navigating the Dozens of Different Strategy Options. *Harvard Business Review*.

Stout, S. S., Loehrer, S., & Cleary-Fishman, M. (2018). *A Framework for Population Health*. Retrieved from Pathways to Population Health: http://www.pathways2pophealth.org/learn.html