BLUEPRINT FOR COMPLEX CARE

Advancing the field of care for individuals with complex health and social needs

*Developed by the **National Center for Complex Health and Social Needs**, the **Center for Health Care Strategies**, and the **Institute for Healthcare Improvement**.*

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About the Authors' Organizations

The **National Center for Complex Health and Social Needs** (National Center), an initiative of the Camden Coalition of Healthcare Providers, coalesces stakeholders in the nascent field of complex care. The National Center aims to serve as an interprofessional hub promoting better-integrated, more efficient care for individuals with complex health and social needs. Learn more at **www.nationalcomplex.care**.

The **Center for Health Care Strategies** facilitates problem-solving exchanges and peer learning among a diverse range of health care stakeholders to improve access, integrate fragmented services, reduce avoidable expenditures, and link payment with quality, especially for individuals with complex, high-cost needs. Learn more at **www.chcs.org**.

The **Institute for Healthcare Improvement** (IHI) is a leading innovator, convener, partner, and driver of results in health and healthcare improvement worldwide. It developed the framework of the triple aim and has led improvement efforts focused on high cost, high needs populations for the last decade. Learn more at **www.ihi.org**.

The National Center for Complex Health and Social Needs

CHCS Center for Health Care Strategies, Inc.

Institute for Healthcare Improvement

> *The most expensive and challenging populations for the current healthcare system will remain underserved until there is **a unified effort**—rather than small, incremental steps—to improve care for the nation's high-need patients.*
>
> *- National Academy of Medicine,*
> *Effective Care for High-Need Patients: Opportunities for Improving Outcomes, Value and Health*

FOREWORD

When individuals with complex health and social needs encounter the healthcare system, they often receive care that is expensive, inefficient, and poorly coordinated across both medical and social service providers.

Several years ago, six foundations came together with the shared goal of addressing this issue by increasing the adoption of evidence-based interventions that improve quality and lower costs of care for those with the greatest needs.

Together, we are proud to support this *Blueprint for Complex Care*. The *Blueprint for Complex Care* provides the field with clear, actionable steps for further developing the wide range of efforts aimed at improving the lives of people with complex health and social needs. We are excited about the many innovative approaches and programs already underway throughout the country for caring for people with complex needs, and about the opportunities that lie ahead if we all work together. We look forward to working closely with the National Center for Complex Health and Social Needs, the Center for Health Care Strategies, the Institute for Healthcare Improvement, and all complex care stakeholders as we continue to work to improve the lives of people with complex health and social needs.

The Commonwealth Fund

The John A. Hartford Foundation

Milbank Memorial Fund

PETERSON CENTER ON HEALTHCARE

Robert Wood Johnson Foundation

THE scan FOUNDATION

EXECUTIVE SUMMARY

The US spends more on healthcare than any other industrialized nation, and much of that spending is concentrated on a small percentage of the population for whom behavioral health and social needs are major contributors to poor health outcomes.[1 - 10]

To address these gaps and provide better care at lower cost, policymakers, health systems, providers, payers, and philanthropists are innovating and experimenting with models of complex care.[11-13, 17-20] Complex care seeks to improve the health and wellbeing of a relatively small, heterogenous group of individuals who repeatedly cycle through multiple healthcare, social service, and other systems but do not derive lasting benefit from those interactions. It operates at the personal level by coordinating care for individuals. Complex care also works at the systemic level by creating complex care ecosystems, the local networks of organizations that collaborate to serve individuals with complex health and social needs. Through these efforts, complex care addresses the root causes of poor health that defy existing boundaries among sectors, fields, and professions. At its heart, complex care seeks to be person-centered, equitable, cross-sector, team-based, and data-driven.

Complex care programs may be housed in many settings, ranging from healthcare clinics and health plans to community-based organizations and social service agencies. Because of the broad set of stakeholders who are providing complex care, there is risk of duplicating and siloing efforts, which may stymie progress. Knowing this, three organizations—the Camden Coalition of Healthcare Providers' National Center for Complex Health and Social Needs, the Center for Health

Care Strategies, and the Institute for Healthcare Improvement—came together to create the *Blueprint for Complex Care*, a guide for advancing the field of complex care. We gathered diverse, far-reaching perspectives through reviews of published literature, interviews, surveys, and an expert convening to develop a comprehensive understanding of the current state of complex care, and to shape our recommendations for strengthening the field.

Assessment of the Current State of Complex Care

The Blueprint for Complex Care outlines the current state of complex care and our recommendations for the future. We used the established *Strong Field Framework* developed by The Bridgespan Group to guide our assessment of the field:

Framework Component	Strengths	Weaknesses
Shared Identity	■ Stakeholders agree on the problems to address ■ The community shares principles and goals ■ The potential community of stakeholders is vast and diverse	■ The field lacks a shared language ■ There has been confusion on who comprises the target population
Standards of Practice	■ Validated care models and promising practices exist and are spreading ■ Common features of promising models and practices have been identified	■ Data sharing limitations hamper progress ■ There is a shortage of providers prepared to deliver complex care
Knowledge Base	■ A growing evidence base demonstrates complex care's positive impact ■ Segmentation of the target population is improving ■ A community of researchers is emerging	■ Current metrics do not reflect whole-person outcomes ■ Stakeholders disagree on the types of evaluation that are necessary
Leadership and Grassroots Support	■ Complex care is a high priority for many healthcare payers, providers, policymakers, and philanthropies ■ Influential stakeholders in key segments of the field are increasing buy-in	■ People with lived experience are not adequately included ■ Multiple barriers impede cross-discipline and cross-sector partnerships
Funding and Supporting Policy	■ The shift toward value-based payment supports complex care investment ■ Public investment has accelerated interest in complex care	■ Healthcare-based programs struggle with financing in a shifting payment environment ■ Social and behavioral health services are funded differently and less robustly than healthcare

Recommendations

Based on these strengths, weaknesses, and the input we gathered from stakeholders, we believe the following activities represent near-term priorities for strengthening the field of complex care:

1. **Develop core competencies and practical tools to support their use.**

   Complex care requires a diverse workforce with the knowledge, skills, and abilities to support intersecting, complex needs. Identifying competencies allows for the development of standardized educational programs and resources. Over time, the core competencies could evolve to become formal practice standards that are measured, tested, and formally certified.

2. **Further develop quality measures for complex care programs.**

   Standard measures for complex care can accelerate learning and quality improvement, and enable providers to demonstrate value to payers and other stakeholders. While cost and utilization are common metrics, the health and wellbeing measures vary considerably. This contributes to over-reliance on cost and utilization as the primary way to define success, and insufficient attention to complex care's positive impact on patient wellbeing and overall health.

3. **Enhance and promote integrated, cross-sector data infrastructures.**

   Improved access to integrated, cross-sector data is critical to building the field's knowledge and its ability to serve people with complex health and social needs. Efforts must address the financial, legal, and technical barriers to data integration.

4. **Identify research and evaluation priorities.**

   While there has been a proliferation of research and evaluation work related to complex care, significant gaps remain. Some of these gaps have already been identified—such as deeper understanding of subpopulations, effective implementation strategies, and designing new payment systems—but additional work is necessary. Convening a research community can help accelerate progress.

5. **Engage allied organizations and healthcare champions through strategic communication and partnership.**

   Complex care must collaborate with overlapping fields and communities that are aligned (or beginning to align) with the values, principles, and tactics that complex care employs and serve the same population. Potential partners include: criminal justice, community development, social services, palliative care, primary care, addiction medicine, population health, patient advocacy groups, and public health.

6. **Value the leadership of people with lived experience.**

   Individuals' personal experiences and insights into the systemic issues impacting people with complex needs, as well as potential solutions, are powerful assets that are not adequately represented in the field. The field must prioritize and support their involvement in continued field development.

7. **Strengthen local cross-sector partnerships.**

   The local complex care ecosystem requires robust, equitable, and effective multi-sector partnerships. Heightened attention to social determinants and health equity has generated a lot of interest and activity in cross-sector relationships, yet true collaboration remains difficult. Tools and coaching can help teach leaders critical elements of effective partnerships.

8. **Promote expanded public investment in innovation, research, and service delivery.**

   Dedicated public funding for innovation, research, and program implementation focused on populations with complex health and social needs has slowed over the last several years. Achieving increased funding will require coalition building and federal advocacy.

9. **Leverage alternative payment models to promote flexible and sustainable funding.**

   Value-based purchasing creates incentives to invest additional resources in individuals with complex needs, particularly addressing social needs. More work, in close collaboration with payers and accountable care organizations, is required to build and test sustainable payment models.

10. **Create a field coordination structure that facilitates collective action and systems-level change.**

    To create accountability to the field, we recommend the development of a multi-organizational coordinating structure convened by the National Center for Complex Health and Social Needs. This structure would convene stakeholders, monitor, and organize major field-building activities, and serve as an entry point for individuals and organizations who want to contribute to the field.

11. **Foster peer-to-peer connections and learning dissemination.**

    The field should also invest in infrastructure to connect individuals and organizations directly to one another and facilitate discussion and shared learning. As the field is building its foundational elements, access to individuals and organizations with common experience can provide essential advice, support, and camaraderie for new members.

Conclusion

Our recommendations are ambitious but necessary for the field to achieve its goal of improving the wellbeing of individuals with complex health and social needs. Success will require leadership and collaboration from many organizations and individuals. We call on you, the field, to join the many innovators, early adopters, and champions of complex care to lend your support and expertise to strengthen the field and, in turn, improve the lives of those with the most complex needs.

SECTION I.

INTRODUCTION

Over the past decade, there has been a growing recognition that the US spends more than any other industrialized nation on healthcare and much of that spending is concentrated in a relatively small percentage of the population.[1-6]

At the same time, the ways in which social and behavioral health needs contribute to this group's high healthcare costs and poor outcomes have become increasingly clear.[7-10] As a result, policymakers, health systems, providers, payers, and philanthropists have taken growing interest in designing and scaling new care models for individuals with complex health and social needs, with the goal of providing better care at lower cost.[11-13] Promising early results have generated interest in rethinking how to serve people with complex health and social needs, in part because they are often ignored or stigmatized by the healthcare system.[14-16]

Within this environment, there has been a spate of innovation and experimentation, supported by public and private investments and an evolving healthcare finance environment that holds providers financially accountable for delivering improved health rather than discrete units of service.[17-20] Organizations and experts are concurrently developing models, tools, resources, research, and policy related to clinically complex comorbidities, behavioral health needs, and social risk factors.

What is Complex Care?

Complex care is a person-centered approach to address the needs of people who experience combinations of medical, behavioral health, and social challenges that result in extreme patterns of healthcare utilization and cost. Complex care works at the personal and systemic levels: it coordinates care for individuals while reshaping ecosystems of services and healthcare. Through both of these efforts, complex care works to achieve health equity by delivering integrated services for people whose root causes of poor health defy existing boundaries among sectors, fields, and professions. By better addressing complex needs, complex care can reduce utilization of expensive acute services and make the system more cost-effective.

Who does complex care serve?

Complex care seeks to improve the health and wellbeing of a relatively small, heterogenous group of individuals who repeatedly cycle through multiple healthcare, social service, and other systems but do not derive lasting benefit from those interactions.

At its heart, complex care seeks to be:

- **Person-centered**: Individuals' goals and preferences guide all aspects of care. Care delivery is designed around the whole person, their needs, and their convenience, rather than the delivering institutions' priorities. Providers develop authentic healing relationships with individuals and are sensitive to the ongoing impact of adverse life experiences.
- **Equitable**: Complex care addresses the consequences of systemic issues such as poverty and racism. Individuals with complex needs and their communities have valuable insights into the structural barriers that affect their lives and should be partners in developing solutions.
- **Cross-sector**: In order to address individuals' array of needs, complex care works at the system level to break down the silos dividing fields, sectors, and specialties. Cross-sector collaboration is critical to create the systemic changes necessary to provide whole-person care.
- **Team-based**: Complex care is delivered through interprofessional, non-traditional, and inclusive teams. These teams incorporate peers, community health workers, the individual themselves, and loved ones whom the individual chooses to include, in addition to medical, behavioral health, and social service providers.
- **Data-driven:** Timely, cross-sector data are freely shared across all care team members and are used to identify individuals with complex needs, enable providers to effectively meet the needs of their patients, and evaluate success.

About the Blueprint for Complex Care

Despite the energy currently fueling complex care, there is risk of duplicating and siloing efforts, which may stymie progress. Likewise, variability in program design and evaluation efforts may limit the spread of improved care for patients with complex health and social needs.

Knowing this, three organizations—the Camden Coalition of Healthcare Provider's National Center for Complex Health and Social Needs, the Center for Health Care Strategies, and the Institute for Healthcare Improvement—came together to develop a national framework for coordinating the complex care community. Just as a blueprint is necessary to guide the construction of a home, this *Blueprint for Complex Care* is a guide for advancing the field of complex care.

This initiative builds on several recent field building efforts, supported by a group of private foundations (Six Foundation Collaborative) who are working together to coordinate their strategies to accelerate the adoption of effective care models for high cost, high need individuals.[*]

These efforts include:

- **The *Playbook for Better Care (The Playbook)***: An online clearinghouse of research and expert advice for health systems interested in developing strategies and programs for their high need, high cost populations. *The Playbook* is available at www.bettercareplaybook.org.
- ***Effective Care for High Need Patients***: A report produced by the National Academy of Medicine (*NAM report*) that collects current evidence on the population and effective complex care models, and contributes a starter taxonomy for segmenting this heterogenous population.[12]
- ***The National Center for Complex Health and Social Needs***: An initiative whose purpose is to organize and support the developing field of complex care.

The *Blueprint for Complex Care* aims to drive a collective strategy for the field as a whole, bringing together the ongoing efforts of hundreds of discrete programs into a cohesive and singularly identifiable field of practice. Using the *Strong Field Framework* as a guide, the *Blueprint for Complex Care* examines the current state of complex care and makes recommendations to support the field's ongoing maturation. Through interviews with complex care innovators, a convening of complex care leaders, and surveys completed by nearly 400 individuals with an interest in complex care, we developed our understanding of what it will take for the field to reach its potential and recommendations for further strengthening complex care. We also looked at examples of other fields that have recently achieved broad scale adoption and spoke with their leaders to understand the strategies they used in advancing their fields.

[*] In 2016, a group of national foundations—The Commonwealth Fund, The John A. Hartford Foundation, Peterson Center on Healthcare, Robert Wood Johnson Foundation, The SCAN Foundation, and later, Milbank Memorial Fund—came together to accelerate healthcare delivery transformation for individuals with complex health and social needs. These organizations have jointly invested their intellectual and financial resources to advance complex care, collectively supporting work that clarifies the needs of high needs, high cost patients, uncovers the best ways of caring for them, and assists with the spread of proven approaches.

Because complex care seeks transformational change in how our society addresses the health needs of its most vulnerable members, it requires the coordinated activity of many organizations and individuals. As such, we intentionally designed a variety of engagement processes at every stage of the initiative to gather diverse, far-reaching perspectives of stakeholders in the community, illustrated in **Figure 1** below. We used data from published literature, interviews, surveys, and convenings to develop a comprehensive picture and definition of the field of complex care and shape our recommendations for building on work already being done.

Figure 1. Perspectives Influencing the *Blueprint for Complex Care*, by the Numbers

For more information about our methodology, see **Appendix B**.

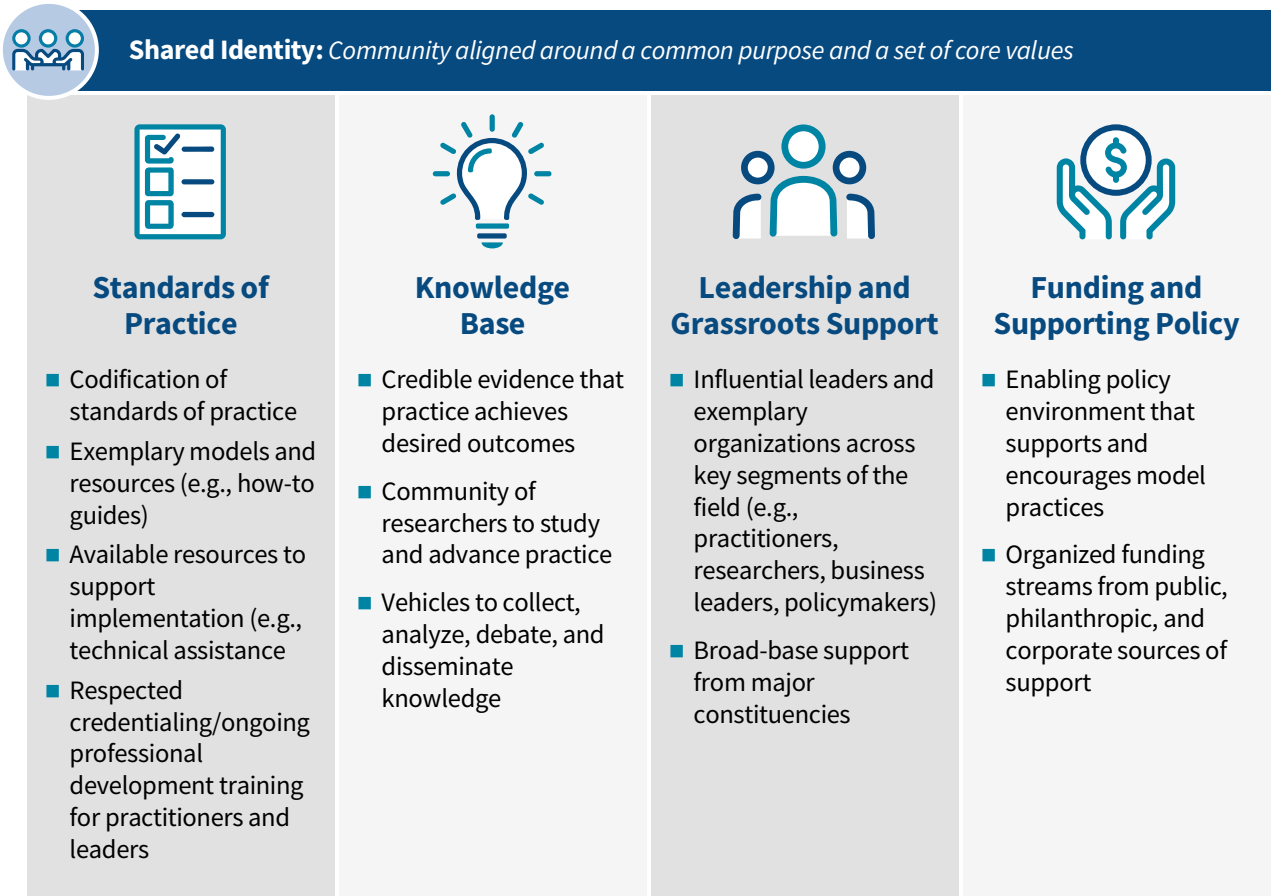
We intend to build on the these efforts to foster a dynamic, ongoing process by which field-builders routinely use the *Blueprint for Complex Care* to assess and share progress, identify gaps, and prioritize opportunities to pursue.

Using the Strong Field Framework

We use the *Strong Field Framework*, developed by The Bridgespan Group, to structure the *Blueprint for Complex Care*. The *Strong Field Framework* helps foundations and nonprofits assess the strengths, weaknesses, and needs of their fields in five core areas, and gives field-builders a way to prioritize effort and investment.[21] *The Blueprint for Complex Care* follows this structure, outlining the current state of complex care and our recommendations for the future using the five components of a strong field, illustrated in **Figure 2** below. (For more information about the *Strong Field Framework* and our decision to use it as a framework for the *Blueprint for Complex Care*, see **Appendix B**.)

As the authors of the *Blueprint for Complex Care*, we recognize that advancing the field of complex care will require multi-organizational leadership to coordinate and align the efforts of many organizations working toward common goals. We believe that no one organization alone can lead the development of the field of complex care, but, like the work of complex care itself, progress will require a dynamic community working as a well-coordinated team. We hope that the *Blueprint for Complex Care* will be a catalyst for strengthening the vision, infrastructure, and momentum needed to advance the field of complex care.

Figure 2. The *Strong Field Framework*



Lessons from Recently-Developed Fields

Recognizing there is existing theory and practice around the maturation of new fields,[22-27] we interviewed individuals involved in the development of the hospitalist movement, geriatrics, tobacco control, trauma-informed care, and palliative care. These fields represent a diverse set of change efforts in the last 30 years that have had significant and lasting impact on the national health and healthcare landscape. These conversations illuminated strategies for supporting the growth of a new field or social change effort, and align closely with the components of the *Strong Field Framework*:

- **Have a clear vision and define the problem**. Clearly naming the problem and articulating the field's vision and goals helps build awareness and buy-in. We received feedback from interviewees that as a generalist field we will need to be clear on the boundaries of complex care.
- **Build a community of individuals and organizations working toward a common vision**. No single organization, individual, or program can drive social change alone, but a community can work together to make change. Social change communities are built by identifying and engaging stakeholders and leveraging parallel movements or political opportunities that align with the core effort.
- **Establish and disseminate effective solutions and best practices**. Meticulous execution in developing, testing, and scaling models and solutions is essential to success. Successful mechanisms for scale were described as standardization of core practices, online and in-person training, toolkits and support material, technical assistance, and train-the-trainer approaches.
- **Have a solid evidence base**. Large scale adoption depends on rigorous, ongoing evidence that the proposed practices and solutions can reliably achieve the desired outcomes. This requires standard measures of success that are routinely collected and analyzed to establish overall effectiveness and produce continuous improvement within programs.
- **Build a supportive environment for sustaining change**. Building a field requires an underlying economic model, incentives, and funding streams that can sustain programs and incentivize the intended changes. Government buy-in is key to creating a supportive environment.
- **Avoid territorialism**. Successful fields actively position themselves as inclusive and work closely with other, similar fields. Working against fragmentation and silos strengthens efforts by drawing on collective power and influence.

SECTION II.

ASSESSMENT OF THE CURRENT STATE OF COMPLEX CARE

Using the *Strong Field Framework* as a guide, we took stock of the current state of the field of complex care.

We used data from our document review, interviews, surveys, and convening to develop a picture of the field to inform priorities for action going forward. This section is an assessment organized by the components of the framework and the field's strengths and weaknesses. The field of complex care will get stronger through efforts to develop a shared identity, codify standards, build the collective knowledge base, bolster leadership and grassroots support, and solidify sustainable funding and supporting policy.

The assessment describes where the field is currently well-developed or has consensus, and where there are still gaps in practice and policy. The complex care community will need to build on the areas of strength and collectively address the weaker elements. We used this analysis to guide the development of the recommendations listed in Section III.

Shared Identity

Establishing a shared identity is a foundational step for a field. This process aligns a community of change makers around a common purpose and communal values. A shared identity means agreeing upon: (1) what a field collectively hopes to accomplish including the specific problems it seeks to address and the population it seeks to serve; (2) common approaches and practices the community will use to achieve overall goals; and (3) the community of stakeholders working together. Defining the boundaries of the field helps stakeholders and organizations with similar goals avoid working in silos or at cross-purposes. Among experts consulted, there was general consensus around complex care's shared identity as described here.

Strengths	Weaknesses
■ Stakeholders agree on the problems to address ■ The community shares principles and goals ■ The potential community of stakeholders is vast and diverse	■ The field lacks a shared language ■ There has been confusion on who comprises the target population

Strengths

Stakeholders agree on the problems to address

Stakeholders largely agree on the problems facing individuals with complex health and social needs. Some of these challenges include:

- **The current healthcare system is not sufficiently person-centered**. Institutions often struggle to effectively engage individuals and to incorporate their personal values, strengths, and experiences into the care delivery system.[28, 29] This issue disproportionately affects individuals with complex needs, many of whom face stigma, lack social supports, and have histories of trauma and negative interactions with systems and organizations.[30]
- **Social determinants of health are inadequately addressed.** The United States spends less on social needs and more on healthcare than other industrialized nations, resulting in both greater cost and poorer outcomes.[3, 4] Until recently, the healthcare system did not, on the whole, address social needs such as housing, food insecurity, and lack of reliable transportation, despite the adverse impact the factors have on both health and healthcare utilization.[31-33] Healthcare is starting to appreciate the importance of addressing social needs, but more work needs to be done to truly provide whole-person care and work toward health equity.[34]

- **Services—and the data they collect—are divided into separate systems**. Individuals with complex needs encounter multiple fragmented and siloed systems within healthcare and across the health and social service sectors resulting in uncoordinated, duplicative, and inefficient care. Data regarding individuals' medical, behavioral health, and social needs are often difficult or impossible to access, which frustrates efforts to identify and serve people with complex needs.[35, 36]
- **Payment systems reward service volume over outcomes and restrict which services can be reimbursed**. Traditional payment models incentivize healthcare systems to maximize utilization. These systems fail to pay for many of the types of services necessary to improve the health of those with complex needs.[37, 38]

The community shares principles and goals

Stakeholders have largely aligned around a common vision and set of shared principles. Complex care is radically person-centered. Many described complex care as doing whatever it takes to meet the needs of the individual in front of you. Complex care seeks to be: (1) person-centered; (2) equitable; (3) cross-sector; (4) team-based; and (5) data-driven.

While complex care has been typically defined as discrete programs or models serving a subset of the population, there is a growing recognition that these programs can only be successful within a redesigned ecosystem of care. The community shares a vision of a transformed complex care ecosystem in which healthcare and social services for the most vulnerable individuals are seamlessly integrated in local communities. Transformational change will require a sustained effort.

> *In complex care, no one entity believes they are the single solution. Working together is the solution.*
>
> *- Jennifer DeCubellis, Deputy County Administrator, Hennepin County*

Opinions differ about how to best approach the system transformation required to achieve the vision. At the expert convening, some advocated radical restructuring of current systems, while others preferred taking a more incremental strategy. While views differ on *how* to leverage the resources and influence of the healthcare system, stakeholders agreed that the changes must avoid reinforcing power differentials between the healthcare and social sectors.

The potential community of stakeholders is vast and diverse

Stakeholders largely agreed that complex care is a bridging field. It does not seek to become a separate service line within healthcare; in fact, many described that vision as a failure of the potential of complex care. Complex care does not seek to replace or compete with existing disciplines. Rather, complex care brings these groups together to share knowledge and best practices in service of patients with complex needs.

By necessity, complex care seeks collaboration among a wide variety of sectors, disciplines and professions including mental health, addiction services, physical health (e.g., primary care and specialists), public health, home care, geriatrics, food access and nutrition, criminal justice and legal needs, housing, education, labor, and employment (see **Figure 3**, next page).

Figure 3. The Complex Care Ecosystem

While the overlap with existing fields presents a risk of confusion and competition, the field can mitigate this risk by engaging leaders in these fields to share approaches for complex populations.

Weaknesses

The field lacks a shared language

While the field has general alignment, it has lacked a standard definition of its target population. Many definitions continue to rely on cost and utilization as the main indicators of complexity.[39,40] However, as the field continues to deepen its understanding that behavioral health and social needs contribute to overall health and wellbeing, the definition of the target population is evolving. Stakeholders consulted for the *Blueprint for Complex Care* found behavioral health and social needs, in addition to medical needs and functional limitations, to be central factors in defining the target population. These stakeholders focus on the interplay between behavioral health, social needs, and medical conditions as a unifying theme. The consensus that the field is focused on people who have a constellation of needs that overwhelm current institutions' abilities to serve them effectively is a major step forward in clarifying the scope of complex care.

There has been confusion on who comprises the target population

Many interviewees noted that complex care has been struggling to articulate a common understanding around what complex care is, what problems it is trying to solve, and the populations it serves. Many felt that in order to gain further traction, the field must develop a clear, consistent narrative around why this work matters, what it accomplishes, what timeframe it can achieve results in, and how success should be viewed and measured. A primary goal of the *Blueprint for Complex Care* is to answer some of these foundational questions and align our community of stakeholders around common purpose, language, and communal values.

Standards of Practice

The adoption and spread of a field is accelerated through the development of standardized practices related to the field and professionalization of practitioners trained to implement these specialized practices. Establishing and spreading standardized practices includes: (1) codifying the practices related to the field across multiple clinical and non-clinical sub-domains; (2) developing and disseminating models and solutions that serve as examples for the field; (3) training and professional development programs that support implementation; and (4) established processes and organizations that help ensure quality and fidelity in implementation.

Strengths	Weaknesses
■ Validated care models and promising practices exist and are spreading ■ Common features of promising models and practices have been identified	■ Data sharing limitations hamper progress ■ There is a shortage of providers prepared to deliver complex care

Strengths

Validated care models and promising practices exist and are spreading

Programs, models, and services targeting individuals with complex needs have spread dramatically over the past several years. Their structures range from intensive integrated services and multidisciplinary team-based care to referral protocols and linkages to social services. A multitude of stakeholders oversee these programs, including hospitals, federally qualified health centers, health plans, departments of health, and community-based organizations.[11, 41-43, 48]

Multiple models and services are demonstrating success in improving care for individuals with complex needs.[11, 12, 41-46, 48] Some individual program evaluations are showing improvements in quality of care and self-reported health alongside reductions in acute care utilization and healthcare cost.[11, 12, 43, 47, 48] Efforts like *The Playbook* and the *NAM report* have highlighted models with the most robust evidence and begun to develop tools to make health systems aware of their existence and facilitate their adoption.

Common features of promising models and practices have been identified

In an effort to document and disseminate successful models, researchers have begun to catalog these successful programs, including key delivery features such as target populations, care team type, evaluation results, and funding sources.[15, 43, 45, 46, 50-56] By looking across models and programs, researchers have begun to identify common care attributes and delivery features of high-quality complex care programs.[45, 50, 51, 54] The *NAM report* collated and published these common features of complex care delivery models:[12]

- **Teamwork**. Interdisciplinary care teams working together to apply a patient-centered approach;
- **Coordination**. Coordination of care services between patient, care team, and care coordinator to facilitate access and minimize duplication;
- **Responsiveness**. Timely communication and responsiveness by provider to patient;
- **Medication management**. Careful medication management and reconciliation, particularly in the home setting;
- **Outreach**. Extension of care to community and home;
- **Integration**. Linkage to appropriate social services; and
- **Follow-up**. Prompt outpatient follow-up after hospital stays and the implementation of standard discharge protocols.

The existence of documented models and identification of core features that contribute to successful outcomes serve as a strong base from which to codify, train, spread, and implement standard practices for both organizations and individuals engaged in complex care. Critical organizational capacities include data stratification, population management, cross-sector collaboration, and continuous quality improvement.[45, 50, 54] Emerging individual core competencies include engagement of hard-to-reach individuals through techniques such as motivational interviewing, care planning, health education and coaching, and team-based collaboration.[45, 51, 54]

Weaknesses

Data sharing limitations hamper progress

Data play an integral role in improving care for individuals with complex needs, from identification and classification of individuals, to monitoring intervention progress and coordinating care across service settings. Individuals with complex needs often interact with multiple healthcare providers, systems, and services, exponentially increasing the potential sources, types of data, and the organizations with which that information must be shared to effectively deliver care.

Despite the importance of data, complex care practitioners are generally limited in their ability to leverage comprehensive physical, behavioral health, and social needs data to support their efforts due to technical, financial, and legal barriers to data sharing.[19, 35, 36] Relevant data are spread across multiple systems in different sectors with varying levels of quality and accessibility. Sharing data between proprietary systems, including electronic health records, is time consuming and expensive.[57] Many are also

> *We don't have enough integrated data to deliver the kind of care that people need. There should be integration of health, behavioral health, and social data, and not just for research, but to drive care management.*
>
> *- Maria Raven, Associate Professor of Emergency Medicine, University of California San Francisco, San Francisco Health Plan*

deterred by perceived legal barriers stemming from privacy protections contained in HIPAA and 42 CFR Part 2, as well as those governing other sectors.[58] As a result, relatively few examples of successful comprehensive data integration currently exist.

There is a shortage of providers prepared to deliver complex care

The field is challenged by a lack of providers who are prepared to deliver complex care effectively. One cause is a shortage of professionals in key roles in complex care, particularly primary care and behavioral health providers.[59,60] Demand for primary care physicians has outpaced supply and that trend is expected to continue. Several experts expressed concern that increasing demands and comparatively low pay make primary care an unattractive choice for new doctors. Additionally, compensation for behavioral health and addiction treatment professionals lags significantly behind other health professions.[61] Low pay coupled with the extreme stress and burnout reported for these providers creates an environment where even professionals with a passion for the work of complex care struggle to stay in the field long term.[62,63]

> *We're still in the process of learning how to teach providers and others how to deliver complex care. So many people are trained in their individual silo. Even if the incentives were right and we knew what to do, it's going to take a fair bit of time change the culture and change how care is delivered.*
>
> *- Melinda Abrams, Vice President, Delivery System Reform, Commonwealth Fund*

A second cause is the need for new skills and competencies among existing providers and new workforce members in the healthcare and social sectors.[63,64] As described earlier, complex care involves significant changes in workflows, staffing, roles, behavior and competencies. These changes include a heightened emphasis on relationship formation, team-based care, pain management, treatment of mental health and substance use disorders, and trauma-informed care, that was not part of training for prior generations of providers. Professional education has been slow to incorporate these competencies. Non-traditional workforce members (community health workers and peers) often lack access to formal educational programs that adequately prepare them to work in interprofessional teams on the complex array of needs facing this population.[65,66]

Knowledge Base

Having clear scientific evidence demonstrating the effectiveness of the core practices is critical to a field's success. A strong knowledge base includes: (1) credible evidence that practice achieves desired outcomes; (2) a community of researchers to study and advance practice; and (3) vehicles to collect, analyze, debate, and disseminate knowledge.

Strengths	Weaknesses
■ A growing evidence base demonstrates complex care's positive impact ■ Segmentation of the target population is improving ■ A community of researchers is emerging	■ Current metrics do not reflect whole-person outcomes ■ Stakeholders disagree on the types of evaluation that are necessary

Strengths

A growing evidence base demonstrates complex care's positive impact

One strength is the foundational evidence demonstrating the need for the field. There is a body of literature showing: (1) the disproportional impact of a small number of individuals on the cost of care; (2) the higher prevalence of addiction and mental health needs among those with the highest costs, particularly those whose high costs persist over time; and (3) the impact of social determinants of health on healthcare costs and health outcomes.[7,10,31,33] We know that health is impacted by complex factors. Healthcare's failure to respond to social needs results in preventable cost and poor outcomes.

New research is expanding knowledge in key areas. Researchers are developing deeper understanding of trauma, including its role as a root cause for complex needs and effective modes of treatment.[68] Stakeholders are also applying lessons from implementation science to design better ways to spread evidence-based interventions more effectively.

There is also a growing body of literature demonstrating the effectiveness of particular models in reducing healthcare utilization and cost while improving health.[69,70] Several recent reports inventory the existing literature, and new evaluations are appearing regularly.[15,71] Some models of care have been scaled to multiple sites and have strong evidence of return on investment; while many newer programs are undergoing initial evaluations. Continued growth in evaluations of complex care models is anticipated over the next several years.

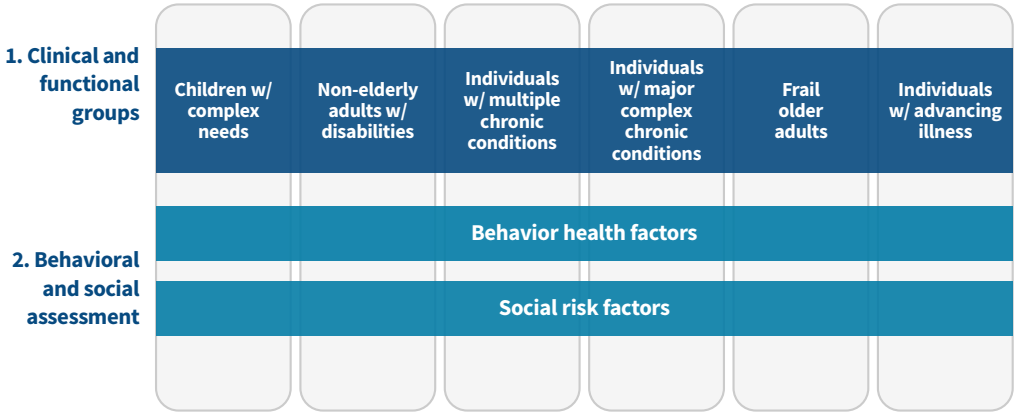
Segmentation of the target population is improving

The heterogeneity of the population is a challenge for the field. The dominant needs and the corresponding effective approaches vary considerably depending on the population. The ability to classify subgroups within the population that complex care serves is essential to understanding

the individuals, the programs that are most effective for meeting their needs, and the features that make them effective for which populations. Yet, until recently, a taxonomy describing these subgroups has not existed.

As part of the *NAM report*, a workgroup developed a conceptual starter taxonomy that is a major contribution to the field.[12] The taxonomy includes six distinct categories defined by a combination of age, disease, and functional status. It then layers high impact behavioral and social risk factors on to each category, reflecting the presence or absence of significant behavioral or social risk as a binary option. The taxonomy authors concede its limitations, due in part to the lack of comprehensive data sets that include medical, behavioral health, and social data. Nevertheless, this taxonomy provides a standard way for health systems and others to segment their complex populations based on relevant needs. Prominent health systems such as Kaiser Permanente and Johns Hopkins have begun to use the taxonomy to segment their complex needs populations. Application of the taxonomy in health systems along with improved access to comprehensive data will allow for further refinement of the taxonomy and improved targeting of services.

Figure 4. Conceptual Model of a Starter Taxonomy for High-Need Patients*†



** Adapted from National Academy's Effective Care for High-Need Patients report.*

† For this taxonomy, fuctional impairments are intrinsically tied to the clinical segments.

A community of researchers is emerging

There is a growing interest among researchers, clinicians, and philanthropy in establishing a robust research base for the field.[11, 69, 70] There are a number of academic researchers who are testing core complex care strategies. The potential research community is quite diverse and includes individuals from health services research, implementation science, data science, mental health, addiction, trauma, medicine/chronic disease, social work, disabilities research, and other disciplines.

While there is not yet a fully formed community of complex care researchers, more connections continue to develop. For example, the recent creation of the Social Interventions Research and Evaluation Network (SIREN) has formalized a community of researchers and evaluators who are focused on addressing social needs within the context of healthcare. There is considerable overlap between their subjects and complex care. Within Kaiser Permanente, a new practice/research community has been formed to encourage greater research and connect individuals across the

organization who are working on related areas of inquiry focused on complex care. More efforts are necessary, including new platforms and infrastructure, to accelerate the formation of a robust network of complex care researchers.

Weaknesses

Current metrics do not reflect whole-person outcomes

Stakeholders cited a lack of standard metrics as a weakness of the field. Most complex care evaluations assess the program's impact on cost, acute care utilization, and some measure of improved health or wellbeing.[73-77] While cost and utilization are somewhat standardized metrics, the health and wellbeing measures vary considerably. However, the health and wellbeing metrics that are applied often are inapplicable to a population with complex needs. Furthermore, there are few standard process measures used consistently to measure effective complex care delivery.

> *It would be very helpful to coalesce around what "health" is, and if that is what we're striving for, how do we measure it? We lack a clear definition of outcomes and success, and we have an inconsistent approach to evaluation. These gaps make it really hard to innovate.*
>
> *- Toyin Ajayi, Chief Health Officer, Cityblock*

This lack of common metrics presents multiple challenges. New programs want standard, commonly accepted metrics that can be used for evaluation and continuous quality improvement, and that take into account the social determinants of health.[78-80] The variability among quality metrics contributes to an over-reliance on cost and utilization measures and insufficient attention to complex care's positive impact on patient wellbeing and overall health. Finally, the lack of standard measures limits opportunities for learning and identification of best practices across programs.

Stakeholders disagree on the types of evaluation that are necessary

Only a handful of complex care programs have been rigorously evaluated. Several interviewees attribute this to time and resource constraints, lack of clarity on the models' ultimate goal, lack of standard definitions and quality metrics, and perceived tension between flexible innovation and robust evaluation. This can be particularly challenging because of regression to the mean, the tendency of high cost patients to experience natural reductions in cost over time.

There was a range of perspectives on how to build the evidence base for the field of complex care. Some interviewees emphasized the important role that rigorous evaluations, such as randomized control trials, play in helping establish best practices within a field. Others argued against making long-term evaluations central to the field's development, expressing concern around how long these evaluations can take, and instead advocated for quicker innovation cycles that allow for rapid testing and refining. It is important to note, however, that both approaches to evaluation would benefit from more precise definitions, functional taxonomies, and standardized metrics as building blocks.

Leadership and Grassroots Support

No single organization alone can solve a complex social challenge. Creating large scale change requires shared leadership and active participation and support from a broad and diverse set of stakeholders. A field's power comes from identifying, recruiting, and activating a strong base of stakeholders and leaders at all levels. Establishing strong leadership and grassroots support includes: (1) having influential leaders and exemplary organization working to advance the field; and (2) developing a broad base of support from major constituencies.

Strengths	Weaknesses
■ Complex care is a high priority for many healthcare payers, providers, policymakers, and philanthropies ■ Influential stakeholders in key segments of the field are increasing buy-in	■ People with lived experience are not adequately included ■ Multiple barriers impede cross-discipline and cross-sector partnerships

Strengths

Complex care is a high priority for many healthcare payers, providers, policymakers, and philanthropies.

Interviewees were heartened by the degree to which this work continues to garner attention from various stakeholders. Efforts such as the Centers for Medicare & Medicaid Services (CMS) Health Care Innovation Awards, Medicaid health homes, CMS' Innovation Accelerator Program, an increasing number of states building complex care measures into managed care contracts, and ongoing shifts toward value-based payment signal that effectively managing complex populations is a priority.

> *People better understand complex care now. Health plans, hospitals, community-based providers, and those who are doing system redesign are focusing on this higher-risk group in order to be effective.*
>
> *- Greg Allen, Director, Division of Program Development and Management, New York State Department of Health*

Prominent private institutions throughout healthcare are participants and leaders in the field. The Six Foundation Collaborative includes some of the most influential private foundations focused on improving health and healthcare.[13] Large corporations and nonprofit institutions, including UnitedHealthcare, Google/Alphabet, and Kaiser Permanente, are active in developing and scaling complex care solutions within their own environments. ACOs and health plans have also prioritized developing programs for their populations with complex needs. Continued

interest from these institutions is essential for the field to have a wide-reaching impact.

Influential stakeholders in key segments of the field are increasing buy-in

Many noted that this field attracts individuals who are passionate, creative thinkers, committed to the underserved, and strongly oriented toward social justice. Several interviewees voiced appreciation for the field's focus on collaboration outside of traditional healthcare. They also emphasized the field's intentions for developing a space for individuals with lived experience. This has helped to cultivate diverse stakeholders in terms of roles and backgrounds.

Weaknesses

People with lived experience are not adequately included

Many interviewees voiced a desire for and recognition of the need to center those with lived experience as key partners in complex care. They also acknowledged that the field has not yet done a good job of incorporating individuals with lived experience in the design, implementation, and evaluation of complex care.

> *We are still really locked into the old medically-based model and are not truly listening to the people that we serve. Complex care is moving into that space more than other groups are, but we have a lot of work to do.*
>
> *- Teresa Cutts, Assistant Professor, Stakeholder Health, Wake Forest School of Medicine*

Stakeholders identified these key challenges: (1) identifying and recruiting individuals with lived experience; (2) maintaining their active involvement; (3) providing tools and preparation necessary for full participation; (4) ensuring individuals with lived experience have equal voice; and (5) changing language and practices that could potentially alienate those with lived experience. Work is being done around addressing these challenges, but complex care is still learning how to fully involve people with lived experience in decision making.[81,82]

Multiple barriers impede cross-discipline and cross-sector partnerships

Although a key strength of the field is its emphasis on cross-discipline and cross-sector partnerships, there are many barriers to establishing and maintaining effective partnerships.[34] Interviewees noted that historical trust issues and territorialism may make stakeholders skeptical of each other's motivations and reluctant to collaborate across sectors. Additionally, stakeholders posited that asymmetries in access to resources and influence between health systems and social service or community-based organizations may be contributing factors. Stakeholders will need to recognize that building or repairing trust and sharing power is active, ongoing work that requires acknowledging and mitigating power differentials and making time for relationship building.

Cultural and language differences among medical, social service, and community providers are also barriers to integrating services across sectors.[83] Finally, stakeholders noted a lack of time and resources as a key challenge to establishing and sustaining cross-sector partnerships. Despite healthcare's shift toward value-based payment, very few financial incentives and flexible funds exist for multi-sector initiatives, leaving many partnerships to build their own funding strategies.

Funding and Supporting Policy

A consistent theme across the interviews, surveys, and literature was the importance of sustainability and financing. None of this work is possible without a policy environment that supports and encourages both innovative care delivery and organized and sustainable funding streams. Accelerating funding and supporting policy entails: (1) a viable underlying economic model; (2) sufficient funding for the field to achieve its goals; (3) a policy environment conducive to model practices; and (4) field members actively involved in the development policies and funding models.

Strengths	Weaknesses
■ The shift toward value-based payment supports complex care investment ■ Public investment has accelerated interest in complex care	■ Healthcare-based programs struggle with financing in the shifting payment environment ■ Social and behavioral health services are funded differently and less robustly than healthcare

Strengths

The shift toward value-based payment supports complex care investment

The significant interest in complex care stems in large part from the financial imperative to manage healthcare costs more effectively.[84,85] As access to health insurance expanded under the Affordable Care Act, stakeholders looked to new ways of controlling costs, which encouraged examining ways to reduce costs among the most expensive subpopulations.[11,12] Yet, the system's goal of producing savings can only be realized if individual stakeholders are similarly incentivized and can achieve a return on investment by changing how they serve those with complex needs.[86]

Value-based payment (VBP), which seeks to align the incentives of providers with the system goals of controlling costs while improving quality, presents an enormous opportunity to accelerate adoption of complex care.[87-90] VBP takes many forms, including performance-based penalties and rewards, bundled payments, and shared savings.

Complex care models depend on the continued support and expansion of VBP arrangements. Shifting financial incentives away from volume-based payments is critical to gaining buy-in and investment from health systems for programs whose goals include reducing the volume of certain high cost services like acute care. Complex care models also require greater flexibility to pay for workforce members, partnered services, and other components of person-centered care that are not typically covered by the fee-for-service system.[91]

Most states are pursuing VBP in some form.[92] There has been significant growth of Accountable Care Organizations (ACOs) and other structures designed to integrate services and participate in

VBP programs, and payers are increasingly opting into value-based payment arrangements.[93] Organizations are starting to see cost savings through these programs as well through reduced ED visits, fewer hospital admissions, among other metrics.[94] Payers are also leveraging value-based purchasing to pay for care that is delivered outside traditional healthcare settings, including in the community and through social service providers.[95]

Public investment has accelerated interest in complex care

Targeted financial and other investments have supported innovation and promoted greater awareness and adoption of new services for those with complex needs. The Center for Medicare and Medicaid Innovation (CMMI) has been an active promoter of complex care.[96] Its initiatives over the last decade include:

- **Health Care Innovation Awards** provided time-limited funding for a significant number of complex care programs that are now viewed as field leaders.
- **Innovation Accelerator Program** provided technical assistance to state Medicaid programs in four areas critical to those with complex needs.
- **Accountable Health Communities** covers a broader population than those with complex health and social needs, but is testing enhanced connections between healthcare and community-based social services to improve health and reduce costs.

Two other provisions within Medicaid have provided important additional federal funding to scale complex care programs.

- The **Health Home program** (Section 2703), provides two years of enhanced federal match to fund the coordination of care, including treatment for mental health and substance use disorders, for Medicaid beneficiaries with multiple chronic conditions.[97]
- Several states, including New York and California, have used **Section 1115 waivers** to undertake large-scale demonstration projects involving enhanced services for populations with complex health and social needs.[98] Both of these programs are time-limited and require that the state establish other ways to sustain them over time.

Other initiatives have provided technical assistance to help states, counties, and cities create a policy environment that supports and sustains complex care. For example, the National Governors' Association provided technical assistance though a multi-year Policy Academy to 11 states seeking to develop data infrastructure, policies, and collaborations to address the needs of individuals with complex health and social needs.[99] Others have approached the same issues from the lens of criminal justice or housing to encourage cross-sector collaboration and system transformation to more effectively and efficiently serve individuals with complex needs. Examples include the Data-Driven Justice initiative, which was started by the Obama administration and currently supported by the

> *Complex care is getting more attention because healthcare is too expensive and we're not getting the outcomes we're seeking.*
>
> *- Olivia Richard, Consumer Activist, Community Catalyst*

Laura and John Arnold Foundation, and Corporation for Supportive Housing's Frequent Users Systems Engagement learning community.

Weaknesses

Healthcare-based programs struggle with financing in a shifting payment environment

Despite the growth in VBP, the majority of care continues to be reimbursed through fee-for-service payments, which promote volume and inhibit flexibility.[37,38] In addition, new complex care programs often require several years of operation before they begin to produce savings, and some of those savings are not captured through the VBP because the savings accrue to other systems like criminal justice, homeless services, and mental health.[100] As a result, providers often face a mix of financial arrangements, both volume and value-based, that create conflicting incentives and can deter more substantial investments that are necessary for complex care programs and systems to flourish.

Many complex care programs that were initially funded through demonstration projects or pilots struggle with sustainability. They often rely on a mix of fee-for-service revenue and VBP arrangements to fund operations. Without dedicated funding streams, many complex care programs have to negotiate customized arrangements with payers. With multiple payers, each having its own measures and requirements, cobbling together sustainable program funding can be a constant challenge.

Social and behavioral health services are funded differently and less robustly than healthcare

Complex care's goal of bringing together the siloed healthcare, behavioral health, and social sectors is further complicated by the lack of sufficient resources and different ways in which each sector's services are financed.[101-103] The United States spends significantly less money on social services, relative to healthcare, than other major (OECD) countries.[3] As a result, social service programs often lack the resources to meet the need for their services within a community.

> *A lot of the financing that occurs in a community is still siloed. While we have some ideas about how to overcome that in the short term, we run into barriers in the medium or long term because funding streams are so different and varied.*
>
> *- Melinda Abrams, Vice President, Delivery System Reform, Commonwealth Fund*

Social services are funded through a patchwork of federal, state, and local programs, each of which may have their own eligibility criteria, program requirements, and payment structures. Funding for behavioral health services varies considerably by state. While some states are moving toward greater financing integration with physical healthcare services, others remain separate. These separate funding streams challenge programmatic integration and create additional barriers for individuals seeking services.

SECTION III.

RECOMMENDATIONS

Based on the current state of complex care and lessons from other fields, we propose the following recommendations as high-priority opportunities to strengthen the field.

These proposed activities emerged from our interviews, polls, literature review, and expert convening, and were refined through discussions with key stakeholders. The recommendations represent a consensus of the authoring organizations and are intended to be specific, relevant, and achievable within the next three to five years. For a detailed description of our process, see **Appendix B**; for additional insight into the interviews, convening, and surveys, see **Appendices C through G**. We believe that the following recommendations are effective ways for the field to achieve its goal of improving the lives of individuals with complex health and social needs.

Table 1. Recommendations by *Strong Field Framework* Components

	Shared identity	Standards of Practice	Knowledge Base	Leadership/ Grassroots Support	Funding/ Supporting Policy
1. Develop core competencies and practical tools to support their use.		✓			
2. Further develop quality measures for complex care programs.		✓	✓		✓
3. Enhance and promote integrated, cross-sector data infrastructures.			✓		✓
4. Identify research and evaluation priorities.			✓		
5. Engage allied organizations and healthcare champions through strategic communication and partnership.	✓			✓	
6. Value the leadership of people with lived experience.				✓	
7. Strengthen local cross-sector partnerships.				✓	
8. Promote expanded public investment in innovation, research, and service delivery.					✓
9. Leverage alternative payment models to promote flexible and sustainable funding.					✓
10. Create a field coordination structure that facilitates collective action and systems-level change.	✓	✓	✓	✓	✓
11. Foster peer-to-peer connections and learning dissemination.	✓	✓	✓	✓	✓

1. Develop core competencies and practical tools to support their use

We recommend the development of a set of core competencies for complex care leaders and practitioners as a first step toward building effective teaching and training programs for the current and future workforce. The field should convene a diverse, cross-sector group of practitioners, educators, and individuals with lived experience. This group should go through a consensus process to identify the core competencies that are essential to providing person-centered, equitable, cross-sector, team-based, and data-driven care to people with complex needs. Specific competencies may be required for certain subpopulations or program types, but the core set of knowledge, skills, and abilities should be broadly applicable. Additional competencies should also be developed for leaders of organizations providing complex care. The competencies may change over time, but they would create a framework and language for describing what defines the practice of complex care.

Identifying competencies allows for the development of standardized educational programs and resources that can be delivered through traditional educational institutions, professional associations (including those in overlapping fields), continuing education programs, and workplace training. Similarly, leadership development programs, like that offered by the Palliative Care Leadership Centers, could be developed based on these competencies.[23] Over time, the core competencies could evolve to become formal practice standards that could be measured and tested. The field may ultimately consider formal certification standards that would allow individuals within their own professional specialties to demonstrate a sub-specialization within complex care.

2. Further develop quality measures for complex care programs

Examples of existing work on developing quality measures:

- CMS' Medicaid Innovation Accelerator Working Group on Metrics for High Needs Populations
- National Quality Forum's Getting to Measures that Matter

The field should develop a common set of process and outcome metrics for programs serving populations with complex needs. There are currently a variety of efforts underway to improve measurement for this population that should be aligned and ultimately integrated.[104]

The process to define appropriate metrics will need to be carefully designed. It should involve diverse stakeholders, including researchers, healthcare and non-healthcare practitioners, government, payers, and individuals with lived experience. Building on related efforts that are already underway, the field should:

- Inventory the range of metrics currently used across different populations and settings.
- Identify shared principles, goals, and outcomes that can be translated into metrics. Such goals may include quality of life, recovery, and progress toward individual goals, as well as more traditional measures of cost and utilization.
- Match existing, validated measures to goals and outcomes, where possible.

- Explore new measures in current gap areas (e.g., measures that capture progress toward patient identified goals).
- Align with existing metrics that impact payment, ratings (e.g., STAR ratings), and other elements that matter to system leaders.
- Standardize methodologies for calculating changes in cost and utilization.
- Streamline measurement. Providers are already subject to significant measurement requirements and this effort should avoid further contributing to that problem.

Ultimately, the field should align around some measures that are common across programs, and should avoid a singular focus on cost and utilization outcomes. This does not preclude the use of other metrics that are customized to particular programs or populations. The collection of common metrics can facilitate faster progress in quality improvement, demonstrate effectiveness, and help generate evidence.

3. Enhance and promote integrated, cross-sector data infrastructures

Improved access to integrated, cross-sector data is critical to building the field's knowledge and its ability to serve people with complex health and social needs. Efforts to promote data sharing and integration within the healthcare system and across sectors must address the cultural, technical, and legal barriers that exist. Keeping these considerations in mind, these steps should be taken:

- Provide resources, formal guidance, and technical assistance to address real and perceived legal barriers to data sharing.
- Invest in improved data collection, management and analytics among community-based organizations and local government.
- Partner with technology companies to develop low-cost IT overlays for complex care programs that can communicate with larger EHR and HIE systems. Opportunities for this exist because of new interoperability requirements and the Fast Healthcare Interoperability Standard that facilitates data exchange.
- Identify a limited set of data fields related to social needs to become standard and incorporated into large health IT systems to ensure social data are shared throughout the complex care ecosystem.
- Incorporate data sharing as a key component of cross-sector partnerships at the community level, including local government. Provide technical assistance and resources to local and regional organizations that serve as data integrators.

Examples of existing work on enhancing and integrating cross-sector data infrastructures:

- Data Across Sectors for Health's All In: Data for Community Health learning network
- Academy Health and Office of the National Coordinator for Health Information Technology's Community Health Peer Learning Program

4. Identify research and evaluation priorities

Examples of existing work on research and evaluation priorities:

- Social Innovation Research and Evaluation Network (SIREN)
- AcademyHealth's high needs research session at their 2018 Annual Research Meeting

While there has been a proliferation of research and evaluation work related to complex care, significant gaps remain. We recommend that the field actively engage leading complex care researchers to develop shared research and evaluation questions and frameworks. While some work is already underway, the development of a community of researchers and an initial set of research questions can be accelerated though these activities:

- Convene researchers in an ongoing network to share research, foster new collaborations, and build connections between researchers and innovative practices.
- Perform a systematic literature review to identify the most pressing research and evaluation priorities.
- Develop key principles and goals for complex care research.
- Incorporate providers and people with lived experience as research collaborators.
- Connect with researchers in other fields who have shared interest in complex care research topics and whose work can be applied in the context of complex care.
- Investigate the potential role that learning health systems could have in creating rapid research and quality improvement capacity among networks of complex care programs.

The Blueprint development process has already identified a number of important research areas:

- Deeper understanding of subpopulations and continued refinement of the NAM complex care patient taxonomy, including how to identify individuals at risk of developing complex health and social needs.
- Continued study of the components of complex care interventions individually and in combination, including dosage response and criteria for reduction in program intensity and graduation.
- Design of implementation systems for replicating and adapting evidence based models in new systems and communities.
- Development of appropriate metrics, as described above.
- Design of payment systems that incentivize and support complex care ecosystems and programs.

5. *Engage allied organizations and healthcare champions through strategic communication and partnership*

As a field that consists of many sectors, complex care must collaborate with overlapping fields and communities that are aligned (or beginning to align) with the values, principles, and tactics that complex care employs—for example, criminal justice, community development, social services, palliative care, primary care, addiction medicine, population health, patient advocacy groups, and public health. Such partnerships allow for collaboration on cross-cutting issues like research, policy, and payment. They also facilitate the spread of complex care practices and knowledge to larger, more developed communities that are able to deploy them and extend the community that identifies as part of complex care.

Many inter-organizational relationships already exist and can be deepened through formal partnerships between convening entities (e.g., the authoring organizations) and professional organizations within those communities. Simple activities like presenting at the others' events, sharing educational resources and curricula, and cross-promoting key information and opportunities create immediate value. Over time, the relationships can deepen to involve collaborative work on shared issues, technical support for programs and members, and joining forces in coalitions to educate and advocate for shared concerns.

Strategic communications efforts are required to influence public and private decision-makers who shape our health and healthcare systems.[106] While enhanced communication will help to provide clarity about what the field is and the value it offers, it also requires a set of shared values and definitions. The field should continue to build on the progress made by the *NAM report* and the *Blueprint for Complex Care* to define core aspects of complex care and its value.

Additionally, particular attention and support should be given to the leadership of health systems, insurers, ACOs, and other healthcare stakeholders who are adapting to dramatic changes in the healthcare landscape and are motivated to find new solutions for those with complex health and social needs. They are critical members of the field and advancing complex care ultimately requires their collaboration and support.

6. *Value the leadership of people with lived experience*

Because active participation of individuals in the design of systems is a component of person-centered care and principle of complex care, people with lived experience should be among the field's leaders and spokespeople. Individuals' experience and insight into the systemic issues impacting people with complex needs, as well as potential solutions, are powerful assets that are not adequately represented in the field. Moreover, the development of leadership skills and opportunities can be an important aspect of building capacity with these individuals.

Examples of existing work to promote leadership and inclusion of people with lived experience:

- Community Catalyst
- Planetree
- Paraprofessional Healthcare Institute

The field should make inclusion of people with lived experience a high priority. We recognize that this goal runs counter to existing power structures in our society that contribute to many

of the problems complex care seeks to address, so deliberate intention and sustained commitment is required.[107] The following represents a non-exhaustive set of recommendations to help progress toward this important goal:

- Incorporate people with lived experience in decision-making and oversight bodies, including local boards, advisory committees, community health needs assessments, and quality improvement efforts. The field should partner with organizations focused on this goal to help health systems overcome barriers to meaningful inclusion.
- Include leaders in peer recovery, disability, patient advocate, and other consumer-led communities in field-building activities. Existing leaders are potential allies who can help connect complex care to larger social movements in ways that are mutually beneficial.
- Through partnership with local and regional networks, develop a cohort of at least 50 national advocates who have lived experiences. Opportunities exist to partner with local organizations and networks to recruit, train, and sustain the engagement of advocates over time. Creating a cohort connected to a national field can elevate their voice, promote the sharing of promising practices, and provide further opportunities for leadership development.

7. Strengthen local cross-sector partnerships

Examples of existing work to strengthen cross-sector partnerships:

- ReThink Health
- America's Essential Hospitals

The local complex care ecosystem requires robust, equitable, and effective multi-sector partnerships. Heightened attention to social determinants and health equity has generated a lot of interest and activity in cross-sector collaboration, yet creating effective, sustained partnerships is challenging.[108] We recommend these focused efforts to support the development and strengthening of multi-sector partnerships:

- Document promising models, core components, and key practices of effective cross-sector partnerships, particularly those focused on people with complex needs. Key elements may include governance and shared decision-making, data sharing, financing, leadership support and culture.
- Support development of cross-sector partnerships through coaching, learning collaboratives, and other technical assistance.
- Create public and private payment models to sustain collaboratives.
- Partner with other organizations focused on cross-sector partnerships to support implementation of evidence-based complex care models within existing partnerships. Activities could include the development of case studies, learning collaboratives, and other resources.
- Promote use of rigorous planning, design, and evaluation as part of all complex care implementation projects through education, funding, and access to expert resources.

8. *Promote expanded public investment in innovation, research, and service delivery*

Dedicated public funding for innovation, research, and program implementation focused on populations with complex health and social needs has slowed over the last several years. Investments are necessary to continue progress and should include:

- Continued investment through CMMI in innovative delivery models and payment models focused on complex care populations.
- Continued use of Medicaid waiver programs and managed care authority to support integration of services and attention to complex needs.
- Working with state and federal partners to develop improved risk adjustment and other rate setting mechanisms to reflect higher costs of people with complex social needs.
- Use of federal funding to support complex care research, including quality metric development, learning health system formation, and the design, dissemination, and implementation of services and models for those with complex health and social needs.
- Promoting use of community benefit funds to support complex care models and ecosystems.
- Use public funding for workforce development, including Graduate Medical Education credits, technical assistance and training, and program implementation, particularly in under-resourced communities.

Achieving increased funding will require coalition building and federal advocacy. The attention and funding around the opioid epidemic also provides opportunities to expand services and create infrastructure to serve those with complex health and social needs.

9. *Leverage alternative payment models to promote flexible and sustainable funding*

Value-based purchasing creates incentives to invest additional resources in individuals with complex needs, but much work needs to be done to build sustainable payment models. We recommend these actions to help the field achieve sustainable funding in the current environment:

- Communicate the business case for payers, ACOs, and health systems to invest in complex care programs and ecosystems.
- Document promising uses of alternative payment models to support complex care programs.
- Collaborate with federal and state partners, Medicaid MCOs, D-SNPs, and Medicare Advantage plans to pilot and test alternative payment models for complex care programs and services.

Examples of existing work to leverage alternate payment models:

- Nonprofit Finance Fund's Advancing CBO Networks for Stronger Healthcare Partnerships
- Center for Health Care Strategies' State Innovation Model Technical Assistance

- Develop resources, case studies, training and coaching to support community-based organizations' capacity to enter into contractual arrangements with managed care and ACOs.
- Promote, within a fee-for-service environment, the development and use of billing codes for services like care planning, care coordination, health coaching, home visiting, and other person-centered services that are common to complex care and other aligned fields. Such codes should be billable by various professions, para-professionals, peers, and community health workers.
- Work with CMS and Medicaid MCOs, to expand coverage and increase incentives for funding social services, including housing and food support.
- Use performance incentives for Federally Qualified Health Centers and other safety net providers to invest in additional resources and services for those with complex needs.
- Work with Medicare Advantage plans to expand coverage of non-medical needs under new authority.

10. Create a field coordination structure that facilitates collective action and systems-level change

These recommendations are ambitious but necessary to continue to formalize, strengthen and grow the field of complex care. Many are foundational investments that require collective action and must reflect the needs, goals, values, and expertise of the field. They will require various organizations to take leadership on behalf of the field. To coordinate activities and create accountability to the field, we recommend the development of a multi-organizational coordinating structure convened by the National Center for Complex Health and Social Needs. This structure would convene stakeholders, monitor, and organize major field-building activities, and serve as an entry point for individuals and organizations who want to contribute to the field.

This structure should include topical working committees of experts who draw on their own and others' experiences to develop resources and positions on issues that are important to the field of complex care. Committees should be inclusive and transparent, formed through an open nominating process involving people with varying backgrounds and lived experience. All committee proceedings, plans, and decisions should be publicly available. Potential committees include Standards and Competencies, Research, Metrics, Implementation, and Policy/Advocacy. Supporting such working committees will require considerable effort and resources; this responsibility can be assigned to different organizations that have the expertise and commitment in the particular topic. The organizations leading each committee should also sit on an overarching steering committee.

11. Foster peer-to-peer connections and learning dissemination

While the field requires coordination, it should also invest in infrastructure to connect stakeholders directly to one another and facilitate discussion and shared learning. As the field is building its foundational elements, access to individuals and organizations with common experience can provide essential advice, support, and camaraderie for new members. The following elements will foster stronger connections among and between members of the complex care community:

Examples of existing work on building peer-to-peer network:

- IHI's Better Care Playbook
- Center for Health Care Strategies' Complex Care Innovation Lab

- A searchable directory of individuals and organizations within the complex care community with information about their programs, populations served, and areas of research.
- A learning management system that hosts resources, training, and curricula from individuals and organizations throughout the field.
- Online communities that enable individuals to interact, post questions, and share resources with one another.
- Local and regional complex care chapters or affiliates that facilitate communities of practice and advocacy.

SECTION IV.

CONCLUSION

The field of complex care is at a pivotal moment. Changing financial incentives and greater attention to health equity and the social determinants of health are fueling interest in complex care from government, payers, health systems, and communities across the country.

Early innovation is leading us toward a body of knowledge and replicable practices. Yet, the work of transforming care for those with the most complex needs is itself complex and requires new skills, collaborative structures, and sustained commitment from a wide array of stakeholders.

The *Blueprint for Complex Care* is an important step in strengthening the field. We hope that it has helped clarify the shared values, principles, goals, and current state of this growing, dynamic community. We intend to use this framework as a guide and benchmark for measuring the field's progress over time. The recommendations provide concrete steps to take the field to its next phase of development, which involves greater standardization and refinement of practices, structures, measurement, and payment.

Our recommendations are ambitious but necessary for the field to achieve its goal of improving the wellbeing of individuals with complex health and social needs. Success will require leadership and collaboration from many organizations and individuals. We call on you, the field, to join the many innovators, early adopters, and champions of complex care to lend your support and expertise to strengthen the field and, in turn, improve the lives of those with the most complex needs.

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APPENDICES

Appendix A. Glossary

Behavioral health: Systems and services related to the prevention, diagnosis, and treatment of mental health conditions and substance use disorders.

Complex care: A person-centered approach to address the needs of people who experience combinations of medical, behavioral health, and social challenges that result in extreme patterns of healthcare utilization and cost.

Complex care ecosystem: A local network of organizations from different sectors, fields, and professions that collaborate to serve individuals with complex health and social needs.

Cross-sector collaboration: An alliance between organizations from two or more sectors with the intention to share responsibility for a project, product, process, or other activities.

Field: "A community of organizations and individuals: (1) working together toward a common goal; and (2) using a set of common approaches to achieving that goal."[1]

Field-building: "Coordinating the efforts of multiple organizations and individuals around a common goal and creating the conditions necessary for them to succeed."[1]

Healthcare: Systems and services related to the prevention, diagnosis, and treatment of physical disease, illness, or injury.

Person-centered care: An approach to care delivery that prioritizes the needs and goals of the individual and their family or support network.

Social determinants of health: "Conditions in the environments 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."[2]

Social services: Systems and services related to reducing poverty and improving the living conditions of low-income populations.

Team-based: "The provision of health services to individuals, families, and/or their communities by at least two health providers who work collaboratively with patients and their caregivers—to the extent preferred by each patient—to accomplish shared goals within and across settings to achieve coordinated, high-quality care."[3]

Trauma: "Individual trauma results from an event, series of events, or set of circumstances that is experienced by an individual as physically or emotionally harmful or life threatening and that has lasting adverse effects on the individual's functioning and mental, physical, social, emotional, or spiritual wellbeing."[4]

Trauma-informed care: "A program, organization, or system that is trauma-informed realizes the widespread impact of trauma and understands potential paths for recovery; recognizes the signs and symptoms of trauma in clients, families, staff, and others involved with the system; and responds by fully integrating knowledge about trauma into policies, procedures, and practices, and seeks to actively resist re-traumatization."[4]

Whole person care: "The coordination of health, behavioral health, and social services in a patient-centered manner with the goals of improved health outcomes and more efficient and effective use of resources."[5]

Glossary References

1. The Bridgespan Group. The strong field framework: a guide and toolkit for funders and nonprofits committed to large-scale impact. https://irvine-dot-org.s3.amazonaws.com/documents/64/attachments/strongfieldframework.pdf?1412656138. Published June 2009. Accessed September 25, 2018.
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3. Mitchell P, Wynia M, Golden R, McNellis B, Okun S, Webb CE, et al. Core principles and values of effective team-based health care. National Academy of Medicine. Published October 2012. Accessed October 2, 2018.
4. SAMHSA's Trauma and Justice Strategic Initiative. SAMHSA's concept of trauma and guidance for a trauma-informed approach. https://store.samhsa.gov/shin/content/SMA14-4884/SMA14-4884.pdf. Published July 2014. Accessed October 2, 2018.
5. Medi-Cal 2020. Whole person care pilots. https://www.dhcs.ca.gov/services/Pages/WholePersonCarePilots.aspx. Accessed October 2, 2018.

Appendix B. Research and Collaboration Methods

Activities

We solicited feedback from a wide range of stakeholders throughout the Blueprint development process in order to ensure inclusivity, transparency, and a final product that reflects the diversity of the complex care community. This process is outlined below:

- **Presentation and workshopping of the Blueprint concept** at the National Center for Complex Health and Social Needs' November 2017 conference, "Putting Care at the Center," to solicit insights and commentary on emerging needs, success indicators, and key stakeholders in the field.
- **Review of key literature** to explore cross cutting themes within the complex care field (including strengths, weaknesses, and opportunities for growth) and the development of other fields of practice to identify strategies for field development (see References section for full list of literature).
- **Six semi-structured phone interviews with leaders of other recently developed fields and academics** who study the development of other fields and social movements to identify best practices and useful strategies for field-building (see Appendix C for list of interview questions and Appendix D interviewees).
- **Twenty-four semi-structured interviews with individuals currently working in complex care** to solicit input on current challenges, priority areas of focus, and indicators of success for the field. Interviewees were selected to provide a balance of diverse perspectives across profession, organization type, roles, geography, and gender (see Appendix C for list of interview questions and Appendix D interviewees).
- **A two day convening with 21 complex care leaders** who provided insight into the idea of a field of complex care, its current state, the long-term vision for the field, the most pressing current priorities and the framework we proposed using to guide the advancement of the field (see Appendix E for list of participants).
- **Two surveys shared with partners and extended networks** of the National Center, CHCS, and IHI: (1) A survey based on the guide for the complex care practitioners' interviews, which was completed by 64 individuals; and (2) A second survey asking for insight into individuals' perspectives on priorities for complex care and recommendations for future actions, completed by 321 individuals. (See Appendix F for the contents of both surveys).

The *Strong Field Framework*

We also researched various frameworks that could serve as an organizing structure for the *Blueprint for Complex Care*, particularly one that outlined the components needed to successfully advance a field or implement social change. Some of these resources are outlined below.

Through this process, we identified the *Strong Field Framework*, developed by The Bridgespan Group to help foundations and nonprofits assess the strengths, weaknesses, and needs of their fields in five core areas and prioritize efforts and investments. The goals of the Bridgespan Group were similar to those of the *Blueprint for Complex Care* and were reflective of the steps recommended to us by experts in other fields. In addition, the *Strong Field Framework* provided a useful organizing structure with core areas that aligned with the interviews with field-builders and complex care experts.

We solicited feedback on the framework at the expert convening where the group endorsed the *Strong Field Framework* as an appropriate organizing structure for the *Blueprint for Complex Care*. We also used the domains of the *Strong Field Framework* as a framework for rating the strengths/weaknesses and priority of components of the field in the surveys.

The final recommendations in the *Blueprint for Complex Care* began with potential action steps taken from the expert interviews and field research. The expert convening participants discussed these concepts within the *Strong Field Framework* structure and ranked them in order of importance and relevancy to their work. The themes that emerged in the convening were ranked by the complex care community through the second survey (Appendix F). Finally, we synthesized the top themes and action steps and connected each to current efforts in the field. The final recommendations represent a consensus of the three authoring organizations based on the methods described here and our own professional expertise.

The sources for concepts included in the final recommendations can be found in Appendix G.

Other Field Framework Resources Consulted

- Nohria N, Khurana R. Handbook of leadership theory and practice, an HBS centennial colloquium on advancing leadership. Harvard Business Review Press; 2010.
- Cassel JB, Bowman B, Rogers M, Spragens LH, Meier DE. Palliative care leadership centers are key to the diffusion of palliative care innovation. Health Affairs. 2018;37(2):231-239.
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- Institute of Medicine. Supporting a movement for health and health equity: lessons from social movements: workshop summary. Washington, D.C.: The National Academies Press; 2014.
- Health Leads. About us. https://healthleadsusa.org/about-us/vision/. Accessed August 30, 2018.

Appendix C. Complex Care Stakeholder Interview Questions

Questions for All Interviewees

Scope

- Please briefly describe what you consider the field of complex care and your role within the field.

Current State

- What do you consider key strengths of the field of complex care?
- What do you consider the most significant barriers/challenges facing the field of complex care?
- Is there anything you would like to change or revise about the field of complex care?

Vision for the Future

- Looking into the future, what do you hope would be different as a result of the field of complex care?
- Where do you think stakeholders in the field of complex care should focus efforts over the next 3 years to bring the most value to the field and individuals with complex health and social needs?
- How do you think those with lived experience should contribute to the evolution/development of the field of complex care?
- How do we best coordinate and align stakeholders to advance the development of the field of complex care?
- When you look back on the development of the field of complex care, how will you know we have been successful?

Sector-Specific Questions

Community-Based Organizations

- What do you consider the biggest gaps in the complex care delivery? How do you think these gaps could be addressed?
- What steps should be taken over the next three years to improve complex care delivery?
- Where should we prioritize efforts to have the biggest impact?
- What role do you see community-based organizations playing to advance the field of complex care?
- What strategies can be used to better engage community-based organizations?

Complex Care Program Leadership

- What are the primary constraints you have experienced in advancing complex care programs? What changes in the broader field could help address these constraints?
- How can communication and collaboration among complex care programs be improved to advance learning in the field?
- Where do you think the field should be heading?

Consumers

- What would you change about the way your doctors manage your care?
- What support do you and/or your family need from the healthcare system that you are not getting?
- How would you change the healthcare system to better meet the needs of patients with multiple chronic diseases?
- How could the providers who care for you do a better job of integrating the care you receive?

Funders

- What do you consider the biggest gaps in the complex care delivery? How do you think these gaps could be addressed?
- What steps should be taken over the next three years to improve complex care delivery?
- What role do you see foundations playing to advance the field of complex care?

Government Officials

- What do you consider the biggest gaps in the complex care delivery? How do you think these gaps could be addressed?
- What steps should be taken over the next three years to improve complex care delivery?
- What role do you see policymakers playing to advance the field of complex care?

Health Plan Staff

- What do you consider the biggest gaps in the complex care delivery and financing? How do you think these gaps could be addressed?
- What steps should be taken over the next three years to improve complex care delivery?
- What role do you see health plan staff playing to advance the field of complex care?

Care Team Members

- What do you consider the biggest gaps (e.g., education, workforce capacity, and implementation) in the complex care delivery? How do you think these gaps could be addressed?
- What steps should be taken over the next three years to improve complex care delivery?
- What role do you see clinicians playing to advance the field of complex care?

Researchers and Evaluators

- What do you consider the biggest gaps in research/evaluation in the field of complex care? How do you think these gaps could be addressed?
- What steps should be taken over the next three years to improve research and evaluation in the field of complex care?

Field-Builder Questions

Background on Field of Practice

- Please briefly describe your field of practice and your role within the field.

Field Evolution

- Please describe the major milestones in the evolution of your field of practice.
- Looking back, what key factors (i.e., people, social factors, changes, organizations) came together to enhance the development of the field?
- How were stakeholders coordinated and aligned to advance the development of your field?
- What do you consider the most significant challenges faced in your field development? How did you overcome these challenges?
- What resistance, if any, did you face? How did you overcome this resistance?
- What do you consider the most significant sources of success that contributed to development of your field?
- What, if any, role(s) have those with lived experience played in the evolution/development of your field?
- Given your experience, what key lessons learned or advice would you share with others working to evolve a field of practice?

Closing Questions

- Is there anything else related to the development of the field of complex care you would like to share?
- Who else do you recommend we talk with to gain perspective on key success factors and opportunities within the field of complex care?

Appendix D. Blueprint Interviewees

NAME	TITLE	ORGANIZATION
Medical providers		
Doug Eby	Primary Care Provider	Southcentral Foundation
Suzanne Daub	Senior Director, Integrated Care Initiatives	UPMC/Community Care Behavioral Health
Adam Davis	Lead Nurse and Program Lead	Puget Sound Fire
Care team members		
O'Nesha Cochran	Peer Support Specialist/Certified Recovery Mentor	Mental Health Association of Oregon
Curtis Peterson	Health Resiliency Specialist	CareOregon
Monica Curiel	Medical Assistant/Health Coach	Stanford Coordinated Care
Consumers		
Fonda White	Consumer	Center for Health Care Services
Olivia Richard	Consumer Activist	Community Catalyst
Jane Hash	Consumer Advocate	Community Catalyst and National Center for Complex Health and Social Needs
Complex care program leadership		
Toyin Ajayi	Chief Health Officer	Cityblock
Allen Dobson	President and CEO	Community Care of North Carolina
Ken Coburn	President, CEO, Medical Director	Health Quality Partners
Liz Davis	General Internal Medicine Director of Intensive Management Programs	Rush University Medical Center
Robyn Golden	Associate Vice President of Population Health	Rush University Medical Center
Health plan staff		
Maria Raven	Associate Professor of Emergency Medicine	UCSF/San Francisco Health Plan
Cy Huffman	Senior Medical Director	Blue Cross Blue Shield of Tennessee
Funders		
Melinda Abrams	Vice President, Delivery System Reform	The Commonwealth Fund
Susan Fleischman	Vice President, Medicaid, CHIP & Charitable Care	Kaiser Permanente
Researchers/evaluators		
Jim Bellows	Managing Director, Care Management Institute	Kaiser Permanente
Sarah Szanton	Director, PhD Program	Johns Hopkins School of Nursing
Public policy/government official (federal, state, or county)		
Greg Allen	Director, Division of Program Development and Management	New York State Department of Health
Jennifer DeCubellis	Deputy County Administrator	Hennepin County
Community-based organization		
Debra Hickman	Co-Founder and CEO	Sisters Together and Reaching, Inc.
Rebecca Onie	Co-Founder and CEO	Health Leads
Teresa Cutts	Assistant Professor	Stakeholder Health, Wake Forest School of Medicine
Field-builders		
Mary Tinetti	Geriatric Physician	Yale School of Medicine
Bob Wachter	Chair, Department of Medicine	UCSF School of Medicine
Steven Schroeder	Distinguished Professor of Health and Healthcare	UCSF
Jennie Chin Hanson	Board member	The SCAN Foundation
Sanjeev Arora	Founder	Project ECHO (Extension for Community Healthcare Outcomes)
Edward Machtinger	Director	UCSF Women's HIV Program

Appendix E. Expert Convening Participants

April 20, 2018 | Philadelphia, PA

NAME	TITLE	ORGANIZATION
Melinda Abrams	Vice President, Delivery System Reform	The Commonwealth Fund
Telia Anderson	Peer Recovery Mentor and Doula	Project Nurture
Ken Coburn	President, CEO, Medical Director	Health Quality Partners
Reverend Debra Hickman	Co-Founder and CEO	Sisters Together and Reaching, Inc.
Ken Himmelman	Managing Principal	Health Leads
Taz Hussein	Public Health Practice Head	The Bridgespan Group
Ann Hwang	Director	Community Catalyst
Barry Jacobs	Director of Behavioral Sciences	Crozer-Keystone
Tracy Johnson	Director of Health Care Reform Initiatives	Denver Health and Hospital Authority
Susan Mende	Senior Program Officer	Robert Wood Johnson Foundation
Rebecca Ramsay	Executive Director	CareOregon
Mark Redding	Co-Founder	Pathways Community HUB
James Schuster	Chief Medical Officer	University of Pittsburgh Medical Center
Tanya Shah	Senior Program Officer	The Commonwealth Fund
Dawn Simonson	Executive Director	Metropolitan Area Agency on Aging
Saul Weiner	Deputy Director	VA Center of Innovation for Complex Chronic Healthcare

Appendix F. Stakeholder Surveys

Survey #1

Thank you for taking the time to complete this survey and providing your input on needs, challenges, success factors, areas of focus and strategies for the field of complex care. There are no right or wrong answers to our questions; we are interested in learning from your experience. All the questions in the survey are optional so please feel free to answer all questions or select a subset to answer. We appreciate your insight.

1. Please briefly describe what you consider to be the scope of the field of complex care.
    a. *For this survey, it may be helpful to refer to a working definition of complex care as "the care for people with complex health and social needs. This is a relatively small population for whom the current health system is ill-equipped to meet the myriad of interrelated medical, behavioral, and social challenges they may face including those often considered 'non-medical' such as addiction, housing, hunger, and mental health. They often experience poorer outcomes despite extreme patterns of hospitalization or emergency care.*
2. What do you consider key strengths of the field of complex care?
3. What do you consider the most significant challenges facing the field of complex care? How do you think these challenges could be addressed?
4. What, if anything, would you like to change about the field of complex care? Why?
5. What do you consider the biggest gaps in complex care delivery? How do you think these gaps could be addressed?
6. Looking into the future, what do you hope would be different as a result of the field of complex care?
7. What do you think the primary goals of the field should be?
8. Where do you think stakeholders in the field of complex care should focus efforts to bring the most value? Why?
9. How do you think those with lived experience should contribute to the development of the field of complex care?
10. How do we best coordinate and align stakeholders to advance the development of the field of complex care?
11. Please describe anything else related to the development of the field of complex care that you would like to share.

Survey #2

Thank you for taking the time to fill out this survey for the *Blueprint for Complex Care*.

1. How strong is the field of complex care on these elements? (Scoring system = strong, somewhat strong, neutral, somewhat less strong, not strong)

   - Codification of standards of practice
   - Exemplary models and resources (e.g., how-to guides)
   - Available resources to support implementation (e.g., technical assistance)
   - Respected credentialing process
   - Ongoing professional development training for practitioners and leaders
   - Credible evidence that practice achieves desired outcomes
   - Community of researchers to study and advance practice
   - Vehicles to collect, analyze, debate and disseminate knowledge
   - Influential leaders and exemplary organizations across key segments of the field (e.g., practitioners, researchers, business leaders, policymakers)
   - Broad base of support from major constituencies
   - Enabling policy environment that supports and encourages model practices
   - Organized funding streams from public, philanthropic and corporate sources of support

2. How important is investing additional work in each of the following set of elements to the success of the field of complex care over the next 3-5 years? Examples of potential activities for each section are included in the parentheses. (Please rank the top 5 elements in order of importance; 1=most important and 5=least important)

   - Codification of standards of practice (e.g., identify core competencies for complex care)
   - Exemplary models and resources (e.g., how-to guides and roadmaps for model implementation)
   - Available resources to support implementation (e.g., technical assistance)
   - Respected credentialing process (e.g., formal credentialing program)
   - Ongoing professional development training for practitioners and leaders (e.g., continuing education programs)
   - Credible evidence that practice achieves desired outcomes (e.g., supported comparative research studies, national research agenda)
   - Community of researchers to study and advance practice (e.g., complex care research network)
   - Vehicles to collect, analyze, debate and disseminate knowledge (e.g., platform/library containing collated complex care evidence and/or better practices)
   - Influential leaders and exemplary organizations across key segments of the field (e.g., practitioners, researchers, business leaders, policymakers)
   - Broad base of support from major constituencies (e.g., engagement of major external stakeholders, i.e. local and national government, payers, health systems, social service sector, etc.)
   - Enabling policy environment that supports and encourages model practices (e.g., advocacy and/or technical assistance to influence policy environments)
   - Organized funding streams from public, philanthropic, and corporate sources of support (e.g., payment reform and grant funding

Appendix G. Sources of Recommendations

The tables below illustrate the source of each recommendation topic.

Note: The recommendations were further refined to incorporate other stakeholder input, so these items are similar but not identical to the final recommendations used in the *Blueprint for Complex Care.*

Standards of Practice

	Interviews	Literature	Survey #1	Convening	Survey #2
Exemplary models and resources (e.g., how-to guides)					
Promote enhanced integrated data infrastructure that allows for identification of complex patients and sharing of information across providers and sector	8	✓	✓	✓	✓
Develop, test, and implement road maps, tools and resources that build on core attributes and competencies for organizations looking to adopt models of care suitable to their populations	2	✓			✓
Codification of standards of practice					
Develop and spread staffing models that promote interprofessional care teams, allow everyone to perform at the top of their license, ensure there is clear accountability to the patient and expand functions provided on care teams including integration of peers, caregivers, lay leaders, CHWs, navigators	8	✓		✓	✓
Build on published starter taxonomies to segment heterogeneous complex care population into meaningful subgroups that facilitate matching of need to tailored care delivery interventions	3	✓		✓	✓
Identify, develop, test, and spread standard set of attributes/care functions that contribute to successful care models	4	✓			✓

Knowledge Base

	Interviews	Literature	Survey #1	Convening	Survey #2
Credible evidence that practice achieves desired outcomes					
Prioritize input from consumers and communities to identify and align on the a small set of standard quality measures appropriate for assessing outcomes that go beyond reductions in utilization and cost	10	✓	✓	✓	✓
Develop and implement a robust research and evaluation agenda to address gaps in the evidence base and identify the most promising practices and models for various subgroups	6	✓	✓	✓	✓
Community of researchers to study and advance practice					
Include individuals with lived experience in defining the problem, identifying key research questions, determining what works, and identifying core outcomes/measures of success	4		✓	✓	
Vehicles to collect, analyze, debate and disseminate knowledge					
Develop an interactive collaborative platform/library for sharing resources that promotes learning in the field and community building	5			✓	

Leadership and Grassroots Support

	Interviews	Literature	Survey #1	Convening	Survey #2
Broad base of support from major constituencies					
Build and strengthen partnerships across sectors; recognize that collaboration will require relationship building, power sharing, time, potentially repairing trust, and ensuring all partners receive value	6			✓	✓
Strategic communications: Continue to develop and refine strategic communications and advocacy around why complex care matters and stories of success to effectively marshal support	4		✓	✓	✓
Influential leaders and exemplary organizations across key segments of the field					
Embed individuals with lived experience at the center of all parts of this work-design, decisions, and accountability. Provide leadership development support for individuals with lived experience	8		✓	✓	
Build collaborations among leaders in the field aimed at aligning objectives, and broadly engaging stakeholders in decision around resource allocation, policy recommendations, and strategies to address operational barriers	6	✓	✓		

Funding and Supporting Policy

	Interviews	Literature	Survey #1	Convening	Survey #2
Organized funding streams					
Need better outcomes tied to payments and to include measures around social risk factors, along with medical and behavioral	6		✓	✓	✓
Continue progress toward value-based payment models and global payment models that facilitate integration of care, incentivize outcomes, provide sustainable funding streams for complex care, and cover the provision of coordination and non-clinical services such as housing, transportation, and social supports	9	✓	✓		✓
Enabling policy environment that supports and encourages model practice					
Strategic communications: Continue to develop and refine strategic communications around advocacy and reform-- why complex care matters to marshal support and resources	4	✓		✓	✓
Service integration: Create frameworks and eliminate barriers at the local, state and federal level to facilitate access to and integration of social supports	5	✓			✓

About the Blueprint for Complex Care

With support from The Commonwealth Fund, the Robert Wood Johnson Foundation, and The SCAN Foundation, three organizations—the Camden Coalition of Healthcare Provider's National Center for Complex Health and Social Needs, the Center for Health Care Strategies, and the Institute for Healthcare Improvement—came together to develop a national framework for coordinating the complex care community. Just as a blueprint is necessary to guide the construction of a home, *The Blueprint for Complex Care* is a guide for advancing the field of complex care. *The Blueprint for Complex Care* aims to drive a collective strategy for the field as a whole, bringing together the ongoing efforts of hundreds of discrete programs into a cohesive and singularly identifiable field of practice.

www.nationalcomplex.care/blueprint

The National Center for Complex Health and Social Needs

CHCS Center for Health Care Strategies, Inc.

Institute *for* Healthcare Improvement