

Ready + Resilient

START STRONG | SUPPORT RECOVERY | SHARE HEALTH

Health Share of Oregon | 2017 - 2020



Ready + Resilient

Health Share was founded to transform the way health care providers and our community work together for the best possible health of our members. In our first five years of innovation and shared accountability, we have made huge strides with our partners in creating systems of care that better serve the people who need it most. Looking ahead, the challenges are great: a statewide opioid crisis, quickly changing community demographics, an uncertain future for Medicaid coverage, the worst mental health outcomes in the country¹ and deep disparities in health. Big challenges require big solutions. With the Ready + Resilient plan, we are creating a long-term roadmap to support the wellbeing of children, families and communities through prevention, support for recovery and focused investment in health equity.

Background

At its inception, Health Share was charged with focusing on Medicaid's "high utilizers" through the work of the Health Commons Grant. A variety of "shovel ready" programs were implemented and studied between 2012 and 2015. Some of those programs are still operating today, including Tri-County 911, the Intensive Transition Teams provided by our county partners, and CareOregon's Health Resilience Program. Some of the programs informed and helped to influence other programs such as ED Navigators at Providence.

In 2013, we launched a small initiative to learn more about our members with high needs who aren't experiencing good outcomes in the health care system. That initiative is now known as the Life Studies project. Through that initiative, we learned what many had suspected for a long time: our members are better served by changing the question from "what's wrong with you?" to discovering "what has happened to you?" This shift is a critical step in acknowledging and addressing the early life trauma, adverse childhood experiences and social determinants of health that form the pathway to high utilization for a large number of our members.

In 2015, Health Share's Board of Directors approved Health Share's second strategic plan—known simply as "2.0"—and identified two strategic goals:

Early Life Health: Ensure the next generation of Oregonians is healthy and productive by focusing on prevention to get the best start. Every child should be physically and emotionally ready for kindergarten.

Enhance Capacity and Access: Use existing capacity in new ways and develop new capacity through investment in community level system enhancements. Every member should have access to the care they need, when and where they need it.

 $^{^{\}rm 1}$ 2016 State of Mental Health in America – Ranking the States, Mental Health America

This was Health Share's first phase of moving upstream to address what the Life Studies project had revealed. Some of the tactics that were part of 2.0 have been moved from strategic initiatives to an operational state inside Health Share. These innovative programs include:

- Funding and capacity support for the Oregon Community Health Worker Association, creating infrastructure to make community health workers part of the workforce
- Tri-County 911, an outreach program for people experiencing extreme disparities who otherwise use the emergency system for even their most basic health needs

Some of the 2.0 initiatives have been completed and transitioned to long-term sustainability outside Health Share. These include:

- Project ECHO, a telementoring program to help primary care providers develop new skills, now adopted by the Oregon Health Authority
- Medical Legal Partnership, providing access to legal advice and assistance within a clinical setting, now sponsored by Metropolitan Defenders

In 2015, the Board also approved Health Share's revised Mission, Vision and Values. These were developed in partnership with staff and Health Share's Community Advisory Council and serve as a guidepost for our actions.

Our Mission: We partner with communities to achieve ongoing transformation, health equity and the best possible health for each individual.

Our Vision: A healthy community for all.
Our Values: At Health Share, we believe:

- Member voice and experience are at the center of what we do
- Health equity is achievable and requires deliberate action on our part
- In honoring our commitments
- Using continuous improvement is vital to our efforts
- In operating transparently and using data to guide our work
- Working in partnership to maximize our resources

Plan Overview

Our third strategic investment plan, Ready + Resilient, continues to build on our prevention-focused, upstream work and elevates improvement of the behavioral health system of care to a strategic priority. The strategies and tactics contained in this plan reflect a continued investment in fundamental system improvement, and an increasingly sophisticated response to the Life Studies lessons.

At its core, this plan is guided by two core principles: helping our members and their families start strong and supporting recovery.

The majority of the work—including outcomes and evaluation reporting—will be completed in three years, and some will be completed even sooner. The Ready + Resilient plan is supported through Quality Metrics funds earned in the 2015 performance year.

Health Share's commitment to equity also continues to evolve. The Ready + Resilient plan's proposed goals and objectives create a cohesive framework that focuses our efforts on making deep and lasting impacts in the community to improve our members' health. By taking an "equity first" approach, each investment and strategy includes an explicit focus on eliminating disparities in health and health care for our member population. With this framework, Health Share has a signature opportunity to transform the Behavioral Health and Early Life Health systems of care, and to serve as a model for other regions undertaking similar work.

An equity first approach means that all of our strategies and tactics should include *explicit* efforts to eliminate the disparities in health and health care faced by our members. These tactics will be driven by data, show demonstrable impact on reducing disparities, have clear metrics to hold us accountable and include adequate resources to be successful. Specifically, as a result of using an equity first approach in our initiatives, systems of care will show:

- Improved access to care generally for historically marginalized communities
- Fewer disparities in access among special populations
- Increased culturally and linguistically effective and appropriate services
- More integration of culturally specific peer supports with payment models to support them
- Decreased barriers to integration of substance use treatment, primary care and maternity care
- Better communication between behavioral health treatment and primary care

In developing the plan, we relied on an extensive environmental scan as well as data from internal and external sources. The proposed plan will show demonstrable impact on reducing disparities, have clear metrics to hold us accountable and include adequate resources to be successful. Health Share's Board of Directors will be instrumental in guiding the overall achievement of these strategies through ongoing collaboration, communication and holding Health Share accountable.

Goals/Strategies/Outcomes

The goals of health improvement and system transformation in our community have not changed during Health Share's first five years, and the new plan for strategic investment retains many of the foundational strategies from previous plans. These goals work in tandem with the Community Health Improvement Plan and the contractually required Quality Improvement Plan. Wherever possible, we have linked Health Share's goals, strategies, outcomes and tactics with our plan partners' priorities and initiatives. Many of the strategies align directly with the Quality Metrics measured by the state, and therefore support our efforts to achieve the metrics.

We recognize that approaching these significant challenges will require more than a few distinct investments in system improvement over a short time frame. Rather, it will take flexibility to adapt our investments and approaches to changing circumstances, a willingness to learn from our work through continuous reflection and improvement, consistent and sustained efforts, and a strong commitment from all of Health Share—our Board, staff, our partners and our community—over a number of years.

The Ready + Resilient plan will focus on the following goals, strategies and outcomes.

Start Strong

Goal: Children are ready for kindergarten, and families are connected to the health and social resources they need to thrive.

Strategies	Key Outcomes
Improve quality and quantity of screening of women and children in health care and community settings.	 Percent of PCPCH and women's health care providers administering preventive screening will increase. Racial, linguistic, and cultural disparities in developmental screening will be reduced. More women will be screened for family planning services and connected to desired services.
Build and enhance clinical and community interventions and referral systems.	 Community referral systems will be in place to respond to needs identified from screening, including social determinants of health. Providers will be better equipped to address the developmental, behavioral, and social needs of the families they serve. Families with developmental, behavioral, or social resource needs will be able to access community and culturally specific supports.
Improve systems of care for populations with complex needs.	 Health Share data analytics and communications will increase partner focus on addressing health disparities. Children in foster care will have access to a coordinated system of health assessments and foster care medical homes. Our community will establish regional Collective Impact approaches for kindergarten readiness and foster care.

Support Recovery

Goal: People are able to access quality mental health and substance use services delivered by a trauma-informed workforce when and where they need them.

Strategies	Key Outcomes
Strengthen the behavioral health (BH) workforce.	 The retention rate of staff who work directly with our members will increase. More providers will reflect the culture and language of our members. Culturally specific communities will increase their use of behavioral health services.
Improve the substance use disorder system of care.	 Members will be served by providers who endorse and adopt best practice treatment guidelines. More members will have access to Medication Assisted Treatment (MAT) services. Fewer children will enter foster care due to parental substance use. Pregnant women with SUD will have access to high-quality maternity care.
Improve the availability of information across care settings.	 Providers and health plans will have access to health information and analytics in order to decrease disparities and improve integrated care for members. Data literacy among behavioral health providers will be improved to positively impact our members.

The remainder of this document provides additional detail regarding the tactics and metrics that will be used to achieve the outcomes.

Start Strong

Health Share's goal is that children are ready for kindergarten, and families are connected to the health and social resources they need to thrive.

In our community and nationally, Health Share is emerging as a leader in prioritizing and accomplishing systems improvement in care for children. Our goal is to ensure that families and children have the health and social resources they need to thrive in a system of care that connects health care and community partners in supporting those at highest risk.

Health Share's work in early life health to date has taught us that children and families give us many opportunities to provide support before children grow up to have chronic medical, dental, mental health and substance use disorders. Unintended pregnancies account for more than half of births in low income populations, and carry significant health and social risks. If women become parents when they are not ready, or when they struggle with trauma, substance use or basic resource needs, effective parenting can be very challenging.

When children grow up in homes affected by significant poverty, violence, mental health issues and substance use, they are often not able to develop the skills they need to succeed in school. Their school performance may also suffer because of poor attendance linked to dental issues or chronic health problems, or an inability to self-regulate. Many of these kids touch the mental health system early in life. We also know the impact of the foster child system and the health risk factors that alone carries. And the systems meant to help the most at-risk children—including the health care system—have not been up to the task, especially in communities of color, and for non-English speakers.

We know that when we invest in early life health, we optimize the chances for lifelong well-being and prevent high utilization for the next generation. We also know that every child's needs are different, and many of Oregon's most vulnerable children are falling through the cracks of the current one-size-fits-all health care system. We will look first at building on initiatives already underway, such as:

- Advancing contraception care as a core preventive service for women
- Screening pregnant women for behavioral health and social resource needs
- Developing the infrastructure for supporting families (Help Me Grow)
- Partnering with schools and communities to promote kindergarten readiness
- Improving services for foster children.

We must ensure our health system is doing everything it can to promote health, support parents, prevent and mitigate the impact of Adverse Childhood Experiences (ACEs) and trauma, eliminate health disparities and assist parents and communities in creating the kinds of environments that set the stage for life-long health.

Succeeding in this work will require novel partnerships with other child-serving systems struggling with many of the same issues. To support better collaboration and aligned initiatives between the health system and other child-serving systems, Health Share is planning to invest in adopting the Collective Impact framework with a higher degree of fidelity. Our focus will be on two key areas: kindergarten readiness and foster care, both of which are favorably positioned for a regional effort of this type.

In both instances, the community has indicated a shared interest in joining forces to address the underlying issues affecting all systems. And in both instances, partners have indicated that the CCO model in general—and Health Share's structure in particular—can play a key role serving either as a "backbone" organization to organize and promote the work, or as a critical support to other backbone organizations. Collective Impact requires more than convening and talking about problems. It requires deep engagement with other systems and the community to understand where needs are aligned, develop shared measures of success, establish strong communication across all sectors and cultivate a willingness to think more broadly about the opportunities and drivers inherent in the current system.

Ultimately, through these investments, we will create a prevention-focused and developmentally aware system of care that connects health care and community partners. And by focusing on supporting parents, identifying needs early, removing barriers and creating coordinated systems of care, we can build resilience and give every child the best possible start. We look forward to inviting our partners into this work.

Support Recovery

Health Share's goal is that people are able to access quality mental health and substance use services delivered by a traumainformed workforce when and where they need them.

Our data on high costs, high utilization and the development of chronic conditions keep pointing us to the behavioral health system. For children ages 6 to 18, behavioral health is the number one category of costs. For children ages 1 to 5, behavioral health is ranked third in costs. These costs are driven by diagnoses of adjustment disorders, PTSD, anxiety and depression. Parental substance use is the number one reason children enter foster care. Communities of color tend to experience a greater burden of substance use disorders, partly and in some cases because of higher rates of use, but mostly due to poorer access to effective substance use treatment and higher social, environmental and economic risk factors.

Oregon has struggled mightily with its behavioral health system—with chronic underfunding and declining budgets over decades. This neglect and deprivation has resulted in a workforce that needs support and a system with many gaps. Fixing and transforming the system is going to take a focused effort over many years.

Our environmental scan coupled with the successful work of the Pathways initiative in regionalizing risk and incorporating the substance use treatment benefit, along with the state's opioid crisis, led to our initial focus on the substance use disorder system of care. However, we predict we'll be working in the behavioral health system for many years.

We'll begin with initiatives such as:

- Expanding Wheelhouse—a model aimed at ensuring adequate access to Medication Assisted Treatment—to primary care
- Integrating primary care and specialty behavioral health
- Integrating substance use treatment with maternity care
- Including better information exchange
- Enhancing training for a culturally diverse workforce and increasing access to culturally-specific peers
- Improving care transitions and continuity from one level of treatment to another (e.g. detox to residential).

Many of the tactics under the Support Recovery goal are pending recommendations for investment of available excess net worth funds in the behavioral health system of care.

Our vision is a system of care that is recovery-oriented, trauma-informed, culturally responsive, user-friendly and demonstrably effective. We also must recognize and address factors that lead to substance abuse in the first place (the social determinants of health, ACEs and trauma)— linking us directly back to early life health.

Next Steps

Upon approval by the Board, Health Share management will proceed with finalizing and implementing work plans for the selected tactics. Some tactics are still in development and will require continuing input from stakeholders and partners to successfully design and execute. Ongoing information sharing and input will occur throughout the three-year cycle. Health Share's Board of Directors will be instrumental in guiding the overall achievement of these strategies through ongoing collaboration, communication and holding Health Share accountable. We will also leverage the work completed in the Health Share Bridge analytics environment as well as the regional Pathways system of behavioral care services.

Appendix A

Start Strong

Strategy 1: Improve quality and quantity of screening for women and children in health care and community settings.

Key Outcomes:

- Percent of PCPCH and women's health care providers administering preventive screening will increase.
- Racial, linguistic, and cultural disparities in developmental screening will be reduced.
- Evidence of ECU will increase to benchmark.

Tactic 1A: Expand number of practices using scripts, prompts, and tools to identify the need for contraception, mental health treatment, SUD treatment, oral health, and social resource support.

Metric 1A: A greater percentage of women and children will be served by clinics who use best practices for screening and referral.

Tactic 1B: Evaluate risk stratification methods for pediatric and maternity care.

Metric 1B: Identification and recommendation for the "best of breed" risk stratification methods will enable provider and payer community to increase number of clinics using data to inform risk stratification for their pediatric population.

Tactic 1C: Build the capacity to provide culturally responsive screening practices among providers.

Metric 1C: Developmental screening rates within culturally specific populations will increase.

Strategy 2: Build and enhance clinical and community interventions and referral systems.

Key Outcomes:

- Community referral systems will be in place to respond to needs identified from screening, including social determinants of health.
- Providers will be better equipped to address the developmental, behavioral, and social needs of the families they serve.
- Families with developmental, behavioral, or social resource needs will be able to access community and culturally specific supports.

Tactic 2A: Increase capacity for families to access community resources for children with developmental and behavioral needs through training, education, and communication. Metric 2A: Help Me Grow will be established, functioning, and serve 2,500 families.

Tactic 2B: Partner with public health and Early Learning Hubs to strengthen their capacity to serve children and families to improve kindergarten readiness with explicit focus on culturally specific communities.

Metric 2B: Each county will have two new partner-led initiatives; targets will be established based on the program.

Strategy 3: Improve systems of care for populations with complex needs.

Key Outcomes:

- Health Share data analytics and communications will increase partner focus on addressing health disparities.
- Children in foster care will have access to a coordinated system of health assessments and foster care medical homes.
- Our community will establish regional Collective Impact approaches for kindergarten readiness and foster care.

Tactic 3A: Use data to identify disparities and inform stakeholders to build a case for response.

Metric 3A: Each plan partner will have a plan and dedicated funding to address identified health disparities.

Tactic 3B: Improve coordinated care for socially and medically complex populations.

Metric 3B: The number of foster children receiving care at a foster care medical home will double.

Tactic 3C: Promote regional Collective Impact efforts for foster care and kindergarten readiness.

Metric 3C: Collective Impact groups will be established with clear, shared vision, goals, milestones, and metrics in place.

Support Recovery

Strategy 1: Strengthen the behavioral health (BH) workforce.

Key Outcomes:

- The retention rate of staff who work directly with our members will be increased.
- More providers will reflect the culture and language of our members.
- Culturally specific communities will increase their use of behavioral health services.

Tactic 1A: Stabilize the existing BH workforce through policy and rate parity, with integrated administrative processes.

Metric 1A: Mental health and SUD fee schedules at the OHA level will have parity.

Metric 1A2: Productivity for the BH workforce will be improved through decreased administrative burdens for providers.

Tactic 1B: Expand and improve cultural specificity and responsiveness in the BH workforce. Metric 1B: Access and engagement of individuals of color and non-English speaking members will increase.

Strategy 2: Improve the substance use disorder system of care.

Key Outcomes:

- Members will be served by providers who endorse and adopt best practice treatment guidelines.
- More members will have access to Medication Assisted Treatment (MAT) services.
- Fewer children will enter foster care due to parental substance use.
- Pregnant women with SUD will have access to high-quality maternity care.

Tactic 2A: Promote best practice treatment guidelines and recovery oriented system of care including culturally and linguistically appropriate care.

Metric 2A: The number of providers who have adopted best practice treatment guidelines will increase; 50 percent of members served will receive services at those organizations.

Tactic 2B: Improve care transitions for people with substance use disorders.

Metric 2B: Follow-up within 7 days following detox or ED visits for individuals with SUD

Tactic 2C: Create centers of excellence for critical populations.

Metric 2C: Access to suboxone treatment through primary care and maternity providers for individuals with opioid use disorder will increase.

Strategy 3: Improve the availability of information across care settings.

will increase by 10 percent.

Key Outcomes:

- Providers and health plans will have access to health information and analytics in order to decrease disparities and improve integrated care for members.
- Data literacy among behavioral health providers will be improved to positively impact our members.

Tactic 3A: Promote the exchange of health information.

Metric 3A: Percentage of members served by BH providers connected to a health information exchange will increase.

Appendix B: Background Data

Table of Contents

Overview: Our Youngest Members	15
Health Share Members Ages 0-8: Demographics	15
The Importance of Early Life Health	15
Measuring Kindergarten Readiness	16
Utilization of Primary Care Provider (PCP) Services	17
Utilization of Oral Health Services	18
Prevalence of Children with Behavioral Health Diagnoses	19
Early Life Health Strategy 1: Improve screening of women and children in health care an	d
community settings	
Oregon Family Well-Being Assessment	20
Effective Contraceptive Use (ECU) Rates	
Developmental Screening Rates	22
Early Life Health Strategy 2: Build and enhance clinical and community interventions and	
referral systems	
Help Me Grow	24
Early Life Health Strategy 3: Improve systems of care for populations with complex need	
Children in Foster Care: Demographics	
Children in Foster Care: Health Disparities	
Children in Foster Care: Utilization	
Impact of Parental Substance Use on Foster Care Entry	
Outcomes for Youth Transitioning Out of the Foster Care System	27
Overview: Behavioral Health	
Utilization of Outpatient Mental Health Services by Race/Ethnicity and Language	
Utilization of Outpatient SUD services by Race/Ethnicity and Language	
Health Share Members with Severe and Persistent Mental Illness (SPMI)	
Utilization Among Individuals with SPMI	30
Behavioral Health Strategy 1: Strengthen the behavioral health workforce	
2016 Market Rate Study	31
Behavioral Health Strategy 2: Improve the Substance Use Disorder system of care	
Opioid Use Disorder (OUD): Prevalence and Demographics	
Costs of Claims with an Opioid Use Disorder Diagnosis	
Utilization by Members with an OUD Diagnosis	
OUD: Treatment	
Substance Use Disorder (SUD): Prevalence and Demographics	33

Costs of Claims with a Substance Use Disorder Diagnosis	34
Utilization by Members with an SUD Diagnosis	34
SUDs: Impact on Pregnancy and Birth Outcomes	35
Behavioral Health Strategy 3: Improve the availability of information across care settings.	36
Enhanced Access to Behavioral Health Data	36
Health Information Exchange (HIE)	36
Behavioral Health Network	36
Endnotes	37

Overview: Our Youngest Members

Health Share Members Ages 0-8: Demographics

Health Share covered more than 3,000 births in 2016 and has more than 50,000 members ages 0-8. These youngest Health Share members represent many racial/ethnic groups, as noted in the table below. One in five Health Share members ages 0-8 (22%) do not speak English as a primary language.

Health Share Members by Age Category (2016)

Category	Number of Members
Births	3349
Children 0-1 years old	5475
Children 0-8 years old	52110

Health Share Members 0-8 years old by Race/Ethnicity and County (2016)

Race/ethnicity	County				% of
Race/etillicity	Clackamas	s Multnomah Washington		Total	total
American Indian/ Alaskan	81	292	193	566	1.1%
Native	01	272	175	300	1.170
Asian or Pacific					
Islander	180	1447	536	2163	4.2%
Black or African American	137	2242	373	2752	5.3%
Caucasian or White (Non-	3669	6682	4250	14601	28.0%
Hispanic)	3007	0002	4230	14001	20.0 /0
Hispanic	935	3410	3445	7790	14.9%
Native Hawaiian	10	18	16	44	0.1%
Not Provided	3777	11469	7897	23143	44.4%
Other Race or Ethnicity	177	506	368	1051	2.0%
All	8966	26066	17078	52110	100.0%

The Importance of Early Life Health

The prenatal and earliest years of a child's life have a profound impact on brain development, school readiness and ultimately on physical and mental health later in life. Strong relationships and health-promoting environments can provide a solid foundation for effective learning, adaptive behaviors and good health. Conversely, chronic stressors in early childhood, such as poverty, exposure to violence or unstable housing, can negatively affect a child's development and produce physiological impacts that become biologically embedded. Children growing up with toxic stress may not learn the adaptive behaviors, may be less ready for Kindergarten, and may be less able to succeed in school and beyond.

Twenty years of research related to the Adverse Childhood Experiences (ACEs) Study have shown a linear correlation between the number of childhood adversities a person experiences and their long-term health outcomes, including heart disease, obesity, depression and alcoholism.¹

The longer we wait to intervene, the more difficult it is to achieve healthy outcomes. Conversely, the sooner we engage, the better our results. Indeed, Nobel Prize-winning economist James Heckman's analyses reveal that early prevention activities targeted toward children with chronic stressors have high rates of economic returns—much higher than remediation efforts later in childhood or adult life.²

Measuring Kindergarten Readiness

The importance of Kindergarten/School Readiness has become more obvious with the burgeoning research on early brain development. A child's early relationships and experiences mold brain architecture and function. Research shows that children from lower income families hear about 30 million fewer words by age four than their counterparts.³ Children who hear more words are better prepared for school, have bigger vocabularies and receive higher test scores. Vocabulary skills by age three predict third grade reading, which in turn predicts high school graduation rates. High school graduates are less likely to have chronic diseases, such as diabetes, chronic pain, and symptoms of mental disorders than are non-graduates. High school graduates are also more likely to report good health and to regularly visit a health professional.⁴

Kindergarten is an important milestone in a child's life: it serves as both the culmination of early childhood experiences and as a launching pad into the formal education system.

In 2014 and 2015, the state convened the Child and Family Well-Being Metrics Workgroup to develop a library of metrics that both CCOs and Early Learning Hubs can use to measure progress toward common goals. That group initiated work around measuring Kindergarten Readiness, including the development of a Kindergarten Readiness measure "bundle," which includes health care (e.g. well child visits, developmental screenings, dental exams, etc.); family (e.g. parent/caregiver screenings for depression, substance use, and intimate partner violence); and kindergarten assessment (e.g. child socio-emotional, literacy, and numeracy skills) components.

Recently, there has been interest from the CCO Metrics and Scoring Committee in adding a Kindergarten Readiness metric to the list of pay-for-performance metrics, and the Health Plan Quality Metrics Committee asked the Children's Institute to convene a technical workgroup to offer a proposal for what a Kindergarten Readiness metric would look like. It is likely that it would not be a single measurement, but rather a dashboard of measures with health and early learning components. More details will be available by the spring of 2018. In the meanwhile, the Metrics and Scoring committee has indicated their interest in early life health by choosing Phase Two quality measures that impact Kindergarten Readiness: timely prenatal care, childhood immunizations before two years of age, developmental screening and timely assessments for children in foster care.

Utilization of Primary Care Provider (PCP) Services

Engagement with primary care services is vital for healthy child development. According to the American Academy of Pediatrics:

"The outcomes of well-child care include the child's physical health and development, emotional, social, and cognitive development, and the family's capacity and functioning. Although outcomes can focus on both the long and short term, it is important to remember that well-child care can affect the seemingly distant future for both child and family. For example, altering dietary habits in childhood or adolescence can help prevent heart attacks during middle age. Positive parenting can avoid adult depression and substance abuse. Researchers are increasingly recognizing the importance and impact of early life experience and health behaviors on health and wellbeing in later life. Alternatively, short-term outcomes focus on current development. In early childhood, one outcome of well-child care is being ready for school entry." 5

Seven in ten (72%) of Health Share five-year-old members had at least one PCP visit in 2016. The rates of PCP visits varied by race/ethnicity and language, however, as seen in the two tables below.

PCP Utilization for 5 year olds by Member Race/Ethnicity

Race/Ethnicity	# w/Medical Coverage	% PCP Visit in 2016
Asian or Pacific Islander	222	81.5%
American Indian or Alaskan Native	58	77.6%
Null & Not Provided	2,801	74.3%
Hispanic	938	72.7%
Caucasian & White (Non-Hispanic)	1,768	67.7%
Black or African American	320	65.9%
Other Race or Ethnicity	115	62.6%
Pacific Islander	34	55.9%
Native Hawaiian	6	50.0%
All	6,262	71.7%

PCP Utilization for 5 year olds by Member Language (2016)

Language	# w/ Medical Coverage	% PCP Visit in 2016
Chinese	30	90.0%
Arabic	17	88.2%
Burmese	14	85.7%
Spanish	994	83.1%
Vietnamese	41	75.6%
Other	45	73.3%
English	4,751	71.1%
Russian	70	70.0%
Somali	23	69.6%
Undetermined	277	38.3%
All	6,262	71.7%

Utilization of Oral Health Services

In a 2016 report the Oregon Health Authority determined that 51 percent of children ages 6-9 in the tri-county region have at least one cavity. Rates of decay are higher among children in low-income households, with 63 percent of these children having at least one cavity, 25 percent having untreated decay, and 19 percent having rampant decay (statewide estimates from the 2012 OHA Smile Survey).⁶ On average, children and adolescents with oral health problems are absent one school day per year more than other children or adolescents.⁷

Only slightly more than half (56%) of Health Share five-year-old members had at least one dental visit in 2016.

Dental Utilization for 5 year olds by Member Race/Ethnicity (2016)

Race/Ethnicity	# w/ Dental Coverage	% Preventive Dental Visit in 2016	% Any Dental Visit in 2016
Asian or Pacific Islander	224	57.6%	58.0%
American Indian or Alaskan Native	58	70.7%	70.7%
Null & Not Provided	2,807	59.6%	60.5%
Hispanic	943	61.7%	63.2%
Caucasian & White (Non-Hispanic)	1,777	45.1%	45.7%
Black or African American	320	58.8%	59.4%
Other Race or Ethnicity	116	44.8%	45.7%
Pacific Islander	34	35.3%	35.3%
Native Hawaiian	6	33.3%	33.3%
All	6,285	55.4%	56.2%

Dental Utilization for 5 year olds by Member Language (2016)

Language	# w/ Dental	% Preventive Dental	% Any Dental Visit
	Coverage	Visit in 2016	in 2016
Chinese	30	86.7%	86.7%
Arabic	17	70.6%	76.5%
Burmese	14	71.4%	71.4%
Spanish	996	76.1%	76.7%
Vietnamese	42	50.0%	50.0%
OTHER	45	60.0%	64.4%
English	4,770	52.9%	53.8%
Russian	70	45.7%	48.6%
Somali	23	39.1%	43.5%
Undetermined	278	22.3%	23.0%
All	6,285	55.4%	56.2%

Prevalence of Children with Behavioral Health Diagnoses

Health Share's Bridge data system aggregates diagnosis codes into clinical groupings to more easily understand conditions impacting our population. Spending on each grouping can be used as one proxy for the burden of certain conditions on our members. One key behavioral health grouping, "stress reaction and adjustment disorders," includes diagnoses like ADHD, PTSD, and adjustment disorders (a temporary diagnosis used to reflect a significant event in a child's life leading to the need for increased support). These conditions are often non-organic—that is, they arise based on social and environmental factors rather than genetic or physical factors. In other words, they are closely related to experiences of trauma, chaotic environments or challenges with attention and focus (which are skills that can often be developed with practice).

Among members in the child rates categories (all children ages 0-17):

- In 2016, 7,998 members in child rate categories (approximately 8 percent of overall child members) had a service in the care processes of anxiety disorders, depressive disorders, or stress reaction and adjustment disorders.
- The amount paid for these services was \$15.4 million, which represents 10 percent of all costs for services to child members.

This means that nearly 8,000 of our children, or the equivalent of 320 full classrooms, have been diagnosed with conditions that are associated with environmental and contextual challenges. Obviously, this fails to account for those whose challenges have not risen to the level of needing professional help, though it can be assumed that many other children have had similar experiences.

Looking specifically at the stress and adjustment disorders care process:

- Among members ages 6-12 it is the second most expensive care process overall.
- It is the fourth most expensive care process for members ages 0-17, after pregnancy (largely newborns), dental (all preventive and non-preventive services), and routine medical exam costs.
- When limited to members ages 6-12 it is the <u>most expensive</u> care process for American Indian/Alaskan Native, Black or African American, and Caucasian members.

Looking specifically at the depressive disorders care process:

- Among members ages 13-17, depressive disorders is the most expensive care process.
- The depressive disorders care process ranks in the top four most expensive care processes for every race/ethnic group in the 13-17 age range.

In summary, these numbers reflect the reality that many children in Health Share's system experience considerable stress and may be less likely to perform well in school and in other social systems designed to support a healthy upbringing. As noted previously, struggles in these systems lead to worse health outcomes later in life and more difficulty finding gainful employment, and can create a repeated cycle for the next generation of children and families in our communities.

Early Life Health Strategy 1: Improve screening of women and children in health care and community settings.

There is growing recognition among health care providers of the importance of understanding the social determinants of health that impact patient health. Many providers in our region have started to screen patients for social risk factors and connect them to social resource needs. There are many clinics in our network that are experimenting with different screening tools and approaches such as Oregon Family Well-Being Assessment, Protocol for Responding to and Assessing Patients' Assets, Risks, and Experiences (PRAPARE), Safe Environment for Every Kid (SEEK) Parent Questionnaire, The Survey of Wellbeing of Young Children (SWYC), ACEs, food insecurity, etc. Health Share is interested in increasing these kinds of screening and referral practices in primary care and maternity settings.

Oregon Family Well-Being Assessment

Health Share has the most experience piloting the Oregon Family Well-Being Assessment in maternity clinics. The Oregon Family Well-Being Assessment (FWBA) is a tool to assess pregnant women and families with young children for behavioral health and social resource needs. It is an opportunity to intervene in a family's life at the earliest possible stage—while the woman is still pregnant or while the child is an infant—in order to prevent adverse childhood experiences that can lead to lifelong effects on health and well-being. Adverse childhood experiences are linked to caregiver mental health and substance use, as well as violence in the home and severe poverty. By screening for these issues in pregnancy, we hope to support the family with needed resources as early as possible to optimize the chances of a healthy parenting environment and optimal emotional health for the child.

The tool was created by a subcommittee of the Oregon Perinatal Collaborative, but Health Share has had a leading role in developing the content and seeing the tool to completion. While behavioral health integration has been a priority in primary care, 80 percent of women participants in a small pilot program indicated they do not visit their primary care provider; they reported using midwives and obstetricians for maternity care, contraception and well-woman care. When women struggle with mental health, substance use, violence, trauma or severe poverty, their maternity care practitioners should have the same resources to connect them to behavioral health and social supports as primary care. This is an important access issue for these women who are our members, but it is also important because optimizing these mothers' well-being is the most reliable way to optimize the well-being of their children.

In addition to screening for behavioral health and social resource needs (including food, housing and transportation), the tool asks women about their connections to primary care, dental care services, Women Infant and Children (WIC) services, parenting support and social connections with friends and neighbors. Having a single comprehensive tool available throughout Oregon has been important not only in standardizing screenings across practices, but also for collecting data that can be used for quality improvements and advancing the model of maternity care.

Oregon has a new Oregon Maternal Data Center, sponsored by the Oregon Perinatal Collaborative, and data from this assessment will become part of that data center to understand the landscape of maternity care in a more comprehensive way.

To date, more than 400 women have been screened with the Oregon Family Well-Being Assessment, and about 6800 women (not all of them pregnant) have been screened by a modified version of it, all in OB/Gyn practices. While overall about 23 percent of women have a need for behavioral health services and 44 percent have a need for social supports (food, transportation and housing), in clinics that have a high proportion of Medicaid clients, 43 percent of women have a need for behavioral health support, and most indicate some need for social resource or parenting support.9

Effective Contraceptive Use (ECU) Rates

In Oregon in 2014, 50 percent of pregnancies were unintended (41 percent of Oregon births were the result of unintended pregnancies, and there were 8231 abortions). ^{10, 11} Nationally, rates of unintended pregnancy in the Medicaid population are 60 percent, and the most important risk factor for an unintended pregnancy is poverty. ^{12, 13} Unintended pregnancies make a financially stable woman 3 times more likely to end up in poverty than if she wasn't pregnant. ¹⁴ Unintended pregnancies are more likely to result in poor obstetric and birth outcomes and more likely to lead to child abuse and neglect. ¹⁵

More than half of women who had an unintended pregnancy were not using contraception at all (due to misinformation about methods or lack of access) and most of the remainder were using a contraception method but were using it inconsistently or incorrectly. Ninety-five percent of all unintended pregnancies can be accounted for by lack of access, appropriate information and follow-up with contraception care. ¹⁶

Oregon is the first state to adopt a contraception quality measure that holds providers accountable for ensuring that all women have access to effective contraceptive methods. Contraception has been identified by the Institute of Medicine as one of the most important health services for women, and a core preventive service in primary care. ¹⁷ Access to family planning, along with oral health services, is the most prevalent health need for women regardless of socioeconomic status.

Having a pay-for-performance metric for effective contraception use among women at risk of unintended pregnancy has incited many clinical quality improvements and motivated clinicians and plans to think differently about the needs of their members for this important service. Health Share's goal is to encourage the development of patient-centered contraception care that meets the values and priorities of the families we serve, and uses a shared-decision making approach. In this way, we can help women meet their own goals for the number and timing of their pregnancies.

There are some disparities in effective contraceptive use (ECU) rates, and as part of Ready + Resilient, Health Share will explore whether there is unmet need in specific communities. Effective Contraception Use (ECU) rates are highest among members who speak English and Spanish, and lowest among Russian speaking members. ECU rates are highest among Hispanic and Caucasian members and lowest among Native Hawaiian members.

Effective Contraceptive Use (ECU) Rates by Member Language Spoken

Language Spoken	# with ECU	# Women Ages 15-50 in ECU Denominator	% ECU Rate (2016)
English	8193	23427	35.0%
Spanish	403	1172	34.4%
Burmese	15	45	33.3%
Arabic	20	62	32.3%
Other	51	159	32.1%
Somali	24	86	27.9%
Chinese	27	132	20.5%
Undetermined	279	1410	19.8%
Vietnamese	43	222	19.4%
Russian	53	324	16.4%
ALL	9108	27039	33.7%

Effective Contraceptive Use (ECU) Rates by Member Race/Ethnicity

Race/Ethnicity	# with ECU	# Women Ages 15-50 in ECU Denominator	% ECU Rate (2016)
Hispanic	661	1724	38.3%
Not Provided	3363	9610	35.0%
Caucasian	4002	12032	33.3%
Black or African American	482	1495	32.2%
American Indian or Alaska Native	74	240	30.8%
Other Race or Ethnicity	129	431	29.9%
Pacific Islander	24	84	28.6%
Asian or Pacific Islander	370	1403	26.4%
Native Hawaiian	3	20	15.0%
ALL	9108	27039	33.7%

Developmental Screening Rates

Developmental delays, learning disorders, and behavioral and social-emotional problems are estimated to affect 1 in 6 children. The 2016 National Survey of Children's Health survey estimated that 19 percent of Oregon children ages 0-17 years have a special health care need.

The 2016 National Survey of Children's Health reports that 49 percent of Oregon parents received a developmental screening for their child aged 10 months to 5 years old. Among Health Share members, the overall developmental screening rate was 61 percent in 2016. Screening rates among Health Share members vary by language spoken and by race/ethnicity.

Health Share developmental screening rates have improved substantially between 2014 and 2016, with the biggest increases seen in the following populations: Spanish speaking (increased from 42% to 74%), Vietnamese speaking (increased from 30% to 60%), Asian/Pacific Islander (increased from 40% to 64%) and Hispanic (increased from 44% to 67%).

Developmental Screening Rates by Member Language Spoken

Language Spoken	# Members w/ Screening (2016)	# Members Who Needed Screening (2016)	% Screened (2016)	% Screened (2014)	Change from 2014-2016
Spanish	1133	1525	74.3%	41.8%	+32.5%
English	5008	8277	60.5%	46.5%	+14.0%
Vietnamese	37	62	59.7%	29.8%	+29.9%
Chinese	26	54	48.1%	30.4%	+17.7%
Burmese	8	26	28.6%	7.7%	+20.9%
Other	35	68	51.5%	26.5%	+25.0%
Russian	54	110	49.1%	25.3%	+23.8%
Arabic	8	21	38.1%	14.6%	+23.5%
Somali	17	39	43.6%	16.5%	+27.1%
Undetermined	211	545	38.7%	47.0%	-8.3%
ALL	6537	10729	60.9%	44.5%	+16.4%

Developmental Screening Rates by Member Race/Ethnicity

Race/Ethnicity	# Members w/Screening (2016)	# Members Who Needed Screening (2016)	% Screened (2016)	% Screened (2014)	Change from 2014- 2016
Hispanic	1011	1502	67.3%	43.7%	+23.6%
Asian or Pacific Islander	261	406	64.3%	40.0%	+24.3%
Not Provided	3076	4872	63.1%	43.5%	+19.6%
American Indian or	64	104	61.5%	52.9%	+8.6%
Alaska Native					
Caucasian	1664	2933	56.7%	46.6%	+10.1%
Black or African	291	533	54.6%	41.6%	+13.0%
American					
Pacific Islander	27	55	49.1%	*	N/A
Other Race or Ethnicity	141	315	44.8%	*	N/A
Native Hawaiian	1	6	16.7%	*	N/A
ALL	6537	10729	60.9%	44.5%	+16.4%

^{*}This was not a category in 2014.

Early Life Health Strategy 2: Build and enhance clinical and community interventions and referral systems.

Help Me Grow

While surveillance and screening are critically important, perhaps even more so is what follows from that: connecting children and families to appropriate resources. There is an emerging vision in primary child health care that focuses on improving child health trajectories by responding to social as well as medical determinants of health. Clinicians and families can easily become overwhelmed with knowing where and when to refer and how to navigate the multitude of programs and their eligibility requirements. The *Help Me Grow* system is designed to help states and communities leverage existing resources to ensure communities identify vulnerable children, link families to community-based services and empower families to support their children's healthy development through the implementation of four core components:

- 1. Centralized access point
- 2. Child health provider outreach
- 3. Family and community outreach
- 4. Data collection and analysis

Help Me Grow builds collaboration and coordination across sectors—health care, early childhood, preschool and child care—focusing on connecting at-risk kids and families to a triaged menu of services through a central access point. It is an ideal resource for kids in the "grey zone" who might just miss eligibility requirements for Early Intervention or home visiting or be on the wait list for Head Start.

Help Me Grow seeks to mitigate the impact of toxic stress and support protective factors among families, so that all children can grow and thrive to their full potential. Help Me Grow is a flexible framework that is growing nationally; currently there are 51 sites nationally building Help Me Grow initiatives. It has been nationally recognized recently in a joint statement by the US Departments of Education and Health and Human Services that calls for states to adopt a centralized access point, screening and referral process, specifically naming Help Me Grow as a system model. Help Me Grow has also been recognized by the American Academy of Pediatrics, Center for the Study of Social Policy, and the Child and Family Policy Center and BUILD initiative, among others national organizations.

Nationally, Help Me Grow served more than 42,000 children and their families in 2015 alone. A study led by investigators from the University of Hartford implemented a parent survey to assess the impact of Help Me Grow in Connecticut on parents' perceptions of the protective factors. Parents that had received support from Help Me Grow reported a positive change in circumstances and a strengthening of protective factors. ²² Using the estimate that 19 percent of children in Oregon have a special health care need, ²³ this would represent at least 5,000 Health Share members ages 0-5, as well as their family members, who could potentially be impacted.

Early Life Health Strategy 3: Improve systems of care for populations with complex needs.

Children in Foster Care: Demographics

As of August 2017, there are 3,049 Health Share members in the Children and Families (CAF) rate group; the CAF rate group is an approximation of kids involved with the state Department of Human Services (DHS) but it is not a perfect match. These children qualify for the Oregon Health Plan because they are or have been directly involved with Child Welfare services and frequently have an out-of-home placement.

American Indian/Alaskan Native, Black/African American, and Caucasian members are overrepresented in the CAF rate group compared to the overall 0-17 Health Share population. Almost all (99%) members in the CAF rate group are English speakers.

CAF Rate Group by Race/Ethnicity (of members with available information) (2017)

Race/Ethnicity	All 0-17 Population % (n)	CAF Rate Group % (n)
American Indian or Alaskan Native	2.3% (951)	3.3% (98)
Asian or Pacific Islander	9.0% (3710)	2.0% (60)
Black or African American	9.7% (4040)	14.3% (418)
Caucasian	46.8% (19397)	61.0% (1788)
Hispanic	29.4% (12178)	19.2% (563)
Native Hawaiian	0.09% (39)	0.0% (0)
Other Race or Ethnicity	2.7% (1121)	0.1% (3)
All with Race/Ethnicity information	41436	2930

CAF Rate Group by Language Spoken (2017)

Language	All 0-17 Population % (n)	CAF Rate Group % (n)
Arabic	0.5% (421)	0.03% (1)
Burmese	0.3% (211)	0.0% (0)
Chinese	0.7% (584)	0.0% (0)
English	74.1% (59366)	98.7% (2841)
Russian	1.7% (1357)	0.0% (0)
Somali	0.6% (475)	0.0% (0)
Spanish	19.9% (15991)	1.1% (32)
Vietnamese	1.2% (925)	0.03% (1)
Other	1.0% (831)	0.1% (3)
All with Language Information	80161	2878

CAF Rate Group by Age (2017)

Age	All 0-24 Population % (n)	CAF Rate Group % (n)
0-5	26.8% (27571)	19.2% (584)
6-12	32.9% (33841)	36.2% (1103)
13-17	21.0% (21642)	33.3% (1017)
18-24	19.1% (19661)	11.3% (345)
All	102715	3049

The CAF rate group is a snapshot of Health Share members involved with DHS services and does not account for their age at entry into foster care. However, according to DHS data, half of the children who entered foster care in the past year in the tri-county area were 0-5 years old.

Children Entering Foster Care from April 16-March 17: Multnomah, Clackamas, and Washington Counties²⁴

Age at Removal	# of Children Entering (% of total)
0-5	551 (50.3%)
6-12	263 (24.0%)
13-17	282 (25.7%)
Total	1096

While all children in foster care will likely benefit from enhanced services and coordination to guide better outcomes, the significant number of pre-kindergarten aged children in our system represent a particularly vulnerable population.

Children in Foster Care: Health Disparities

As part of Health Share's Life Study, Providence's Center for Outcomes Research and Evaluation (CORE) looked at Life Survey participants who were in foster care as kids and compared them to adults who were not in foster care. CORE found that as adults, the foster care alumni were three times more likely to have a chronic physical diagnosis, and almost five times more likely to have a chronic mental health condition diagnosis.

When compared to 0-5-year-old members who had not ever been in foster care, an analysis of the Health Share foster care population in 2016 found that Health Share members ages 0-5 who had been in foster care had:

- Asthma rates that were twice as high (11.2% versus 5.2%)
- PTSD rates that were 40 times as high (8.3% versus 0.2%)
- Rates of low birth weight that were 3 times as high (7.1% versus 2.4%)

Children in Foster Care: Utilization

Children in the CAF rate group use PCP and Emergency Department (ED) services similarly to children ages 0-17 overall, but they have much higher rates of specialist utilization (1.9 times higher than the overall population), outpatient mental health utilization (6.7 times higher than the overall population), inpatient mental health utilization (6 times higher than the overall population), and outpatient SUD utilization (6.8 times higher than the overall population).

2016 Utilization, CAF Rate Group Comparison

Utilization Type	Members in the CAF Rate Ages 0-17**	All Health Share Members Ages 0-17**
PCP Utilization	229.0	230.9
Specialty Utilization	152.5	80.2
ED Utilization	29.4	35.8
Outpatient MH Utilization	988.8	148.4
Inpatient MH Utilization	1.2	0.2
Outpatient SUD Utilization	61.7	9.2

^{**}All utilization rates are per 1000 member months for the time period Jan-Dec 2016.

Impact of Parental Substance Use on Foster Care Entry

Parental substance use is the single largest factor driving entry to foster care. According to data from DHS, it was noted as a removal reason in 67 percent of the 1352 children entering foster care in the tri-county area in 2016.²⁵ Health Share hopes to impact this number by offering stronger supports for parents working toward recovery, partnering with other service sectors and enhancing our substance use disorder system of care.

Outcomes for Youth Transitioning Out of the Foster Care System

Many behaviors place youth in foster care at risk for a variety of negative outcomes. The National Youth in Transition (NYTD) survey collects information on three key outcomes that have been associated with hindering successful transitions to adulthood among youth in foster care.

- At age 17, over one quarter (28%) had, at some point during their lifetimes, been referred for substance abuse assessment or counseling. Fifteen percent at age 19 and 10 percent at age 21 reported having had a referral within the past two years.
- At age 17, over one-third (37%) of the youth reported a history of incarceration. Two years later, slightly more than one in five (24%) 19-year-olds reported having been incarcerated within the past two years. By age 21, that percentage had decreased to 20 percent.
- The proportion of youth reporting having given birth to or fathered a child has steadily increased at each wave of the survey. At age 17, seven percent of youth had a child. Twelve percent of 19-year-olds and 25 percent of 21-year-olds reported having given birth to or fathered a child within the past two years.
- Among the 5,583 youth who completed all three waves of the NYTD survey, 32 percent reported having had a child by age 21. Of these young people, only 9 percent reported having ever been married at the time of a child's birth.

Overview: Behavioral Health

Utilization of Outpatient Mental Health Services by Race/Ethnicity and Language

Utilization of outpatient mental health services by Health Share members varies greatly by race/ethnicity and language. Caucasian and American Indian/Alaskan Native children have the highest rates of utilization. Asian/Pacific Islander and Native Hawaiian members have the lowest rates of utilization. Mental health utilization is much lower among all groups of non-English speakers.

2016 Outpatient MH Services per 1000 Member Months by Race/Ethnicity

	0-17 Years Old		18+ Years Old		All	
	Utilization	Current	Utilization	Current	Utilization	Current
Race/Ethnicity	per 1000	n	per 1000	n	per 1000	n
African American	191.5	4,547	269.7	8,323	242.0	12,870
American Indian or Alaskan Native	203.8	990	314.5	1,338	268.5	2,328
Asian or Pacific Islander	36.8	4,086	160.5	10,145	126.1	14,231
Caucasian	235.4	21,532	271.2	64,044	262.3	85,576
Hispanic	122.9	14,344	100.9	8,380	114.2	22,724
Native Hawaiian	13.7	43	68.7	79	48.9	122
Other Race or Ethnicity	102.1	1,196	82.5	1,802	89.4	2,998
Not Provided	109.2	38,035	137.1	37,618	123.6	75,653
ALL	148.4	84,773	212.3	131,729	188.3	216,502

2016 Outpatient MH Services per 1000 Member Months by Language

	0-17 Years Old		18+ Years Old		All	
Language	Utilization per 1000	Current n	Utilization per 1000	Current n	Utilization per 1000	Current n
Arabic	72.1	431	320.5	581	226.5	1,012
Burmese	0.5	223	53.9	236	28.6	459
Chinese	51.2	571	123.1	1,868	107.3	2,439
English	183.4	61,697	242.1	112,844	221.9	174,541
Russian	8.7	1,442	57.0	2,734	40.3	4,176
Somali	16.7	533	144.7	511	77.9	1,044
Spanish	61.5	16,915	36.0	6,149	54.8	23,064
Vietnamese	45.5	979	127.6	2,371	105.9	3,350
Other	66.0	947	184.7	2,455	156.3	3,402
Undetermined	78.5	1,035	50.9	1,980	57.7	3,015
ALL	148.4	84,773	212.3	131,729	188.3	216,502

All utilization rates are per 1000 member months for the time period Jan-Dec 2016. "Current n" is Health Share current enrollment on 6/19/17.

Utilization of Outpatient SUD services by Race/Ethnicity and Language

Utilization of outpatient Substance Use Disorder (SUD) services varies greatly by age, race/ethnicity and language. African American children have the highest rates of utilization for members under the age of 18, while Asian/Pacific Islander members have the lowest rates of utilization overall. Outpatient SUD utilization is much lower among all groups of non-English speakers.

2016 Outpatient SUD Services per 1000 Member Months by Race/Ethnicity

	0-17 Years Old		18+ Year	18+ Years Old		All	
	Utilization	Current	Utilization	Current	Utilization	Current	
Race/Ethnicity	per 1000	n	per 1000	n	per 1000	n	
African American	17.5	4,547	400.1	8,323	264.7	12,870	
American Indian or							
Alaskan Native	13.4	990	534.9	1,338	318.1	2,328	
Asian or Pacific Islander	1.2	4,086	39.8	10,145	29.1	14,231	
Caucasian	13.2	21,532	428.0	64,044	325.3	85,576	
Hispanic	7.5	14,344	163.4	8,380	69.3	22,724	
Native Hawaiian	11.2	43	38.5	79	28.7	122	
Other Race or Ethnicity	1.8	1,196	249.7	1,802	162.2	2,998	
Not Provided	7.2	38,035	419.6	37,618	219.4	75,653	
ALL	9.2	84,773	375.0	131,729	237.8	216,502	

2016 Outpatient SUD Services per 1000 Member Months by Language

	0-17 Years Old		18+ Years	18+ Years Old		All	
	Utilization	Current	Utilization	Current	Utilization	Current	
Language	per 1000	n	per 1000	n	per 1000	n	
Arabic	0.3	431	0.0	581	0.1	1,012	
Burmese	0.0	223	84.8	236	44.7	459	
Chinese	0.0	571	8.8	1,868	6.9	2,439	
English	10.4	61,697	443.6	112,844	294.3	174,541	
Russian	0.1	1,442	23.8	2,734	15.6	4,176	
Somali	0.2	533	5.0	511	2.5	1,044	
Spanish	7.3	16,915	36.9	6,149	15.1	23,064	
Vietnamese	0.0	979	1.8	2,371	1.4	3,350	
Other	15.6	947	36.0	2,455	31.1	3,402	
Undetermined	4.4	1,035	118.3	1,980	90.3	3,015	
ALL	9.2	84,773	375.0	131,729	237.8	216,502	

All utilization rates are per 1000 member months for the time period Jan-Dec 2016. "Current n" is Health Share current enrollment on 6/19/17.

Health Share Members with Severe and Persistent Mental Illness (SPMI)

There are currently about 29,000 Health Share members with a recent diagnosis related to Severe and Persistent Mental Illness (SPMI), which represents 24 percent of all adult Health Share members. Forty one percent of members with SPMI are between the ages of 45 and 64 and another 40 percent are between the ages of 25 and 44. Sixty-three percent of all members with SPMI are women.

Utilization Among Individuals with SPMI

During 2016, members with SPMI represented 13.2 percent of the Health Share population but 32.8 percent of all Emergency Department visits.

Members with SPMI have much higher rates of utilization of the following services:

- Emergency Departments: 2 times higher than the overall adult population
- Primary Care Providers: 2 times higher than the overall adult population
- Outpatient mental health services: 4.4 times higher than the overall adult population
- Inpatient mental health services: 4.6 times higher than the overall adult population
- Outpatient Substance Use Disorder (SUD) services: 2 times higher than the overall adult population
- Specialist services: 2 times higher than the overall adult population

2016 Utilization, SPMI Comparison

Utilization Type	Adult Members with SPMI	All Adult Members
ED Utilization	120.6	56.3
PCP Utilization	613.8	325.0
Outpatient MH Utilization	935.8	213.3
Inpatient MH Utilization	5.5	1.2
Outpatient SUD Utilization	766.3	375.0
Specialty Utilization	440.4	216.1

All utilization rates are per 1000 member months for the time period Jan-Dec 2016.

Behavioral Health Strategy 1: Strengthen the behavioral health workforce.

2016 Market Rate Study

Health Share collaborated with consultant Dale Jarvis and fifteen behavioral health providers to develop and implement a Market Rate Study in late 2016. The final report of the study made the following recommendations to Health Share:

- Bring clinician wages and benefits to benchmark in the Health Share rate setting model
- Adjust non-clinical compensation and other costs to align with clinical wages and benefits adjustment in the Health Share rate setting model
- Develop a plan to fund behavioral health services that align community benchmarks, which represents a need to increase behavioral health funding by between 17.7 percent and 30 percent
- Address issues related to provider productivity barriers

The Market Rate Study report noted the following key findings:

- Health Share Provider Network Clinician Salaries: Clinician salaries in the Health Share Behavioral Health Provider Network are currently 1.9 percent below median salaries in the region and 20.8 percent below salaries at the seventy-fifth percentile.
- Health Share Provider Network Benefits: Clinician benefits in the Health Share Behavioral Health Provider Network are currently 27.4 percent below median benefits of a comparison group of health and social service organizations and 35.8 percent below hospital benefit rates.
- Current Payment Rates compared with Payment Costs: Health Share's combined mental
 health and addictions payment rates are between 7 percent and 19 percent below
 current costs, including clinician compensation and overhead. The range is based on
 assumed clinician productivity of 45 percent to 50 percent. The gap is significantly larger
 for addictions services payment rates are 25 percent to 39 percent below costs.

The report concluded that there is a clear correlation between below market clinician salaries and benefits, and current reimbursement rates that are based on a Health Share behavioral health fee schedule that is below current costs. It determined that without changing these conditions, it will be very difficult for Health Share's behavioral health provider organizations to hire and retain sufficient providers to meet demand and improve outcomes for our members.

Behavioral Health Strategy 2: Improve the Substance Use Disorder system of care.

Opioid Use Disorder (OUD): Prevalence and Demographics

The opioid epidemic is impacting Health Share members at a growing rate. The percent of Health Share members with a primary opioid use disorder diagnosis increased from 1.8 percent in 2014 to 2.3 percent in 2016, which represents a 28 percent increase. When diagnoses beyond primary are considered, the percent of members with an OUD diagnosis was 3.2 percent in 2016.

OUD Prevalence Trend

Year	# Members w/ OUD Diagnosis*	# Health Share Members	% of Health Share population
2014	3174	178798	1.8%
2015	4672	237983	2.0%
2016	5257	232689	2.3%

^{*}Includes primary diagnosis only

Opioid Use Disorder diagnosis impacts members of all adult age groups, but 7 in 10 members with OUD are between 25 and 54 years old, and more than half (56%) are women. More than half (53%) are Health Share members through the Medicaid Expansion.

Costs of Claims with an Opioid Use Disorder Diagnosis

The per Member per Month (PMPM) cost for claims that have an Opioid Use Disorder diagnosis has increased by 25 percent from 2015 to 2017. These costs only represent the cost for claims that have a primary diagnosis of Opioid Use Disorder.

PMPM (across all Health Share members) Cost for Claims with a Primary OUD Diagnosis

Year	PMPM Cost
2015	\$4.99
2016	\$5.53
2017 (1 st half)	\$6.25

When only adults are included in the analysis, opioid use dependence is the most expensive diagnoses code. The PMPM for Opioid Use Disorder claims (claims with a primary diagnosis of OUD) is \$8.59 for adult Health Share members (average from January 2016- June 2017). This is the most expensive PMPM for any single diagnosis among adults—more expensive than sepsis (\$6.68 PMPM) and end stage renal disease (\$6.32 PMPM).

Utilization by Members with an OUD Diagnosis

Members with an opioid use disorder have much higher rates of utilization of the following services:

- Emergency Departments: 3 times higher than the overall adult population
- Primary Care Providers: 2 times higher than the overall adult population
- Outpatient mental health services: 2 times higher than the overall adult population
- Inpatient mental health services: 4 times higher than the overall adult population
- Outpatient Substance Use Disorder (SUD) services: 19 times higher than the overall adult population
- Specialist services: 2 times higher than the overall population

2016 Utilization, OUD Comparison

Utilization Type	Adult Members with an Opioid Use Disorder Diagnosis (n=7,261)	All Adult Members (n=188,248)
ED Utilization	186.1	55.9
PCP Utilization	646.6	325.2
Outpatient MH Utilization	444.5	214.3
Inpatient MH Utilization	5.2	1.2
Outpatient SUD Utilization	7046.2	365.6
Specialty Utilization	430.0	211.4

Based on the members with a 2016 opioid use diagnosis in the first five diagnosis fields.

All utilization rates are per 1000 member months for the time period Jan-Dec 2016.

OUD: Treatment

Almost half (48%) of members with an OUD diagnosis have received Medication Assisted Treatment (MAT) services, either through an Opioid Treatment Program (36%) or an Office Based Opioid Treatment Program (12%).

Substance Use Disorder (SUD): Prevalence and Demographics

Substance use disorders are impacting Health Share members at a growing rate. The percent of Health Share members with a primary substance use disorder diagnosis increased from 4.0 percent in 2014 to 5.5 percent in 2016, which represents a **38 percent increase** in the percent of members with an SUD diagnosis.

SUD Prevalence Trend

Year	# Members w/ SUD Diagnosis*	# Health Share Members	% of Health Share population
2014	7137	178798	4.0%
2015	12094	237983	5.1%
2016	12841	232689	5.5%

^{*}Includes primary diagnosis only

Substance use disorders impact all age groups, but seven in ten (71%) of people with a SUD diagnosis in 2016 were between the ages of 25-54, and 56 percent were men. More than half (57%) of people with an SUD diagnosis in 2016 are Health Share members through the Medicaid Expansion.

Costs of Claims with a Substance Use Disorder Diagnosis

The substance dependence care process (which represents claims with a primary diagnosis of substance dependence) is the most expensive care process for American Indian, Caucasian, and Other Race/Ethnicity adult members. It is the second most expensive care process for Black/ African American members and the third most expensive care process for Hispanic members.

The per Member per Month (PMPM) cost for claims in the substance use care process has increased by 26 percent from 2015 to 2017. These costs only represent the cost for claims that have a primary diagnosis of substance dependence disorder and does not include pharmacy costs.

PMPM (across all Health Share members) Cost for Claims with a Primary SUD Diagnosis

Year	PMPM Cost
2015	\$10.12
2016	\$11.81
2017 (1st half)	\$12.77

Utilization by Members with an SUD Diagnosis

Members with a substance use disorder have much higher rates of utilization of the following services:

- Emergency Departments: 3 times higher than the overall adult population
- Primary Care Providers: 1.7 times higher than the overall adult population
- Outpatient mental health services: 2.8 times higher than the overall adult population
- Inpatient mental health services: 5 times higher than the overall adult population
- Outpatient SUD services: 14 times higher than the overall adult population
- Specialist services: 1.5 times higher than the overall population

2016 Utilization, SUDs Comparison

Utilization Type	Adult Members with a Substance Use Disorder Diagnosis (n=)	All Adult Members (n=188,248)
ED Utilization	180.9	55.9
PCP Utilization	547.3	325.2
Outpatient MH Utilization	600.0	214.3
Inpatient MH Utilization	6.0	1.2
Outpatient SUD Utilization	5072.9	365.6
Specialty Utilization	306.7	211.4

Note: Based on the members with a primary SUD diagnosis in 2016.

All utilization rates are per 1000 member months for the time period Jan-Dec 2016.

SUDs: Follow-up After Detox

The current Health Share 7-Day Follow-up Rate after detox services is 61 percent. Detox follow-up analysis is based on 1349 members with at least one detox claim from October 2015 to December 2016. Follow-up is based on claims in any care settings within 7 days, and is based on the first detox episode of each member during that time period. The 7-day follow-up rate where the member receives services in treatment-related care settings is considerably lower and thus lessens the likelihood of good outcomes post-detox.

Evidence is clear that those who transition to longer term treatment following detoxification have better outcomes, including reduced drug use and fewer re-admissions to detoxification. ^{27,} ^{28, 29}

SUDs: Impact on Pregnancy and Birth Outcomes

Six to eight percent of Health Share births are to women with a known SUD diagnosis within the nine months before or three months after giving birth. ³⁰ Nationally, between 2000 and 2009, prenatal opioid use increased from 1.19 to 5.63 per 1000 hospital births per year, and mean hospital charges with Neonatal Abstinence Syndrome (NAS) increased from \$39,000 in 2000 to \$53,400 in 2009. ³¹

Number of Births to Women w/SUD diagnosis by Year

Year	# of Births to Women Diagnosed with SUD	% of All Health Share Births
2012	81	5.7%
2013	205	5.8%
2014	216	6.1%
2015	274	8.2%
2016	199	6.8%

Types of Substances Used by Pregnant Women with SUDs

	Substance Type Among Pregnant Women with an SUD Diagnosis (2012-2016)	
Drugs Used		
Opioids	49.1%	
Amphetamines	35.3%	
Alcohol	25.4%	
Cannabis	16.1%	
Other drugs	10.2%	
Cocaine	2.7%	
Hallucinogens	0.3%	

Behavioral Health Strategy 3: Improve the availability of information across care settings.

Enhanced Access to Behavioral Health Data

Health Share uses mental health authorization data to attribute members to mental health provider organizations. This offers the opportunity to show new perspectives on the demographic, diagnostic and utilization patterns of those populations. It also allows the CCO to offer these providers access to some of Health Share's analytic tools in Health Share Bridge. These tools will allow behavioral health providers to see the engagement of their members across the entire Health Share network, not simply services limited to behavioral health. This can impact performance on discharge and transition measures, ED Utilization and other key outcomes. It can also foster a community of data-driven behavioral health care to help Health Share refine and improve our analytic capacity based on the needs of our members and the providers with whom our members work.

Health Share hopes to greatly increase provider adoption of these tools and to create a much stronger analytic partnership in both mental health and SUD services through the use of regular trainings, webinars and individual meetings with organizations using the system.

Health Information Exchange (HIE)

Health Information Exchange involves developing technological pathways to connect electronic medical records (EMRs) across providers. A significant majority of providers in Health Share's behavioral health network have adopted EMRs, as have the vast majority of physical health providers. HIE provides a method for improving quality and reducing medication and communication errors, can eliminate unnecessary paperwork and errors in record sharing, and helps create a feedback loop for referrals and cross-provider communication. This is critical for effectively bridging the communication chasm between behavioral health and primary care providers—though it could also be extended to dental and other specialty providers over time.

Behavioral Health Network

A recent analysis of mental health authorization data revealed that there are roughly 19,000 Health Share members who can be attributed to a mental health provider for specialty services. Within this group about 13,000 members (68%) are assigned to five organizations across the tricounty region. This relative concentration of providers serving our members offers a tremendous opportunity to enhance health information exchange (HIE). By supporting technological connections to mental health and substance use providers, and encouraging primary care providers to connect as well, information about some of our most complex members can be shared more easily and in a more timely way.

The providers who may be involved in piloting HIE are yet to be determined; however, a crosswalk of our BH network and our PCP assignments show that with the participation of a relatively small number of provider groups on both sides, a sizeable portion of our population receiving BH services (20-40%) could be impacted.

Endnotes

¹Jimenez ME, Wade R, Lin Y, et al. Adverse Experiences in Early Childhood and Kindergarten Outcomes. Pediatrics 2016; 137(2).

- ² Heckman J. Invest in Early Childhood Development: Reduce Deficits, Strengthen the Economy. https://heckmanequation.org/resource/invest-in-early-childhood-development-reduce-deficits-strengthen-the-economy. Accessed 9/6/17.
- ³ Suskind D, Suskind B, Lewinter-Suskind L. Thirty Million Words: Building a Child's Brain: Tune In, Talk More, Take Turns. Dutton, 2015.
- ⁴ Robinson LR, Bitsko RH, Thompson RA, et al. CDC Grand Rounds: Addressing Health Disparities in Early Childhood. MMWR Morb Mortal Wkly Rep 2017; 66: 769–772.
- ⁵ AAP, Bright Futures Handbook, https://brightfutures.aap.org/Bright%20Futures%20Documents/Forward%20and%20Introduction.pdf, Accessed 9/5/17.
- ⁶ 2012 Smile Survey Report, http://www.oregon.gov/oha/PH/PREVENTIONWELLNESS/ORALHEALTH/Documents/SmileSurvey2012.pdf, Accessed 9/5/2017.
- ⁷ Guarnizo-Herreno CC, Wehby GL. Children's dental health, school performance, and psychosocial well-being. J Pediatr 2012; 161(6): 1153-9.
- 8 Oregon Family Well-Being Pilot data, 2017.
- ⁹ Data from the Women's Healthcare Associates' Well-Being Assessment and the Oregon Family Well-Being pilot, 2016.
- ¹⁰ Oregon Pregnancy Risk Assessment and Monitoring System (PRAMS) 2014 data, http://www.oregon.gov/oha/PH/HEALTHYPEOPLEFAMILIES/DATAREPORTS/PRAMS/Document s/OregonPRAMS2014.pdf, Accessed 9/6/17.
- ¹¹ Oregon Vital Statistics report, http://www.oregon.gov/oha/PH/BIRTHDEATHCERTIFICATES/VITALSTATISTICS/Pages/Induced-Abortion-Data.aspx, Accessed 9/6/17.
- ¹² Finer LB, Zolna MR. Declines in Unintended Pregnancy in the United States, 2008–2011.N Engl J Med 2016; 374: 843-852.
- ¹³ Guttmacher Institute: Unintended Pregnancy in the United States FactSheet, https://www.guttmacher.org/fact-sheet/unintended-pregnancy-united-states#8, Accessed 9/6/17.

- ¹⁴ Foster DG. Turnaround Study, Advancing New Standards in Reproductive Health, 2017, https://www.ansirh.org/research/turnaway-study, Accessed 9/6/17.
- ¹⁵ Institute of Medicine (US) Committee on Unintended Pregnancy; Brown SS, Eisenberg L, editors. The Best Intentions: Unintended Pregnancy and the Well-Being of Children and Families. Washington (DC): National Academies Press (US); 1995. 3, Consequences of Unintended Pregnancy, https://www.ncbi.nlm.nih.gov/books/NBK232137/, Accessed 9/6/17.
- ¹⁶ Guttmacher Institute: Unintended Pregnancy in the United States FactSheet, https://www.guttmacher.org/fact-sheet/unintended-pregnancy-united-states#8, Accessed 9/6/17.
- ¹⁷ Institute of Medicine (US) Committee on Unintended Pregnancy; Brown SS, Eisenberg L, editors. The Best Intentions: Unintended Pregnancy and the Well-Being of Children and Families. Washington (DC): National Academies Press (US); 1995. 3, Consequences of Unintended Pregnancy, https://www.ncbi.nlm.nih.gov/books/NBK232137/, Accessed 9/6/17.
- ¹⁸ US Department of Education and US Department of Health and Human Services Joint Memo, 1/19/17, https://www2.ed.gov/about/inits/ed/earlylearning/files/ed-hhs-miechv-partc-guidance.pdf. Accessed 9/6/17.
- ¹⁹ Garg A et al. From Medical Home to Health Neighborhood: Transforming the Medical Home into a Community-Based Health Neighborhood. The Journal of Pediatrics 2012; 160 (4): 535 536.
- ²⁰ Primary Health Partners, American Academy of Pediatrics.

 https://www.cfpciowa.org/documents/filelibrary/issues/health-equity/KitchenCabinetPolicyStatementAugust-0A57AC53B7DCC.pdf, Accessed 9/6/17.
- ²¹ Community of Practice Project: The Key Elements of Sustainability. Presented July 2010. https://www.cfpciowa.org/documents/news/Communities_of_Practice_Presentatio_B30A7B73 D6D8F.pdfAccessed 9/6/17.
- ²² Hughes M, Joslyn A, Wojton et al. Connecting Vulnerable Children and Families to Community-Based Programs Strengthens Parents' Perceptions of Protective Factors. Infants & Young Children: April/June 2016; 29 (2): 116–129.
- ²³ CDC Facts about Developmental Disabilities, https://www.cdc.gov/ncbddd/developmentaldisabilities/facts.html, Accessed 9/5/17.
- ²⁴ Oregon DHS website: https://rom.socwel.ku.edu/Oregon_Public/AllViews.aspx?R=6103, Accessed 8/14/17
- ²⁵ DHS reports website, OR.06: Removal Reasons for Children Entering Foster Care report https://rom.socwel.ku.edu/0regon_Public/AllViews.aspx?R=6106, Accessed 8/11/17

²⁶ National Youth in Transition Data Brief #5, November 2015, https://www.acf.hhs.gov/sites/default/files/cb/nytd_data_brief_5.pdf, Accessed 8/14/17

- ²⁷ Ghodse AH, Reynolds M, Baldacchino AM et al. Treating an opiate-dependent inpatient population: A one-year follow-up study of treatment completers and noncompleters. Addictive Behaviors. 2002; 27: 765–778.
- ²⁸ Mark TL, Vandivort-Warren R, Montejano LB. Factors affecting detoxification readmission: Analysis of public sector data from three states. Journal of Substance Abuse Treatment. 2006; 31: 439–445.
- ²⁹ Campbell BK, Tillotson CJ, Choi D, et al. Predicting Outpatient Treatment Entry Following Detoxification for Injection Drug Use: The Impact of Patient and Program Factors. Journal of substance abuse treatment. 2010; 38 (Suppl 1):S87-S96.
- ³⁰ Note: Based on CORE Project Nurture analysis, using Health Share medical claims data
- ³¹ Patrick SW, Schumacher RE, Benneyworth BD et al. "Neonatal Abstinence Syndrome and Associated Health Care Expenditures: United States, 2000-2009," JAMA. 2012; 307(18): 1934-1940.