

## Utah Health Status Update:

### *Impact of Social and Emotional Development on Health*

November 2018

We often attempt to understand what factors contribute to positive individual, family, and community outcomes. We want our children to thrive and do well in school, and for our communities, to be safe and prosperous. Historically, building success in children has meant an emphasis on academia; good math and reading skills yields good grades, which increases the likelihood of obtaining a college degree and securing more earning power. It goes without saying that core reading and math skills are important, but research shows it's time to focus on another set of skills to build lifelong success—those within the social and emotional realm.

Social and emotional development is the developing capacity of a child from birth to five years to experience, regulate, and express emotions; form close and secure personal relationships; and to explore the environment and learn.<sup>i</sup> Social and emotional development is also called infant mental health and can be understood within five domains<sup>ii</sup>: 1) self-management, 2) self-awareness, 3) social awareness, 4) relationship skills, and 5) responsible decision-making.

When social and emotional health is compromised it can create significant challenges for children with regard to school, friendships,

and self-esteem. One in five children enters kindergarten with poor social-emotional skills. For example, it's difficult for them to join others in play, interact with peers, and form and maintain friendships.<sup>iii</sup> Children who are mentally healthy tend to be happier, show greater motivation to learn, have a more positive attitude toward school, more eagerly participate in classroom activities, and demonstrate higher academic performance than less mentally happy peers.<sup>iv,v</sup> Finally, social and emotional readiness in kindergarten is a significant predictor of grade retention even after controlling for student scores on other domains, such as literacy, cognition, and general development.<sup>vi</sup>

Children who do not succeed in the first three elementary school grades are often headed for a much longer-term and costly trajectory of challenges.<sup>vii</sup> In one study, children entering kindergarten received a social and emotional competence score; 15–20 years later, researchers checked on how these same children were doing in school and in other areas of their lives. The findings were quite compelling. For every one-point increase in a child's social competence score in kindergarten, he/she was twice as likely to attain a college degree in early adulthood, 54% more likely to earn a high school diploma, and 46% more likely to have a full-time job at the age of 25. For every one-point decrease in a child's social competence score in kindergarten, he/she had:

- 64% higher chance of having spent time in juvenile detention;
- 67% higher chance of having been arrested by early adulthood;
- 52% higher rate of recent binge drinking;
- 82% higher rate of recent marijuana usage; and
- 82% higher chance of being in or on a waiting list for public housing.<sup>viii</sup>

Even those in the business sector are paying attention to social and emotional development. Of 900 business executives surveyed, 93% said character skills are as or more important than technical skills; 89% reported difficulties in finding employees with these abilities.<sup>ix</sup> Economically, it pays to invest in our youngest citizens. Investing in comprehensive, high-quality, birth-to-five programs for disadvantaged children can yield a 13% return on investment per child, per year.<sup>x</sup>

There are several programs within and outside the Utah Department of Health (UDOH) that address social and emotional development. For instance, the UDOH Early Childhood Utah program and the United Way Help Me Grow Utah program both promote social and emotional development through the use of the Ages and Stages Questionnaire® Social-Emotional, Second Edition (ASQ®:SE-2). The tool helps parents understand and recognize important social and emotional milestones. Upon completion, parents are provided with simple, pragmatic activities to use with their child to enhance development. Nonetheless, despite the availability of the ASQ:SE-2 through several early childhood programs, the number of Utah children receiving developmental screening in general and specific to social and emotional development is low (see Figure 1).

#### KEY FINDINGS

- The five domains of social and emotional development are important factors in overall health.
- Poor social-emotional health in children can affect school, friendships, self-esteem, happiness, motivation, attitude, class participation, academic performance, and grade retention.
- One study associated higher social-emotional scores with a positive relationship for higher education and employment as well as lower scores correlating with juvenile detention, being arrested, binge drinking, marijuana use, and public housing.

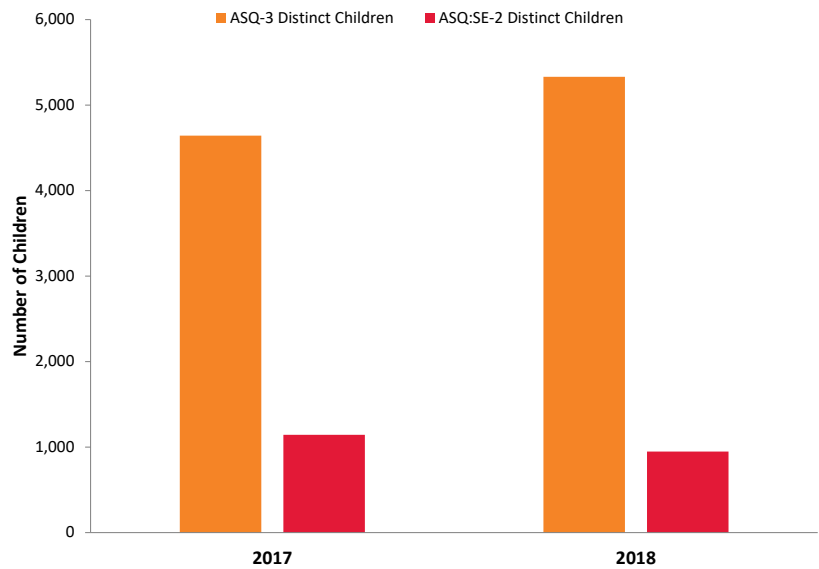
Below is a list of programs and initiatives that address social and emotional development.

1. The [UDOH Bureau of Child Development](#) establishes health and safety standards in early child care and childhood programs, provides training for child care providers, supports research-based child development programs and initiatives, and supports programs in utilizing the ASQ and ASQ:SE developmental screening tools.
2. [Help Me Grow Utah](#) is an information and referral helpline that offers services to parents and providers such as developmental screening (ASQ and ASQ:SE), parental depression screening (prenatally and post-partum), and resource and referral services for parents.
3. [Home Visitation](#) supports pregnant women and young families with parenting skills, child development, nutrition, and accessing local resources.
4. The [Utah Intergenerational Poverty Initiative](#) is a collaborative effort of several state agencies to break the cycle of poverty among Utah families. The focus areas of the initiative include early childhood development, education, family economic stability, and health.
5. [Infant Early Childhood Mental Health Consultation](#) (IECMHC) builds the capacity of providers and families to understand influences of children's relationships, interactions, and environments on their well-being and emotional and mental health.

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## Children Aged 0–5 Screened in Utah

Figure 1. Number of children aged 0–5 screened in Early Childhood Utah and Help Me Grow programs by screening type, Utah, 2017–2018



Data represents unique child counts of completed ASQ's from Early Childhood Utah and Help Me Grow; it does not include ASQ data from programs not connected to Early Childhood Utah and Help Me Grow

- i. Zero to Three: National Center for Infants, Toddlers and Families—Infant Mental Health Task Force.
- ii. CASEL (Collaborative for Academic, Social and Emotional Learning) Chicago, IL.
- iii. Georgetown University Center for Early Childhood Mental Health Consultation/Center for Child and Human Development.
- iv. Hyson, M. 2004. *The Emotional Development of Young Children: Building an Emotion-Centered Curriculum*, 2nd ed. New York: Teachers College Press.
- v. Kostelnik, M.J., A.K. Soderman, A.P. Whiren, M.L. Rupiper, & K.M. Gregory. 2015. *Guiding Children's Social Development and Learning: Theory and Skills*, 8th ed. Stamford, CT: Cengage.
- vi. Gross, D., Bettencourt, A., Ho, G. John Hopkins University & the Baltimore Education Research Consortium (2016).
- vii. Johnston, K., & Knitzer, J. (2005). *Spending smarter: A funding guide for policymakers and advocates to promote social and emotional health and school readiness*. New York: National Center for Children in Poverty, Columbia University Mailman School of Public Health.
- viii. Jones, D.E., Greenberg, M., Crowley, M. (2015). "Early Social-Emotional Functioning and Public Health: The Relationships between Kindergarten Social Competence and Future Wellness." *American Journal of Public Health* 105(11): 2283–2290.
- ix. Wall Street Journal.
- x. Heckman, J.J. (2000). University of Chicago Irving B. Harris Graduate School of Public Policy Studies.

### UDOH ANNOUNCEMENT:

The Utah Small Areas have been updated from 64 to 99 areas. All query modules on the Indicator-Based Information System for Public Health (IBIS-PH) have been updated to reflect these changes. New views will be added to Indicator Reports as they are updated. Definitions for the new Utah Small Areas can be found at <https://ibis.health.utah.gov/pdf/resource/UtahSmallAreaInfo.pdf>.

## Breaking News, November 2018

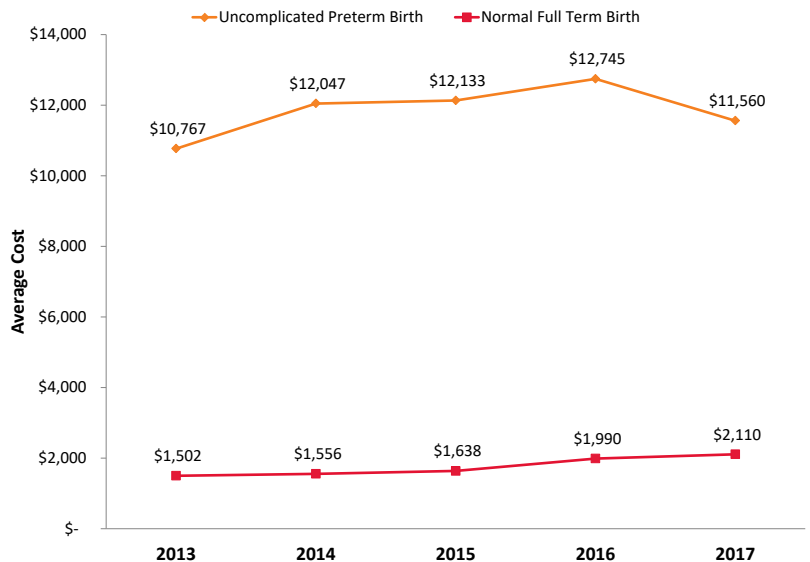
### Reducing Preterm Birth

Premature birth (before 37 weeks of pregnancy) and its complications are the top cause of infant mortality in the United States. The average cost of a preterm birth (PTB) in Utah from 2013–2017 was \$11,850, which is more than \$10,000 more than the average cost of a full term birth. Babies who survive premature birth often have long-term health problems, including cerebral palsy and blindness.

The key risk factor for PTB is having a history of PTB. Studies have shown that 17P (a type of progesterone) treatment beginning in the second trimester of pregnancy can lower the risk of PTB among these high risk women.

According to July 2017–June 2018 preliminary Utah birth certificate records, 16% of women with a previous PTB received 17P treatment. The Utah Women and Newborns Quality Collaborative (UWNQC) has the goal of working with providers to counsel women on the use of 17P with 80% of eligible women. Educational materials for healthcare providers and for women who have had a PTB can be found at [UWNQC.org](http://UWNQC.org).

### Average Cost of Preterm vs. Full Term Births, Utah, 2013–2017



Costs determined by average payment for all births that fell into DRG Code 792 (Prematurity without Major Problems) and DRG Code 795 (Normal Newborn). Payments are often significantly lower than the amount charged by a facility.

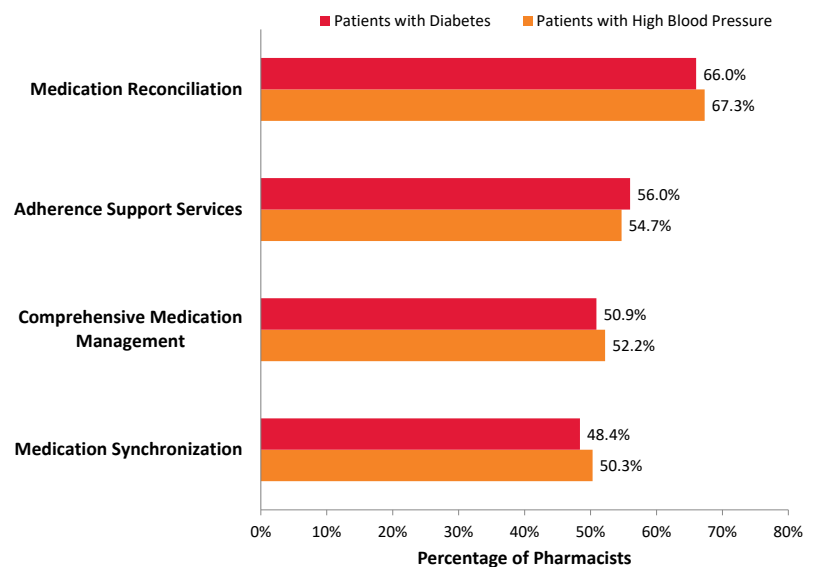
Source: Utah All Payer Claims Database

## Community Health Spotlight, November 2018

### Enhancing the Role of Pharmacists in Chronic Disease Management

Many Utahns struggle to properly manage their chronic conditions. For example, one in four Utah adults (24.5%) has been diagnosed with high blood pressure and of these, 37.9% do not have it under control (BRFSS 2017, HEDIS 2017). Pharmacists are an underutilized resource on the healthcare team. There is a strong case to be made for allowing pharmacists to operate at the top of their training by providing enhanced clinical services for patients with chronic conditions. In 2017, the Utah Department of Health Healthy Living Through Environment, Policy, and Improved Clinical Care Program (EPICC) conducted a survey of licensed pharmacists in Utah to assess the extent that enhanced services were being offered. Medication reconciliation was the most commonly reported service provided for patients with high blood pressure (67.3%) and diabetes (66.0%). Roughly half of all pharmacists reported providing adherence support services, comprehensive medication management, and medication synchronization for patients with diabetes and high blood pressure.

### Percentage of Pharmacists Providing Enhanced Services, Utah, 2017



Source: EPICC Environmental Pharmacy Scan, 2017 (n=159)

The most commonly reported barrier to providing enhanced services was lack of reimbursement. To address this barrier, EPICC established the Utah Community Pharmacy Enhanced Services Network and is working toward developing a sustainable reimbursement model.

# Monthly Health Indicators Report

(Data Through September 2018)

Monthly Report of Notifiable Diseases, September 2018					
	Current Month # Cases	Current Month # Expected Cases (5-yr average)	# Cases YTD	# Expected YTD (5-yr average)	YTD Standard Morbidity Ratio (obs/exp)
Campylobacteriosis ( <i>Campylobacter</i> )	31	51	424	420	1.0
Shiga toxin-producing <i>Escherichia coli</i> ( <i>E. coli</i> )	10	9	145	77	1.9
Hepatitis A (infectious hepatitis)	3	4	130	16	8.3
Hepatitis B, acute infections (serum hepatitis)	1	1	14	7	2.0
Meningococcal Disease	0	0	3	2	1.3
Pertussis (Whooping Cough)	16	42	262	566	0.5
Salmonellosis ( <i>Salmonella</i> )	28	34	277	300	0.9
Shigellosis ( <i>Shigella</i> )	7	4	47	31	1.5
Varicella (Chickenpox)	11	20	102	170	0.6
West Nile (Human cases)	4	9	11	18	0.6

Quarterly Report of Notifiable Diseases, 3rd Qtr 2018					
	Current Quarter # Cases	Current Quarter # Expected Cases (5-yr average)	# Cases YTD	# Expected YTD (5-yr average)	YTD Standard Morbidity Ratio (obs/exp)
HIV/AIDS†	35	30	99	91	1.1
Chlamydia	2,688	2,099	7,905	4,354	1.8
Gonorrhea	764	387	2,169	770	2.8
Syphilis	46	22	111	42	2.7
Tuberculosis	5	8	15	22	0.7

Medicaid Expenditures (in Millions) for the Month of September 2018‡					
	Current Month	Expected/Budgeted for Month	Fiscal YTD	Budgeted Fiscal YTD	Variance - over (under) budget
Mental Health Services§	\$ 19.6	\$ 19.5	\$ 43.0	\$ 44.3	\$ (1.3)
Inpatient Hospital Services	\$ 15.4	\$ 15.4	\$ 33.4	\$ 34.9	\$ (1.6)
Outpatient Hospital Services	\$ 5.1	\$ 5.0	\$ 6.8	\$ 7.3	\$ (0.5)
Nursing Home Services	\$ 30.1	\$ 30.9	\$ 44.6	\$ 46.4	\$ (1.8)
Pharmacy Services	\$ 12.6	\$ 12.6	\$ 31.6	\$ 33.0	\$ (1.4)
Physician/Osteo Services	\$ 8.7	\$ 9.0	\$ 14.8	\$ 15.1	\$ (0.2)
Medicaid Expansion Services	\$ 11.5	\$ 11.6	\$ 21.7	\$ 23.2	\$ (1.5)
TOTAL MEDICAID#	\$ 323.3	\$ 318.8	\$ 604.6	\$ 608.7	\$ (4.1)

Program Enrollment for the Month of September 2018					
	Current Month	Previous Month	% Change** From Previous Month	1 Year Ago	% Change** From 1 Year Ago
Medicaid	272,050	274,596	-0.9%	282,629	-3.7%
PCN (Primary Care Network)	15,658	15,522	+0.9%	14,568	+7.5%
CHIP (Children's Health Ins. Plan)	18,651	18,852	-1.1%	19,424	-4.0%

Health Care System Measures (Year)	Annual Visits			Annual Charges	
	Number of Events	Visits per 1,000 Utahns	% Change** From Previous Year	Total Charges in Millions	% Change** From Previous Year
Overall Hospitalizations (2016)	297,106	97.4	+3.0%	\$ 8,638.0	+8.4%
Non-maternity Hospitalizations (2016)	198,257	65.0	+2.0%	\$ 7,466.1	+9.2%
Emergency Department Encounters** (2016)	756,376	247.9	+7.6%	\$ 2,286.3	+21.7%
Outpatient Surgery (2016)	491,566	161.1	+4.9%	\$ 3,000.6	-0.3%

Annual Community Health Measures					
	Current Data Year	Number Affected	Percent/Rate	% Change** From Previous Year	State Rank** (1 is best)
Obesity (Adults 18+)	2017	548,100	25.2%	-0.4%	10 (2016)
Cigarette Smoking (Adults 18+)	2017	193,600	8.9%	+1.1%	1 (2016)
Influenza Immunization (Adults 65+)	2017	187,900	56.0%	+2.0%	41 (2016)
Health Insurance Coverage (Uninsured)	2016	265,500	8.7%	-1.1%	n/a
Motor Vehicle Traffic Crash Injury Deaths	2017	280	9.0 / 100,000	+6.9%	16 (2016)
Poisoning Deaths	2017	714	23.0 / 100,000	-0.3%	33 (2016)
Suicide Deaths	2017	663	21.4 / 100,000	+6.3%	47 (2016)
Diabetes Prevalence (Adults 18+)	2017	154,400	7.1%	-1.4%	8 (2016)
Poor Mental Health (Adults 18+)	2017	395,900	18.2%	+7.1%	21 (2016)
Coronary Heart Disease Deaths	2017	1,692	54.5 / 100,000	+1.8%	4 (2016)
All Cancer Deaths	2017	3,160	101.9 / 100,000	-0.4%	1 (2016)
Stroke Deaths	2017	888	28.6 / 100,000	-6.0%	32 (2016)
Births to Adolescents (Ages 15-17)	2017	420	5.8 / 1,000	-7.6%	11 (2016)
Early Prenatal Care	2017	37,395	77.0%	+2.3%	n/a
Infant Mortality	2017	282	5.8 / 1,000	+7.0%	12 (2015)
Childhood Immunization (4:3:1:3:3:1)	2017	35,600	70.2%	-4.6%	46 (2017)

† Diagnosed HIV infections, regardless of AIDS diagnosis.  
Notes: Data for notifiable diseases are preliminary and subject to change upon the completion of ongoing disease investigations. Active surveillance has ended for influenza until the 2018–2019 season.  
‡ This state fiscal year (SFY) 2018 report includes supplemental payments to better match the SFY 2018 Medicaid Forecast Budget which costs have not been included in previous years.  
§ The SFY 2018 Medicaid Forecast Budget includes Mental Health and Substance Abuse services together while this report only accounts for Mental Health services. This is to stay consistent with the previous years reports.  
# Medicaid Expansion Services was added to the Medicaid program in SFY 2018. Total Medicaid costs exclude the Prism Project.  
\*\* Relative percent change. Percent change could be due to random variation.  
†† Treat and release only.  
‡‡ State rank based on age-adjusted rates where applicable.