HEALTHY KIDS, BRIGHT FUTURES
Improving Child & Adolescent Health
2016-2017

Improving Child and Adolescent health was identified as one of the five health priorities in our 2016 CHNA. In examining some of the youth health needs in our community more specifically, the ACS (2009-13) we found that in the SLUHN service area, 38.22% of children under the age of 18 were living in households with incomes that are at or below 200% of the Federal Poverty Level. This was lower than the national percentage (43.81%) and the Pennsylvania percentage (38.97%). Related to the issue of poverty is the lack of insurance, since many of those in poverty are unemployed or do not have enough money to pay out of pocket for healthcare services. According to the Small Area Health Insurance Estimates (2012), 5.71% of children under the age of 19 were not covered by medical insurance. This uninsured rate was worse than the percentages seen in New Jersey (5.38%) and Pennsylvania (5.31%), but was better than the national percentage of uninsured children (7.54%). It is important that we support children and adolescents in our communities, as they are the hope for generations to come.

St. Luke's University Health Network (SLUHN) is committed to the goal of improving the health and well-being of women, infants, children and families. These goals are accomplished through network-wide programming such a Adopt A School and Adolescent Career Mentoring, as well as The Department of Community Health & Preventive Medicine's (CHPM) Maternal Child Health (MCH) Initiatives which consists of collaborative SLUHN and community organizational partnerships, and our three home visitation programs implemented through the Visiting Nurse Association of St. Luke's: the Nurse-Family Partnership (NFP), Parent Advocate in the Home (PATH) and the Visiting Nurse Advocate for the County (VNAC). Each of these programs has a slightly different focus with the goal being to create positive environments in which children can grow in safe, healthy, and nurturing homes. Together, the MCH programs address priority areas such as: pregnancy outcomes including low birth weight, preterm birth, improving breastfeeding rates, and the prevention of child abuse. Additionally, MCH serves as a community care coordination effort that works towards connecting children to medical homes, improving immunization rates, and keeping children on track physically and developmentally. These efforts help with preventing illness and disease and assist in reducing the already overwhelming costs of health care.

The MCH Initiatives continue to demonstrate positive outcomes. Through our three home visitation programs we have served 550 unduplicated families in FY17. The NFP, PATH, and VNAC programs serve families residing in Lehigh and Northampton counties. However, because NFP is a national program with sites across Pennsylvania the Miners campus has formed a partnership with the Schuylkill county NFP, while Warren campus is served by the New Jersey program in Sussex, Warren, and Hunterdon Counties. With the new St. Luke's Monroe campus, we have been linking families with the NFP of Monroe and Pike Counties. As a Network, we continue to examine our MCH programs and our partnerships with other community agencies to ensure we are addressing our population needs and align with the ever-changing face of health care.

Prevention and Wellness:
Although the primary purpose of our network-wide Adopt a School and Adolescent Career mentoring initiatives is to improve access to care and reduce disparities for the promotion of health equity, they also address this CHNA health priority to improve Child Adolescent health.

Since gainful employment is vital to success in adulthood and high school graduation is an important indicator for that, the Adolescent Career Mentoring Initiative provides career-mentoring programming for in-school and out-of-school youth in Lehigh and Northampton Counties, through a combination of hospital rotations, professional development sessions, and/or work experience. Initiatives include the School-To-Work Program, Health Career Exploration Program, Next Step, and CareerLinking Academy in Bangor, Bethlehem and Allentown. The programs focus on increasing graduation rates in high risk populations, improving English language skills for English as a Second Language Learners, providing work experience for high school students in the healthcare field, while teaching job keeping and job seeking skills, and diversifying the healthcare workforce. Adolescent Career Mentoring Initiatives address our CHNA goals related to Improving Access to Care and Reducing Health Disparities; and Improving Child and Adolescent Health.

Additionally, three specific MCH initiatives to improve child and adolescent health are:
Nurse-Family Partnership (NFP) is an evidence-based nurse (RN) lead home visitation program for first-time low income mothers less than 28 weeks gestation. During FY17, the VNA of St. Luke's NFP program served 365 total clients with a graduation rate of 50% at 24 months. Our NFP nurses conducted over 4,547 visits this year to support families to meet the NFP program goals.

Parent Advocate in the Home (PATH) is a St. Luke's-developed evidence-leaning community health home visitation and care coordination program focused on children ages 0-3. The PATH program works with at-risk low income families in need of parenting education and support. FY17 the PATH program served 102 families with two nurses (LPN's) and conducted over 2400 visits this year.

Visiting Nurse Advocate for the County (VNAC) is an intensive intervention program that works with our County Children and Youth agencies to prevent future instances of abuse and to work with families to improve parenting skills, strengthen family bonds, and promote a safe healthy environment for the child. Our VNAC Nurses served 83 unduplicated clients this year between Lehigh and Northampton County. Of those discharged from the program we were able to improve the safety of the living enviornment in 77% of the families, improve the positive interaction between parent and child in 91% of families, increase parental knowledge of caregiving in 85% of families, and improve parents follow-through and accountability with child medical issues in 91% of families.

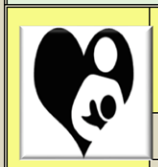
Breastfeeding and Baby & Me Program: The MCH staff is working with our network to increase breastfeeding rates. MCH has representation on the Keystone 10 team (A PA Department of Health led initiative to implement evidence based practices, improve breastfeeding initiation and duration, and improve the health of mothers and babies). This team is currently working with the Bethlehem Health Bureau to develop a free home visitation breastfeeding program for mothers delivering at St. Luke's Bethlehem Campus. The MCH program has also been involved in the Baby and Me program developed by SLUHN. This program is committed to delivering personalized care that will help families to have quality birth experiences, support breastfeeding, and to recognize and deliver care that is tailored to the patient and not a "one size fits all" approach for maximized success.

Prenatal Outcomes	St. Luke's NFP	PA State NFP	National NFP	PATH Program	HP 2020 Objective
Change in Prenatal Smoking (from intake to 36 weeks)	-0%	-14%	-17%		
Pre-term Birth rate	13.7%^	9.2%	9.7%	***25% ***	11.4%
Low-Birth Rate	10.5%^	11.9%	10.8%	***14.7%***	7.8%
Very-Low Birth Rate	1.1%^	1.6%	1.6%	Not collected	1.4%

*** Client's are often referred to the PATH Program after birth. Referrals are frequently made to PATH due to prematurity or born at a Low birth weight and/or family has risks that may have had an impact prenatal outcomes. ***
^NFP currently has 6 sets of multiples this year which has impacted our pre-term outcomes

Child Growth and Development-% Needing Referrals	St. Luke's NFP	NFP State	NFP National	PATH
ASQ 4/6 months	2%	2%	5%	4%
ASQ 10/12 months	6%	9%	10%	4%
ASQ 20/24 months	18%	10%	12%	6%
ASQ 36 months				11%

Life Course Outcomes	St. Luke's NFP	PA State NFP	National NFP
Mother's postponing second pregnancy	86%	76%	75%
Over age of 18 Working at 24 months	70%	65%	62%
Obtaining GED/HS diploma while in the program	78%*	67%	61%



Breastfeeding	St. Luke's NFP	PA State NFP	National NFP	PATH Program	HP 2020 Objective
Breastfeeding initiation	90%	85%	90%	53% *	81.9%
Breastfeeding 6 month	24%	33%	42%	11.7% *	60.6%
Breastfeeding 12 months	19%	21%	28%	5% *	34.1%

*PATH clients can enter the program at various ages and therefore nurses have a somewhat limited ability to impact overall breastfeeding rates.

Care Transformation:

St. Luke's Community Health programs, specifically in Maternal Child Health, have been implementing care coordination efforts for many years through our community facing home visitation programs. These programs incorporate assessments on social determinants of health, connecting patients to community resources, providing education, supporting self-management, evaluating patient's readiness for change, and coordinating with patients and providers to ensure follow-up and adherence in receiving preventative care. CHPM has been conducting supportive care coordination in various areas through Healthy Living Initiatives, Adopt-A-School (Mobile Health programs), HIV Clinic (Case Management programs), and through programs such as Integrative behavioral health models.

Vaccines are among the most cost-effective clinical preventive services we have. Yet 300 children in the United States die each year from vaccine-preventable diseases. Healthy People 2020 aims to have 80% of children up to date on vaccines. With the help of our nurses, our families enrolled in one of our home

visitation programs are exceeding those goals. Our MCH home visitation programs assist in care coordination efforts by educating families on the importance of vaccines, linking them with providers and insurance, and holding them accountable with follow-up care.

Immunizations	St. Luke's NFP	PA State NFP	National NFP	PATH Program	HP 2020 Objective
6 month Immunizations up to date	100.0%	96.2%	94.8%	92%	80%
12 month Immunizations Up to date	98.8%	97.2%	95.9%	97%	80%
24 month Immunizations Up to date	100%	97.9%	96.1%	94%	80%

On Discharge from the VNAC program 96% of children were up to date on Immunizations

Health Connections	PATH Program- results based on average % for all ages	VNAC Program- results based on % discharge	HP 2020 Objective
Connected to Insurance	100%	96%	100%
Connected to Medical Home	99%	100%	83.9%
Up to date on well child checks	97%	98%	

At 24 months, 88.43% of the children in NFP were insured. Of those children 76.08 % were insured under Medicaid.

The Mobile Health and Adopt A School Initiative is one of our primary community based initiatives addressing issues related to our CHNA goals of Improving Access to Care and Reducing Health Disparities; and Improving Child and Adolescent Health. Since 1994 St. Luke's University Health Network (SLUHN) has been providing medical, vision and dental care on our Mobile Vans. Our goal is to increase access to care for students who are uninsured, underinsured or who slip through the cracks in our health care system. Additionally, we have added integrated behavioral health services and nutrition counseling to our Mobile Health services. In FY17 we partnered with six school districts (Allentown, Bangor, Bethlehem, Panther Valley, Phillipsburg, and Quakertown) and brought services to 32 schools. CHPM Mobile Health Vans were out in the community 212 days, providing services on site to 2401+ students. The number of appointment visits on the van totaled 5581.

Research & Partnerships:

As we look to the next fiscal year, our goal is for all of the Maternal Child Health Programs to more fully integrate our care coordination efforts with SLUHN, community clinics and community organizations. Healthcare reform requires us to do a better job serving high risk populations who are more vulnerable to lapses in care and access to preventative interventions. Working more closely with our local clinics will help us to ensure we are meeting our population health goals for prevention and early detection. Additional focus will be directed to funding opportunities as they are extremely competitive and with the increasing incidence of chronic disease and obesity it becomes even more of a challenge to ensure that babies are being born healthy and on time. Through the use of evidenced-based screening tools; helping families get connected to medical homes, preventative medical and dental care; and educating them on parenting and positive discipline, and strengthening our family's protective factors we hope to improve the overall health and development of the children we serve. Intervening early and helping families get on the right track from birth will help us to creating lasting and sustainable positive health outcomes throughout the lifespan. With healthcare challenges going beyond just medical adherence we need to look more closely into the social determinants impacting these already at-risk families with maintain health and wellness. Our vision is a future where all children are healthy, families thrive, communities prosper, and the cycle of poverty is broken.

Submitted 2017