Transforming Adolescent Health Care Delivery
in the State of Michigan

Key Findings from Seven Grant–Funded Demonstration Projects Transforming Care for Medically Underserved Children and Adolescents

Michigan Departments of Health and Human Services and Education
The Michigan Departments of Health and Human Services and Education have undertaken a critical initiative to address this disparity in care, funding a three year multi-million dollar project to partner with organizations proposing innovative and transformative approaches in the delivery of health care to these populations.

**Focused on building appropriate care and sustainable access!**

Underserved adolescent populations have unique needs — including health and behavior risks, environmental challenges, and mental health issues. Access to early prevention and intervention services has been shown to mitigate risks typically experienced in adolescence and into adulthood.

**To address these multi-faceted needs, four key priorities were identified as areas of focus:**

1. Improving access to primary healthcare (physical and behavioral)
2. Improving clinical health outcomes
3. Decreasing health disparities by reducing the burden of chronic disease
4. Integration of primary care & public health (primary prevention)

Leveraging technology to engage youth and improve care delivery, seven leading organizations across the State of Michigan were awarded grants to demonstrate a transformation of health care delivery for underserved children and youth with one common focus:

**The identification of needs, and integration of comprehensive and holistic care – designed especially for unique populations of underserved adolescents.**

**Project Evaluation Measures**

Seven projects employed a broad range of strategies to transform adolescent health care, the following methods were used to evaluate the impact of these efforts, including:

- Surveying of providers and their adolescent patients
- Monitoring trends in volume and type of health services provided to adolescent patients
- Analyzing Medicaid administrative data to identify patterns in behavioral health services for Medicaid-enrolled adolescents
- Analyzing data from the Michigan Care Improvement Registry (MCIR) to identify patterns of HPV vaccination for adolescents

Key findings for each of these methods are presented in this report.
The funded projects transforming care in three overarching categories:

1. Transforming Care by Improving Youth Experience

2. Transforming Care by Increasing Access

3. Transforming Care by Improving Mental Health

Transformational Health Care Delivery Grant Recipients:

Cherry Street Health Services
Community Health Center of Branch County
Health Department of Northwest Michigan
Henry Ford Health System

Starfish Family Services
University of Michigan, Adolescent Health Initiative
Western Michigan University Children’s Trauma

Transforming Care by Improving Mental Health

When youth are asked how they experience health care, they cite a number of gaps and concerns, including health care providers not spending enough time to get to know them; confidentiality protections not being ensured; a focus on their problems rather than on their strengths; unappealing office space with little relevant information or support; and minimal opportunity for engaging with providers or giving feedback. As a result, many youth simply drop out of the health system, foregoing the care they need. These transformational models are designed to address and mitigate this critical gap-in-care.

Kent County: Integrated Pediatric Patient Centered Medical Home
Cherry Health transformed healthcare for children and adolescents through the development of an interdisciplinary, team-based, integrated healthcare model as part of a comprehensive patient centered medical home. Target populations included children and adolescents with overweight and obesity, asthma, and mental health issues.

Washtenaw County: Adolescent Champion Model
The University of Michigan Adolescent Health Initiative’s (AHI) award-winning Adolescent Champion model transforms the delivery of adolescent healthcare by developing interdisciplinary teams of health center providers and staff who serve as agents of change and drive practice improvements throughout the health center. AHI provides Adolescent Champion teams with a comprehensive health center assessment tool and customized implementation plan, targeted quality improvement initiatives, innovative training and professional development opportunities for staff at all levels of the health center, and ongoing, personalized technical assistance to support the development of adolescent-centered medical homes.

“This project gave us room to try something new and make errors, leading us to have a stronger model in the end. We have advanced the adolescent model of integration, and solidified community partnerships and collaboration in a variety of ways. Together we are helping teens create a foundation for a healthier adulthood.”

- Cherry Street Health Services
OUTCOMES: Successfully Improving Youth Experience and Site Expertise

A review of survey findings from baseline to the final year for the two project sites in this category revealed overarching improvements in communication and comfort levels among both adolescent patients and their providers:

• **Providers report implementing private time with adolescents leads to open and honest communication.** At sites with a high proportion (>80%) of providers who report always talking privately with adolescent patients, adolescents were more likely (85% versus 75%) to rate themselves as being completely honest when talking with the provider about their health behaviors and concerns, compared to sites where <50% of providers always talk privately with adolescent patients.

• **Providers have become more comfortable with the range of adolescent needs.** By the end of the project, 99% of providers agreed that they were comfortable caring for all types of adolescent patients.

• **Adolescents reported improvements in the way providers interact with them during visits.** By the final year of the project, more than 95% of adolescents gave their provider positive ratings on key actions during the visit: listening carefully, showing respect, explaining things in a way an adolescent can understand, spending enough time with them, and asking about both physical and mental health.

• **Improvements in provider interactions may signal their interest in adolescents’ health concerns.** Adolescents who reported their provider always listens carefully to them were 2.5 times more likely to say they are willing to bring up their health concerns during the visit, even if the provider doesn’t ask (71% versus 29%).
Branch County: CHC School Telehealth Program

The Community Health Center of Branch County transformed school-based healthcare through the use of telemedicine and EMR systems. By blending technological efficiencies with an alternative staffing design (RN on site and NP through telemedicine) they improved healthcare access and services to youth in rural school districts.

Wayne County: Enhanced Mobile Care through School Nurses

Henry Ford Health System’s School-Based and Community Health Program transformed school-based healthcare through the use of two mobile medical units (Hank and Clara) and utilization of full-time RNs in three school sites. Adding a registered nurse on site in each school improved accessibility and allowed for a more comprehensive and efficient approach, maximizing healthcare being delivered and subsequent impact on health outcomes.

“Telehealth intrigued health professionals looking for new ways to provide care and address access issues in rural health. The transformational grant allowed us time to show the communities how this process can work.”

- Community Health Center of Branch County

OUTCOMES: Significantly Increasing Adolescent Access and Utilization of Care

A review of internal administrative data from the two project sites in this category shows a significant improvement in adolescent access to, and utilization of, care.

- An increase in the total number of adolescent visits per year at participating clinics.
  - ↑ 20%
- An increase in adolescent patients who received a preventive care visit at participating clinics.
  - ↑ 30%
- An increase in the total number of preventive care visits provided to adolescents at project clinics.
  - ↑ 21%

Greater comfort and communication with adolescent patients yielded improved HPV vaccination rates

Additional analysis was performed using Medicaid claims data to review vaccination rates for the human papillomavirus (HPV). Low rates of health care visits often limit many adolescents from completing the three-part HPV vaccine series. However, primary care practices that received training on adolescent-friendly care showed a 20 percent increase in girls who competed the HPV vaccine series, and a 24 percent increase in boys.

School health clinics play a critical role in helping adolescents complete the HPV vaccine series.

By the final year of the TG project, the HPV vaccination rate for girls who received at least one dose at their school health clinic was at least 10 percentage points higher than the vaccination rate for students who received doses only at non-school sites.
Transforming Care by Improving Mental Health

There is growing evidence that a significant percentage of youth experience poor social-emotional health. Children and adolescents lacking in social, emotional and behavioral health are at high risk for experiencing a number of short- and long-term problems. If left untreated, these same youth are more likely to experience adolescent delinquency, gang involvement, incarceration, and substance abuse. The following projects seek to integrate the provision of physical and behavioral health care – with a goal of improving effectiveness of care and overall outcomes and quality of life for underserved youth.

Emmet/Antrim Counties: The HUB: Integrated Community Connections
The Health Department of Northwest Michigan (HDNW) transformed school-based healthcare through the implementation of the Pathways Community HUB Model. The effects of THE HUB Community Connections Program are improved family independence, positively impacting child and adolescent health; improved adolescent health status; and improved school connectedness and engagement.

In addition, HDNW aimed to transform school-based healthcare by redesigning the service delivery system to full integration of physical health and mental healthcare. The school-based health center teams are innovating a healthcare system where clients are offered comprehensive care within the clinic setting, differentiating between the need of physical health and behavioral healthcare, and also realizing the full potential of expanding the model of integration beyond the clinic’s walls into the school building and the community.

Van Buren County: Universal Trauma Screening, Assessment and Intervention
The Western Michigan University’s Children’s Trauma Assessment Center (CTAC) transformed Van Buren primary healthcare through strengthening partnerships between the intermediate school district, private/community mental health, health department, school-based health center and a subset of primary care practices through addressing the complex issues associated with traumatic stress in adolescents. CTAC employed a trauma-informed, resiliency-focused model to accomplish this that ultimately contributed to optimized physical and emotional well-being for Van Buren adolescents, as well as a more resilient Van Buren workforce.

Wayne County/Inkster: Office of Integrated Healthcare
Starfish Family Services transformed adolescent healthcare by creating an Office of Integrated Healthcare utilizing the Integrated Healthcare Implementation Model to provide non-integrated primary care practices the expertise, consultation, staff and technical support needed for successful implementation of integrated behavioral healthcare. This Office of Integrated Healthcare is becoming a resource to support any practice seeking assistance in fully integrating physical and behavioral healthcare.

“Through the transformational grant we were able to test the implementation model and make adjustments based on real world experiences. We’ve helped create a new ‘norm’ of healthcare for adolescents, that includes social/emotional and behavioral health issues within the trusted pediatric clinic and relationships.”

- Starfish Family Services
OUTCOMES: Integrating and Improving Access to Adolescent Mental Health

Analysis of internal administrative data across three years from the three project sites in this category revealed significant improvements in adolescent access to, and utilization of, mental health care:

- **An increase in behavioral health services visits**: ↑40%
- **An increase in the number of adolescent patients receiving behavioral health services**: ↑25%
- **An increase in the percentage of clinics that reported an increase in behavioral health referrals**: ↑75%

More confident and effective providers:

- **Confidence to identify mild and moderate behavioral health issues**: Before 35%, After 48%
- **Knowing where to refer patients for behavioral health services**: Before 12%, After 33%
- **Supporting parents to follow through on behavioral health referrals**: Before 5%, After 25%

Onsite assistance helped to reduce barriers to behavioral healthcare:

Providers reported decreases in all areas initially rated as major barriers to identifying and addressing behavioral health issues.

- **Lack of screening tools**: Before 14%, After 0%
- **Provider own knowledge deficits**: Before 100%, After 77%
- **Parent unwillingness to seek behavioral health care**: Before 29%, After 19%
- **Lack of referral options**: Before 70%, After 67%

In addition, the proportion of providers who strongly agree that they have sufficient options to connect adolescent patients with behavioral health providers tripled from baseline to the final year of the project.

Medicaid claims further support these findings, and highlight important trends for providers focused on enhancing adolescent behavioral health services:

- **Participating primary care clinics have dramatically increased their use of standardized risk/developmental screening tools for adolescents.** In the baseline year, only 2% of Medicaid-enrolled adolescent patients had received standardized screening; this jumped to 12% in the final year — an increase of over 500%.
- **Broader screening is facilitating more behavioral health service use.** As more adolescents were screened, providers identified more patients who required additional services. The proportion of Medicaid-enrolled adolescents at the participating primary care clinics receiving behavioral health care increased 16% across the three project years. By the final year, 1 in 5 Medicaid-enrolled adolescents was receiving some type of behavioral health service.
Laying the Groundwork: From Initial Success to Long-term Sustainability

Overall evaluation results demonstrate that the Transformational Grant projects have had a positive impact on provider interactions with adolescent patients, on adolescents’ willingness to engage honestly and openly with providers, and on adolescents’ reception of preventive and behavioral health services. But that’s just the beginning.

Transformational grant participants report they’ve laid the groundwork for sustainable models that will continue to improve adolescent health well into the future. And in many cases, participating sites have extended their momentum, success, and experience or skills gained from this initiative, to the creation of brand new programs to fill gaps in adolescent care.

- For example, the Western Michigan University Children’s Trauma Assessment Center reports not just the creation of a successful program—but one that will leave a lasting effect for the community: “We are extremely proud of our accomplishments in Van Buren, we strongly believe that we have built a solid foundation after this 3-year effort. If the momentum we started continues, we also see Van Buren ultimately serving as a state and national rural model for trauma-informed practice.”

- The Health Department of Northwest Michigan described benefits that extended well beyond the current initiative: “This project served as an excellent foundation that has prepared us to replicate the work in several other projects and our experience contributed to the strength of our position in grant submissions.”

- And the University of Michigan Adolescent Health Initiative achieved not just a sustainable model—but the foundation and momentum for much more: “The opportunity to create this model led to the development of a Replication Partner model, a fee for service structure and securing additional grant funding. The ability to share resources developed and pilot data results also helped gain recognition through presentations at national conferences and receiving local and national awards.”

For more information about the Transformational Health Care Delivery Project or any of the grantees, visit www.transformadolhealthcare.com