Improving the Identification and Treatment of Depression in Teens

81 percent relative increase in depression screening rates for adolescent patients 12-18 years old in a primary care setting—**more than 22,500 patients screened**, increasing the identification and treatment of patients with depression that may have otherwise been unrecognized.

PRODUCTS

- Health Catalyst® data platform

EXECUTIVE SUMMARY

Suicide remains a leading cause of death for youth ages 10-24, but early identification of mental health issues can prevent it. This pediatric hospital had processes to screen patients for depression but sought to improve the identification of depression among adolescent patients. By implementing new processes, the organization decreased variation and ensured adolescent patients receive depression screening at least once yearly to support improved mental health.

DEPRESSION IN TEENS: A MENTAL HEALTH CRISIS

Adolescence is often a challenging time as teens go through numerous physical, emotional, psychological, and social changes. These changes can make teens vulnerable to mental health problems that lead to severe outcomes. By 2018, suicide was the second leading cause of death for youth ages 10-24. The COVID-19 pandemic accelerated the worsening crisis in adolescent mental health, including depression in teens, dramatically increasing the number of adolescents visiting emergency departments for mental health emergencies and suspected suicide attempts.[1]

THE NEED FOR IMPROVED IDENTIFICATION AN TREATMENT OF DEPRESSION

At this pediatric hospital, mental health is as important as physical health. The organization was acutely aware that the mental health crisis among teens was accelerating. The organization recognized that while one in five teens have a diagnosable mental health condition, only one-third of those teens are diagnosed and treated.

Early identification of mental health issues and intervention can prevent severe manifestations, such as suicidal ideation and suicide, and can also prevent emergency department visits and mental health admissions. The organization developed comprehensive mental health services and had some processes in place to screen patients for depression, but processes varied, and the organization wasn't confident it was screening all patients. It sought to improve the identification of depression among adolescent patients so it could further enhance the support and treatment offered.

ENHANCED DEPRESSION SCREENING

The organization implemented new processes to decrease variation and ensure adolescent patients 12-18 years old who receive care in its primary care or specialty clinics receive regular depression screening. The organization engaged physicians in selecting a standard depression screening tool and committed the physicians to screening all adolescent patients 12-18 years old at least once a year. The pediatric hospital started its improvement efforts by focusing on adolescents coming in for well-child visits and then expanded screening to all visit types.

Screening for depression

When adolescent patients 12-18 years old present to the clinic, decision support tools in the EHR help the pediatric hospital care team members identify if the patient has been screened for depression within the last year. Patients who have not been screened are provided the depression screening form. Care team members collect the results and enter the data into the patient's medical record for providers to review during the patient visit.

The depression risk scores resulting from the screening are stratified, and the care team provides patients with resources corresponding to their risk level.

- ❯ **Patients who are screened as at-risk for suicide or self-harm** receive an urgent evaluation by a mental health provider and may be transported to the emergency department if the more detailed evaluation done by the provider reveals a high risk for suicide or self-harm, the child is either referred to a newly formed mental health crisis clinic or the emergency department (depending on circumstances).

- ❯ **Patients not at risk for self-harm who screen positive for depressive symptoms** are referred to local mental health providers and their primary care provider (if the screening is taking place in a specialty clinic) to ensure follow-up and connectivity with the right services. They're also given education and information regarding how to access mental health resources and different services.

> " The high-value data and analytics in the analytics application have been invaluable. We can evaluate performance day to day, week to week, month to month, enabling us to focus our improvement efforts and substantially increase the number of adolescents screened and treated for depression.
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> **Assistant Chief Medical Officer; VP and Executive Medical Director**

Identifying ongoing improvement opportunities

The pediatric hospital leverages the high-value data and analytics from the Health Catalyst ® data platform and a robust suite of analytics applications to visualize screening performance, enabling real-time tracking of depression screening rates. The organization integrates social determinants of health data (SDoH) into the analytics application and can visualize performance by different demographic and SDoH variables.

Using data from the data platform, the organization can quickly identify ongoing improvement opportunities. The organization uses the data to guide improvement efforts, reaching out to clinics and providers with lower than desired screening rates, sharing data, and collaborating to identify process changes to ensure more patients receive depression screening and mental health care.

RESULTS

The pediatric hospital's data-informed improvement efforts are improving the mental health of the patients and families in its care. In just one year, the organization achieved:

- ❯ **81 percent relative increase** in depression screening rates for adolescent patients 12-18 years old in a primary care setting.
- ❯ **40 percent relative increase** in depression screening rates for adolescent patients 12-18 years old across all clinics.
- ❯ **More than 22,500** adolescent patients 12-18 years old were screened for depression, increasing the identification and treatment of patients with depression that may have otherwise been unrecognized.
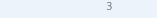
WHAT'S NEXT

The pediatric hospital plans to further expand depression screening across all care sites, improving the recognition and treatment of adolescents with depression. In addition, the organization plans to improve mental health referral processes, ensuring patients can easily and efficiently access needed care. ⬩

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> Data-driven innovation is at the forefront of our pediatric care. Through the use of high-value data and analytics, we've been able to drive significant improvements in patient care, making a profound difference in the lives of children and their families.
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> **VP and Chief Digital & Information Officer**

REFERENCES

1. American Academy of Pediatrics. (2021). *Declaration of a national emergency in child and adolescent mental health.* Retrieved from https://www.aap.org/en/advocacy/child-and-adolescent-healthy-mental-development/aap-aacap-cha-declaration-of-a-national-emergency-in-child-and-adolescent-mental-health/

ABOUT HEALTH CATALYST

Health Catalyst is a leading provider of data and analytics technology and services to healthcare organizations, committed to being the catalyst for massive, measurable, data-informed healthcare improvement. Our customers leverage our cloud-based data platform—powered by data from more than 100 million patient records, and encompassing trillions of facts—as well as our analytics software and professional services expertise to make data-informed decisions and realize measurable clinical, financial, and operational improvements. We envision a future in which all healthcare decisions are data informed.

Learn more at **www.healthcatalyst.com**, and follow us on **Twitter**, **LinkedIn**, and **Facebook**.