Well-Care Visits Among Vermont Adolescents 12-17 Years Old, 2023

VCHIP
VERMONT CHILD HEALTH IMPROVEMENT PROGRAM

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Data Report

Introduction

Annual well-care visits are recommended for adolescents to ensure they receive preventive care services, such as development and growth assessments and the administration of recommended vaccinations.[1,2] Well-care visits provide time for healthcare providers to assess and support positive behaviors.[3] Well-care visits include time to discuss important topics with adolescents, such as driving safety,[4] mental health,[5] sexual health,[6] drug and alcohol use,[7] school and family connections,[8] technology and social media,[9] and transitioning to adult care.[10] Healthy Vermonters 2030 has a goal that 59% of youth aged 12-17 will receive at least one preventive visit in the year.[11] This brief reports on the prevalence of well-care visits for adolescents aged 12-17 in Vermont. We also examined the impact of geographic, sociodemographic, health, and other factors that have been shown to be related to receiving preventive care.[12]

Approach

We followed criteria to estimate the prevalence of well-care visits (WCV)[13] among 96,469 children, adolescents, and young adults aged 3-21 years old in December of 2023 using Vermont's all-payer claims dataset (Vermont Health Care Uniform Reporting and Evaluation System; VHCURES).[14,15] Of those patients, one-third were adolescents aged 12-17 years old (n=32,417). All comparisons reported were made using Chi-Square tests or non-parametric trend analyses, with a significance level set at p<.05 or lower (for tests with multiple comparisons).

Just over half (54%) of adolescents aged 12-17 years had a well-care visit

- More adolescents (12-17 years old) had a well-care visit compared to young adults (18-21 years old) (30%), but fewer adolescents had a well-care visit compared to younger children (3-11 years old; 62%). (Figure 1)
- There was a negative trend for age among adolescents, with increasing age associated with fewer receiving well-care visits. (Figure 2)

Figure 1

Percent of Children With a Well-Care Visit by Age Group, 2023

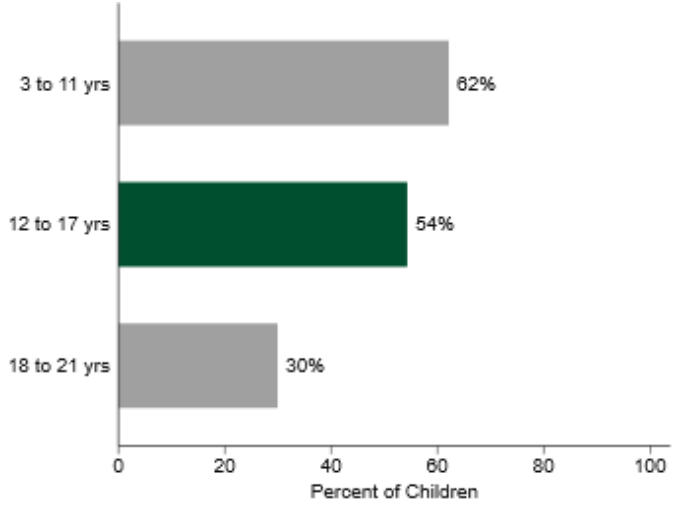
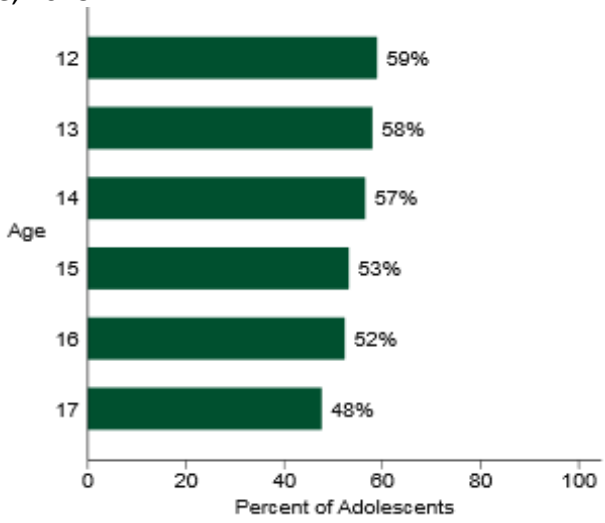


Figure 2

Percent of Adolescents With a Well-Care Visit by Age, 2023

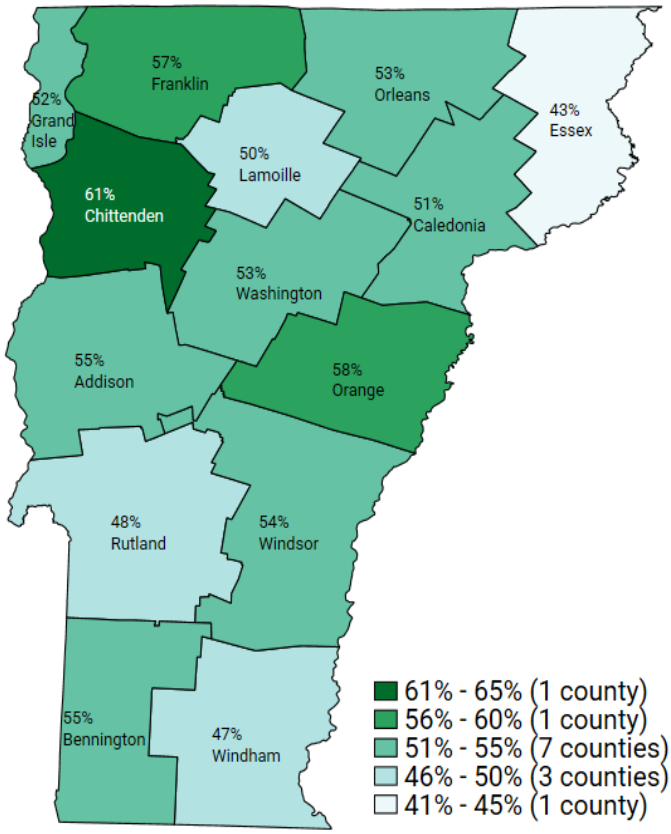


SOURCE: VCHIP Analysis of VHCURES Extract #3011

The Vermont Health Care Uniform Reporting and Evaluation System (VHCURES) data are under the stewardship of the Green Mountain Care Board (GMCB). The analyses, conclusions, and recommendations from the VHCURES data are solely those of the study authors and are not necessarily those of the GMCB. The GMCB had no input into the study design, implementation, or interpretation of the findings.

Figure 3

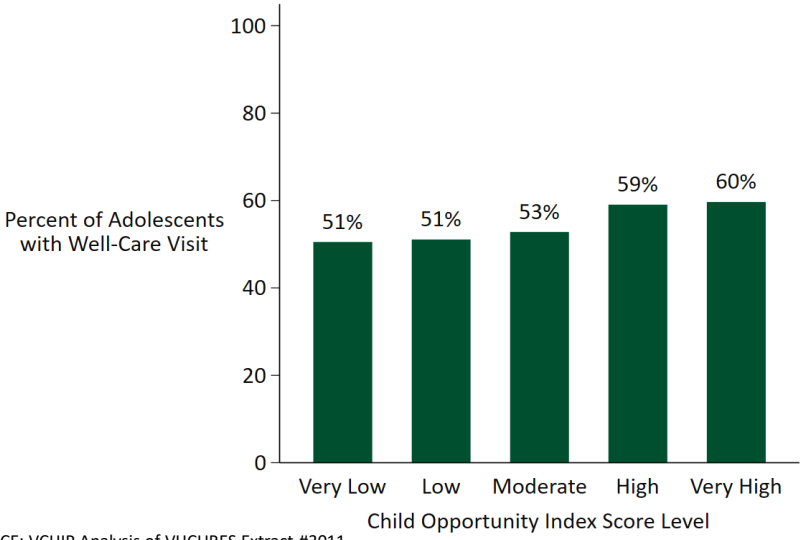
Percent of Children Aged 12-17 with Well-Care Visits, 2023



SOURCE: VCHIP Analysis of VHCURES Extract #3011

Figure 4

Percent of Adolescents with Well-Care Visits by Child Opportunity Index Score, 2023



SOURCE: VCHIP Analysis of VHCURES Extract #3011

Where Adolescents Lived Mattered

Geography

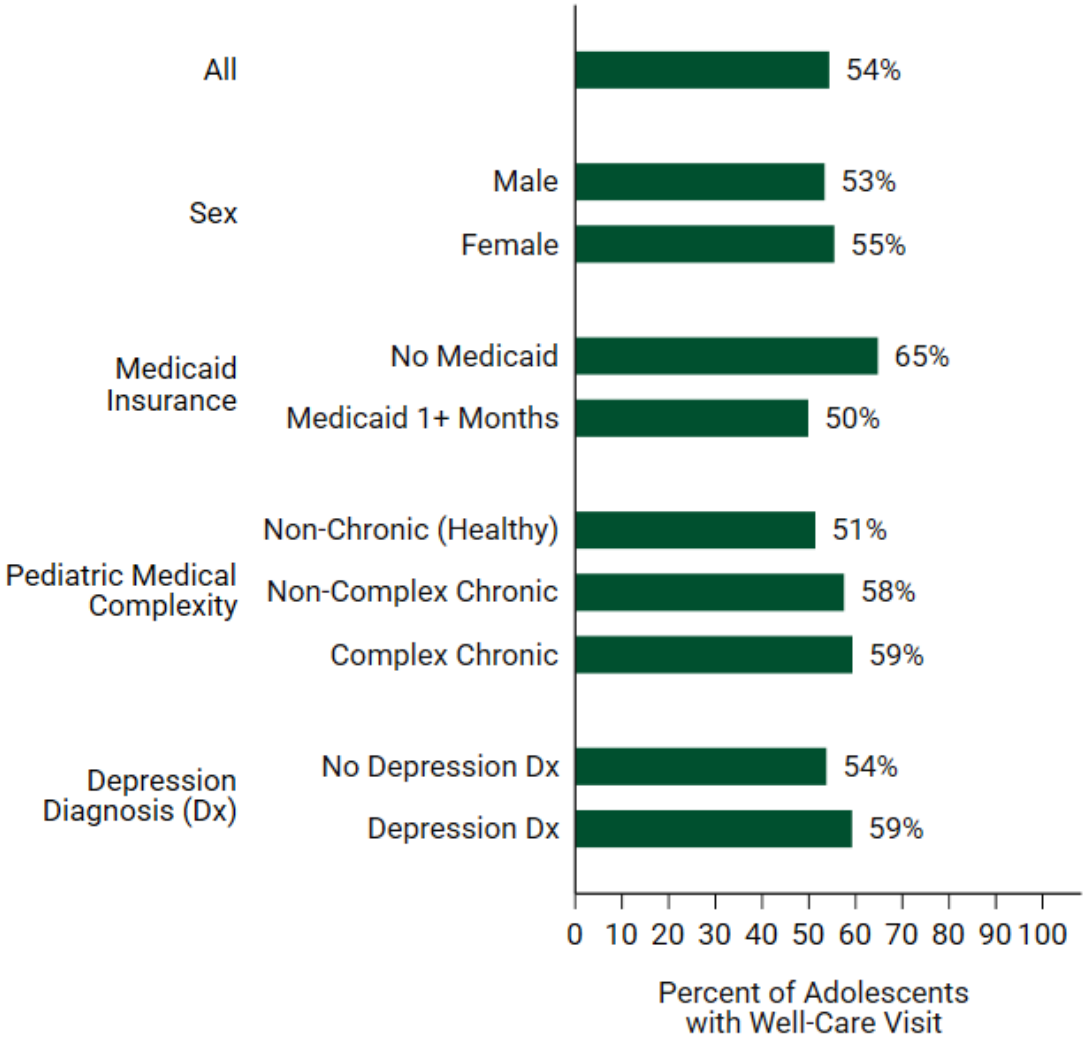
- The percentage of adolescents aged 12 to 17 with a well-care visit ranged from 43% (Essex County) to 61% (Chittenden County). (Figure 3)
- Fewer adolescents in Caledonia (51%), Essex (43%), Lamoille (50%), Rutland (48%), and Windham (47%) had a well-care visit compared to the overall state (54%)
- Fewer adolescents living in rural counties (as defined by the Federal Office of Rural Health Policy) had a well-care visit (52%) compared to adolescents living in a non-rural county (Chittenden County; (61%)).

Community

- The Child Opportunity Index (COI) 3.0 is a child-focused social determinant of health index that uses data from multiple sources to categorize geographical areas by the quality of life in those areas and the resources they offer.[16]
- As opportunity increased, so did the percentage of adolescents who had a well-care visit. (Figure 4)

Figure 5

Percent of Adolescents Aged 12-17 with Well-Care Visit by Select Characteristics, 2023



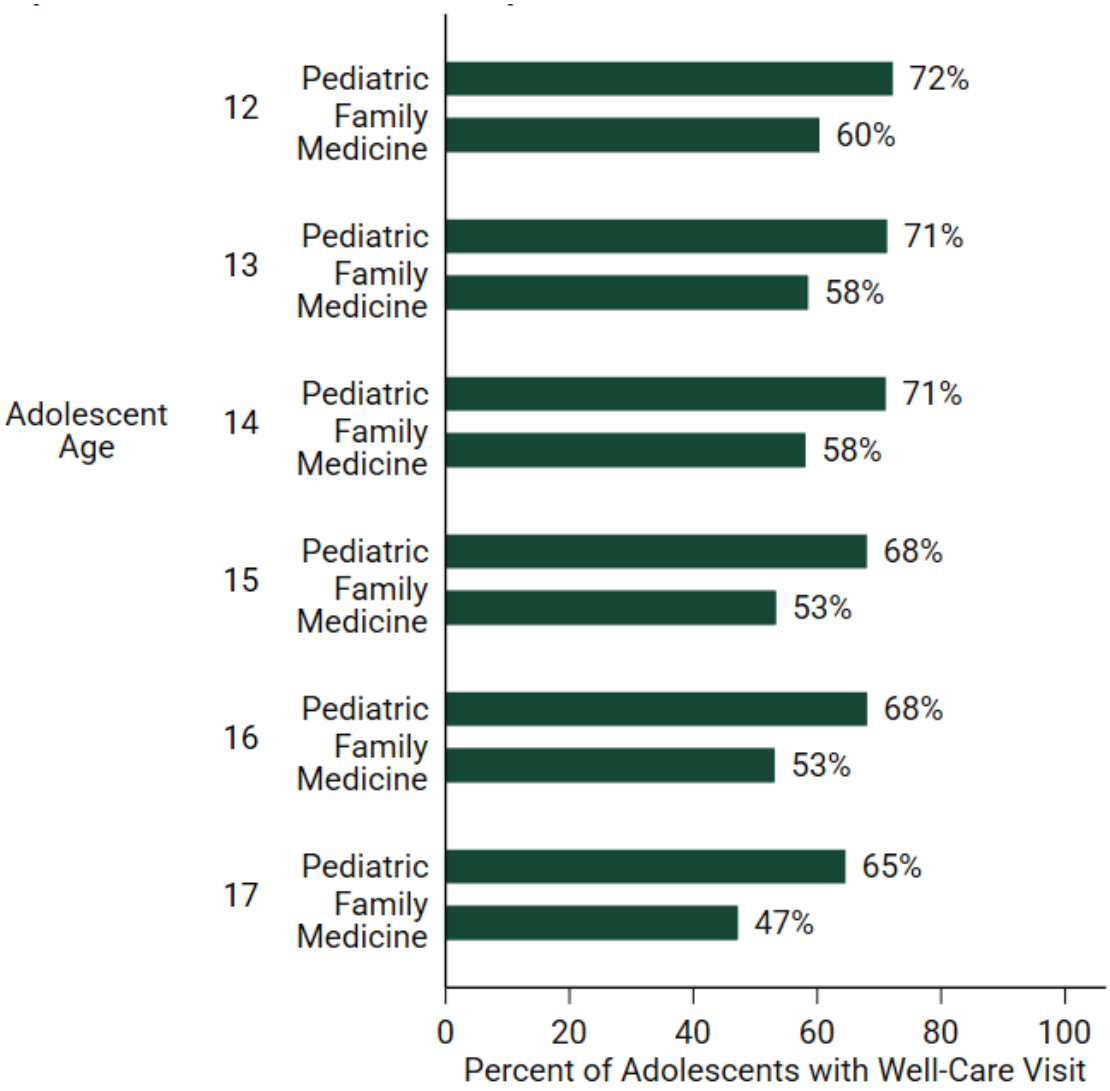
SOURCE: VCHIP Analysis of VHCURES Extract #3011

Demographics and health were related to having a well-care visit

- Slightly more adolescent females had a well-care visit (55%) compared to males (53%).
- Fewer adolescents with Medicaid insurance (One or more months of Medicaid in 2023) had a well-care visit (50%) compared to adolescents with no Medicaid insurance (65%).
- Having a well-care visit was related to an adolescent's medical complexity, as defined by the Pediatric Medical Complexity Algorithm.[17] Fewer adolescents with no chronic health diseases had a well-care visit (51%) than adolescents with one non-complex chronic diseases (58%) or multiple complex chronic diseases (59%).
- Just over 1 in 10 adolescents (11%, n=3,572) had a diagnosis of depression. More adolescents with a diagnosis of depression had a well care visit (59%) compared to adolescents without a depression diagnosis (54%).

Figure 6

Percent of Adolescents Aged 12-17 with Well-Care Visit by Attribution to Pediatric or Family Medicine Practice, 2023



SOURCE: VCHIP Analysis of VHCURES Extract #3011

Where an adolescent received care was related to having a well-care visit

- Using medical claims data over two years, we looked at where adolescents received their medical care and assigned them to medical practices. Figure 6 includes adolescents attributed to pediatric and family medicine practices only (N=24,978).
- Most adolescents (77%) received their care at pediatric practices (n=17,087) or at family medicine practices (n=7,891).
- Overall, more adolescents at pediatric practices had well-care visits (69%) compared to adolescents at family medicine practices (55%).
- More adolescents at pediatric practices had well-care visits compared to adolescents at family medicine practices at each single-year age between 12 and 17 years old (Figure 6).

Promoting Well-Care Visits Among Children, Adolescents, and Young Adults in Vermont

- The Vermont Department of Health and the Vermont Agency of Education support the Whole School, Whole Community, Whole Child program, which includes support for preventive health services and promotes connection to a medical home.
- Through its Education Local Wellness Policy, the Vermont Agency of Education includes optional activity recommendations for local education agencies to support students and families to establish and access a medical home for recommended preventive well-care visits.
- As part of Vermont's Essential School Health Services System, school nurses assess the health of all students each year, including their access to a medical home if they have had an annual well-care visit. School nurses also promote access to Medicaid for eligible students and encourage parents to schedule annual well-care visits. They are also encouraged to collaborate with other school nurses in their district to specifically promote adolescent well-care visits
- The Vermont Child Health Improvement Program supports annual well-care and associated services through multiple initiatives including:
  - Improving health care delivery for children entering foster care.
  - The VT RAYS, a statewide youth-health advisory council focused on improving the utilization of preventative services for adolescents and young adults,VCHIP websitecreated a tool healthcare providers can use to assess how welcoming their practice is to adolescents and young adults.
  - Child Health Advances Measured in Practice network has facilitated several quality improvement projects with primary care practices, including adolescent-focused projects.
  - The School Age and Adolescent Health Initiative (SAAHI) at VCHIP partners with Vermont Afterschool to address adolescent health priorities, enhance youth services, and boost engagement in primary care.

These are just some of Vermont's statewide initiatives. For more information, use the links above.

Summary

Our measurement of Vermont adolescent well-care visits in 2023 showed that 54% received well-care, approaching the Healthy Vermonters 2030 goal of 59%. Increasing the number of adolescents receiving well-care visits and the services in those visits will require thinking about the unique strengths and challenges related to adolescence. The "Adolescent Champion" model for primary care outlines several strategies to make healthcare visits youth-friendly including how to screen for risky behaviors and navigate issues of confidentiality.[18] Utilizing technologies such as electronic health records to conduct screening and using data from wearable technology to collect information ahead of time may reduce visit time making it easier for adolescents to fit visits into busy schedules.[19]

Well-care visits are not the only type of visit adolescents may have with their healthcare provider. Previous research has shown that adolescents have more non-preventive appointments (e.g., acute visits, visits to manage medications, etc.) than preventive appointments. Using a "no wrong door" approach and providing preventive care to adolescents at non-preventive visits may increase the proportion of adolescents receiving preventive services.[20]

Prepared by VCHIP's Health Services Research Team, Susan Richardson & Valerie Harder

Notes

- Age was based on insurance eligibility records, not age at any visit dates during the year. Those with multiple ages more than one year apart over the year was excluded.
- Location and rurality was based on the adolescent's first Vermont ZIP Code from insurance eligibility records. All adolescents included for analysis had at least one Vermont ZIP Code.
- Adolescents were categorized as having Medicaid if they had one or more months of Medicaid eligibility during the year.
- Changes were made to the measure to align with local context, such as not requiring continuous enrollment. Patients with eligibility records but with no medical claims in VHCURES were counted as not having a well-care visit in the year.
- Additional details on Pediatric Medical Complexity can be found here. We reviewed both inpatient and outpatient diagnoses from 2021-2023. Adolescents categorized as non-complex chronic had a chronic condition impacting one body system. Complex chronic adolescents had conditions impacting one or more body systems, or malignancy or dependence on technology. Non-chronic adolescents had only acute or no conditions. Adolescents with no medical claims with diagnoses were categorized as non-chronic. We modified this definition to include anxiety diagnoses.
- Diagnoses used for inclusion in the Clinical Classification Software Revised (CCSR v.2023.1) can be found on the H-CUP website. We reviewed both inpatient and outpatient medical claims diagnoses in 2023. Adolescents with no medical claims with diagnoses were coded as not having a depression diagnosis.
- Analyses by practice type were limited to adolescents who were attributed to pediatric or family medicine practices.
- Analyses by sex excluded adolescents with unknown sex.

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