

September 2023

# PEDIATRIC VALUE-BASED CARE: WHAT EMPLOYERS SHOULD KNOW ABOUT ADOLESCENT HEALTH

**Brian Jensen, MD, MSHP**

Assistant Professor, Department of Pediatrics  
University of Pennsylvania Perelman School of Medicine  
Primary Care Pediatrician  
Medical Director, Value-Base Care CHOP Network



# DISCLOSURE SLIDE

---

**No relevant conflicts of interest to disclose**

# 1. WHAT IS PEDIATRIC VALUE-BASED CARE?

2. Value-Based Care at Children's Hospital of Philadelphia (CHOP)
3. Focus on Adolescent Care

# WHAT IS VALUE-BASED CARE (VBC)?

---

## Quality relative to cost

### Achieving the Triple Aim (or quadruple aim)

- Improving population health
- Reducing the per capita cost of health care
- Enhancing the individual care experience
- Plus – elevating health equity or pursuing improved joy in work

### Shift from “Volume to Value”

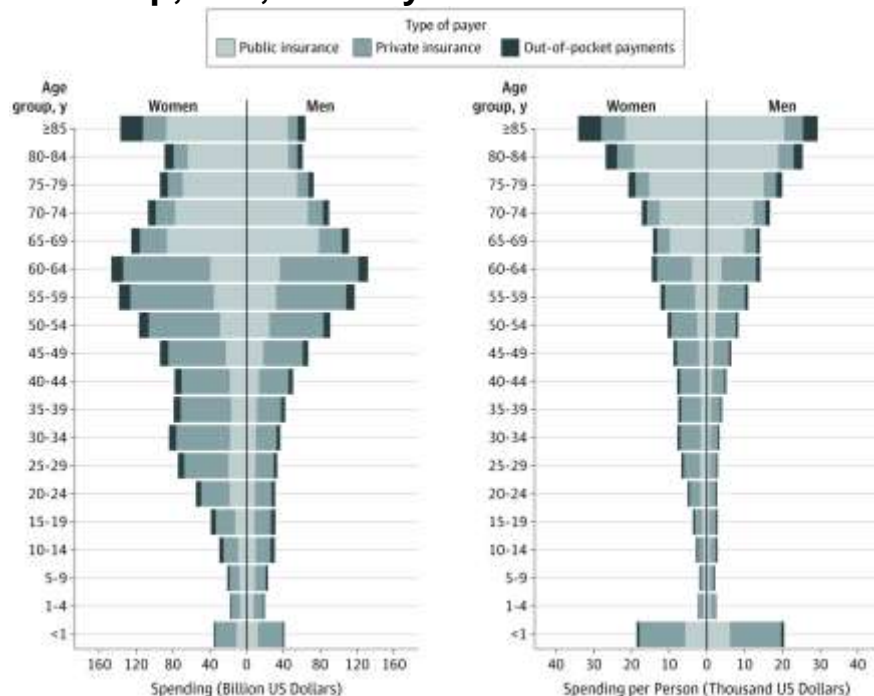
- Away from “fee for service”

# PEDIATRICS NOT THE PRESSURE POINT ON COST CURVE

**Pediatric health care represents small proportion of total health care costs**

- ~8% of total US health care spending directed to children (age 0-19)

## Estimated Health Care Spending by Age Group, Sex, and Payer in 2016



**SOURCE:** Bui AL et al. Spending on Children's Personal Health Care in the United States, 1996-2013. JAMA Pediatr. 2017; Dieleman JL et al. US Health Care Spending by Payer and Health Condition, 1996-2016. JAMA. 2020

# PEDIATRIC HEALTH CARE IS DIFFERENT THAN ADULT CARE

## Children and adolescents aren't little adults

- Core of the pediatrics → prevention
- Health care needs change dramatically over time
- “Triadic” care relationship: parent-pediatrician-patient
- Pediatric population unique in US:
  - More diverse in race, ethnicity, and language
  - Highest rates of poverty among all age groups
- Health of children dependent on a variety of factors
  - Healthy parents, families, neighborhoods, schools, and communities



# PEDIATRIC VBC DIFFERENT THAN ADULT VBC

---

## **Value propositions and outcome measures need to be different**

- Adult health care → chronic disease management
- Vast majority of pediatric care in outpatient, primary care settings
- Only few key healthcare quality measures
- Return on investment in children often not realized until years/decades later
- Significant social forces influence outcomes and health costs
  - Poverty and poor access to care

## **Prime targets for different payment approaches:**

- Children with special health care needs – significant prematurity, genetic syndromes, asthma, behavioral health (e.g. ADHD)
- Adolescent care

# UNIQUE VALUE OF PEDIATRIC CARE: CHILDREN/FAMILY

---

## **Short- and long-term value to the child**

- Detect and treat challenges early to mitigate lifelong effects
- Promote children's physical, development, socio-emotional, & nutritional health
- Positive childhood experiences in health system supports good health later in life

## **Uniquely positioned to intervene for the family**

- Support referral/treatment for parents who otherwise don't engage in care

## **Significant return on investment for money spent on child health**

- Investment in pediatric primary care reduces ED admission, hospitalizations
- Healthier children become healthier adults

**SOURCE:** Perrin JM et al. The Unique Value Proposition of Pediatric Health Care. *Pediatrics* 2023; Campbell et al. Early childhood investments substantially boost adult health. *Science*. 2014; Heckman JJ. The case for investing in disadvantaged young children. In: *Big Ideas for Children: Investing in Our Nation's Future*. Washington, First Focus; 2008

# UNIQUE VALUE OF PEDIATRIC CARE: SOCIETY

---

## Delivery of key public health interventions

- **Immunization**: clear, well-documented benefits
- Substantial economic gain by reducing/eliminating diseases
- Population protection for many illnesses comes from routine pediatric vaccination

## Investing in children reaps long-term benefits beyond healthcare

- Savings in child welfare, school, and juvenile justice systems
- **We ALL benefit** when children become high-functioning adults
- Strengthen the economy
- Make communities competitive in an increasingly complex economic environment

**SOURCE:** Perrin JM et al. The Unique Value Proposition of Pediatric Health Care. *Pediatrics* 2023; Heckman JJ. The case for investing in disadvantaged young children. In: *Big Ideas for Children: Investing in Our Nation's Future*. Washington, First Focus; 2008; Flanagan P et al. The value proposition for pediatric care. *JAMA Pediatr.* 2019

# UNIQUE VALUE OF PEDIATRIC CARE: EMPLOYERS

---

## High quality pediatric care offers immediate savings:

- Fewer workdays lost by parents who need to stay home caring for sick children
- Lower parent concern and anxiety
- Helps parents focus on work/become more effective workers



## Kids are next generation of workforce

**SOURCE:** Perrin JM et al. Benefits for employees with children with special needs: findings from the collaborative employee benefit study. Health Aff (Millwood). 2007; Image via: <https://www.istockphoto.com/photos/worried-parent>

OVERVIEW

1. What is Pediatric Value-Based Care?

## 2. VALUE-BASED CARE AT CHILDREN'S HOSPITAL OF PHILADELPHIA (CHOP)

3. Focus on Adolescent Care

# CHOP CARE NETWORK AND OUR VBC TEAM

## 32 primary care practices

- Urban, suburban and semi-rural clinics
- ~310,000 children and adolescents
- 53% White patients, 25% non-Hispanic Black patients, 34% Medicaid insurance, & 65% Commercial insurance
- 350 physicians and nurse practitioners

## CHOP Value-Based Care Team

- Diverse team: clinical and operations leaders
- Expertise in pediatrics, change management, analytics, informatics, and innovation
- Broad focus on supporting and improving **populational health**



 Children's Hospital  
of Philadelphia  
CARE NETWORK

- Specialty Care Center
- ★ Primary Care Practice
- Specialty Care Center
- Specialty Care Clinics, Surgery Centers & After Hours Urgent Care
- Specialty Care & Imaging Center
- Specialty Care & After Hours Urgent Care

 Children's Hospital  
of Philadelphia  
Value Based Care Team

# OUR METHODS AND EFFORTS

---

## Managing change

- Interfacing with insurance companies, expanding VBC efforts
- Educating, supporting, working with individual practices/specialists
- Leveraging data to support decision-making
- Innovation -> “Learning through doing”

## Range of evolving efforts → unique value of pediatrics

- Supporting preventive care – the pediatric well visit
- Improving access
- Expanding and optimizing care management for medical/social complexity
- Individual quality improvement efforts
- Improving parent care
- Adolescent care efforts

# PREVENTIVE “WELL” CHILD CARE (WCC) VISITS

---

## Well visits – foundation for a range of preventive services

- Growth monitored and supported
- Nutritional and physical activity advice tailored to each child

## Receive key preventive services

- Immunizations
- Screening for development, socio-emotional, oral & mental health
- Screening for lead poisoning, anemia, and sexually transmitted infections

## Regular family assessment

- Postpartum depression, tobacco/substance use, food insecurity
- Domestic violence, family adversity, connection to community services

**SOURCE:** Hagan JF, Shaw JS, Duncan PM, eds. Bright Futures: Guidelines for Health Supervision of Infants, Children and Adolescents. 4th ed. American Academy of Pediatrics; 2017

# RECOMMENDATION FOR PREVENTIVE PEDIATRIC CARE: SCHEDULE AND GOALS

AGE <sup>1</sup>	INFANCY								EARLY CHILDHOOD							MIDDLE CHILDHOOD					ADOLESCENCE										
	Prenatal <sup>2</sup>	Newborn <sup>3</sup>	3-5 d <sup>4</sup>	2 mo	4 mo	6 mo	9 mo	12 mo	15 mo	18 mo	24 mo	30 mo	3 y	4 y	5 y	6 y	7 y	8 y	9 y	10 y	11 y	12 y	13 y	14 y	15 y	16 y	17 y	18 y	19 y	20 y	21 y
<b>HISTORY</b>																															
Initial/Interval	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
<b>MEASUREMENTS</b>																															
Length/Height and Weight		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Head Circumference		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Weight for Length		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Body Mass Index <sup>5</sup>											●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Blood Pressure <sup>6</sup>		★	★	★	★	★	★	★	★	★	★	★	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
<b>SENSORY SCREENING</b>																															
Vision <sup>7</sup>		★	★	★	★	★	★	★	★	★	★	★	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Hearing		● <sup>8</sup>	● <sup>9</sup>	→	★	★	★	★	★	★	★	★	★	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
<b>DEVELOPMENTAL/SOCIAL/BEHAVIORAL/MENTAL HEALTH</b>																															
Maternal Depression Screening <sup>11</sup>				●	●	●	●																								
Developmental Screening <sup>12</sup>							●			●		●																			
Autism Spectrum Disorder Screening <sup>13</sup>									●		●																				
Developmental Surveillance		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Behavioral/Social/Emotional Screening <sup>14</sup>		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Tobacco, Alcohol, or Drug Use Assessment <sup>15</sup>																						★	★	★	★	★	★	★	★	★	★
Depression and Suicide Risk Screening <sup>16</sup>																						●	●	●	●	●	●	●	●	●	●
<b>PHYSICAL EXAMINATION<sup>17</sup></b>		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
<b>PROCEDURES<sup>18</sup></b>																															
Newborn Blood		● <sup>19</sup>	● <sup>20</sup>	→																											
Newborn Bilirubin <sup>21</sup>		●																													
Critical Congenital Heart Defect <sup>22</sup>		●																													
Immunization <sup>23</sup>		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Anemia <sup>24</sup>					★			●	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★
Lead <sup>25</sup>					★	★	● or ★ <sup>26</sup>		★	● or ★ <sup>26</sup>		★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★
Tuberculosis <sup>27</sup>			★			★									★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★
Dyslipidemia <sup>28</sup>										★		★			★		★		★		★	★	★	★	★	★	★	★	★	★	★
Sexually Transmitted Infections <sup>29</sup>																						★	★	★	★	★	★	★	★	★	★
HIV <sup>30</sup>																						★	★	★	★	●					
Hepatitis B Virus Infection <sup>31</sup>		★																													
Hepatitis C Virus Infection <sup>32</sup>																															
Sudden Cardiac Arrest/Death <sup>33</sup>																						★									
Cervical Dysplasia <sup>34</sup>																															
<b>ORAL HEALTH<sup>35</sup></b>							● <sup>36</sup>	★		★	★	★	★	★	★	★															
Fluoride Varnish <sup>37</sup>							←		●						→																
Fluoride Supplementation <sup>38</sup>							★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★
<b>ANTICIPATORY GUIDANCE</b>	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

SOURCE: American Academy of Pediatrics

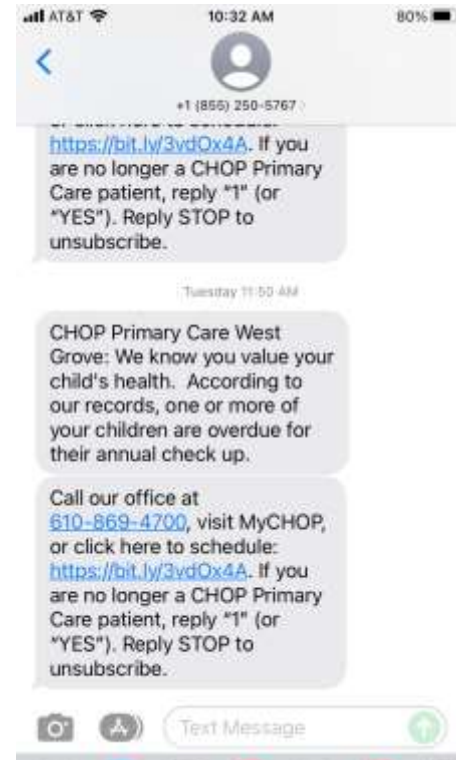
# RANGE OF EFFORTS TO SUPPORT WELL VISIT ATTENDANCE

## Make it easier for patients to access/schedule preventive visits

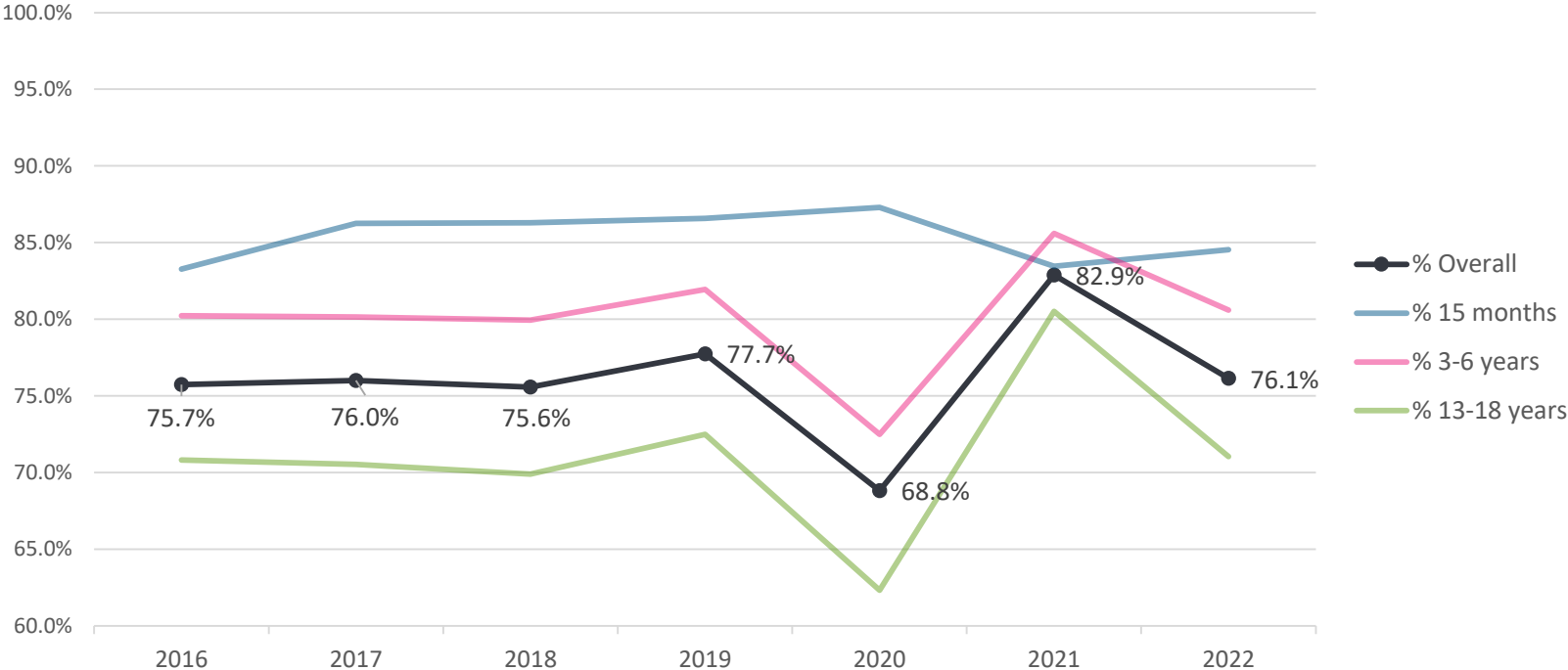
- Data visualization to support staffing needs
- Supporting “panel” management
- Centralizing outreach efforts

## Text messaging outreach

- Bi-directional text messaging to parents
- Proactive outreach for well visits **will be due** or **are overdue**
- Significant increase in completed visits



# WELL CHILD CARE VISIT COMPLETION RATES, BY AGE



# SUPPORTING PARENTS TO REDUCE NO-SHOWS

## Reducing well visit “no-shows” through personalized outreach

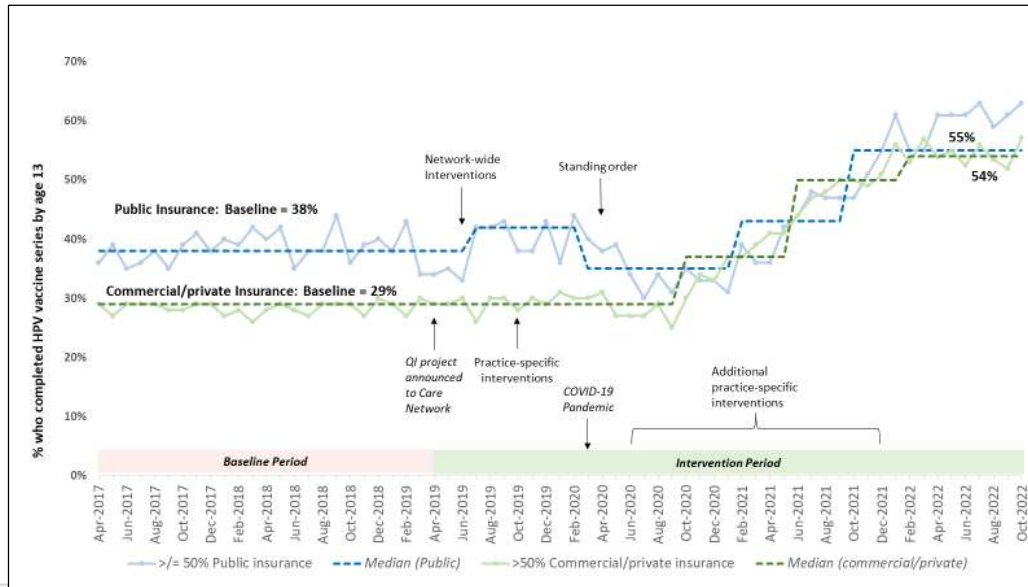
- Children with Medicaid insurance, >20% patients schedule/miss WCC visit
- Partnership with Medicaid payor – call, remind, support visit attendance
- **4-6% reduction** in no-shows



# QUALITY IMPROVEMENT EXAMPLE: HPV VACCINATION

## Human papillomavirus (HPV) vaccine prevents cancer

- But **<40%** of adolescents appropriately immunized
- Coordinated effort, CHOP Care network patients → **63% vaccinated**



## CARE COORDINATION EFFORTS

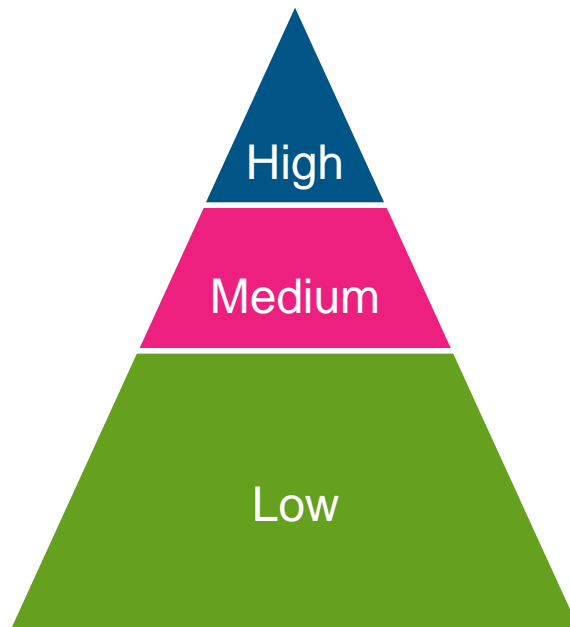
---

### Tiered approach to support children with “medium” complexity

- Population health support involving care navigators, nurse coordinators, change managers, & physicians
- Address medical and/or social complexity
- Complexity: chronic condition #

### Population (~310,000 children)

- High (10+ chronic conditions): 0.3%
- **Medium (3-9): 3.2%**
- Low ( $\leq 2$ ): 96.5%



# EFFORTS TO IMPROVE FAMILY HEALTH

---

## Range of services focused on improving care for parents/caregivers

- Screening for postpartum depression, referral to treatment
- Connecting parents to parent-child interaction therapy
- Helping parents quit smoking



# HELPING PARENTS QUIT SMOKING: A POLICY PRIORITY

## When a parent quits:

- Their life expectancy increases by 10 years
- Future tobacco-related **poor pregnancy outcomes** eliminated
- Pack-a-day parent no longer spends more than **\$4,000 per year** on cigarettes
- Secondhand smoke exposure in child eliminated
- Children **4-fold lower risk** of becoming smoker



# PARENT TOBACCO TREATMENT AT CHOP

## Electronic system embedded within workflow

- Screens all parents for tobacco use at WCC visits
- Evidence-based messages to support quitting
- Automatically connects to behavioral counseling and/or prescribes medications

## Promotes high-levels of treatment engagement

- **>120,000 children screened** for parent tobacco use
- **~6%** of parents smoke cigarettes (>4000 parents)
- **~46%** of parents start treatment
  - Quitline, SmokefreeTXT, and/or nicotine replacement therapy (NRT)



**SOURCE:** Jenssen BP et al. Electronic Health Record-Embedded, Behavioral Science-Informed System for Smoking Cessation for the Parents of Pediatric Patients. Appl Clin Inform. 2022; Jenssen BP et al. A Clinical Decision Support System for Motivational Messaging and Tobacco Cessation Treatment for Parents: Pilot Evaluation of Use and Acceptance. Appl Clin Inform. 2023

## OVERVIEW

1. What is Pediatric Value-Based Care?
2. Value-Based Care at Children's Hospital of Philadelphia (CHOP)

# 3. FOCUS ON ADOLESCENT CARE

# CRITICAL QUALITY GAPS IN ADOLESCENT CARE

---

## Low rates of preventive care

- Nationally – **only 50%** of adolescents completed annual well visit

## Low rates of critical adolescent vaccinations

- Only **~30% up-to-date** with Meningococcal, TDAP/TD, & HPV vaccines

## Lack of care with significant health and financial consequences

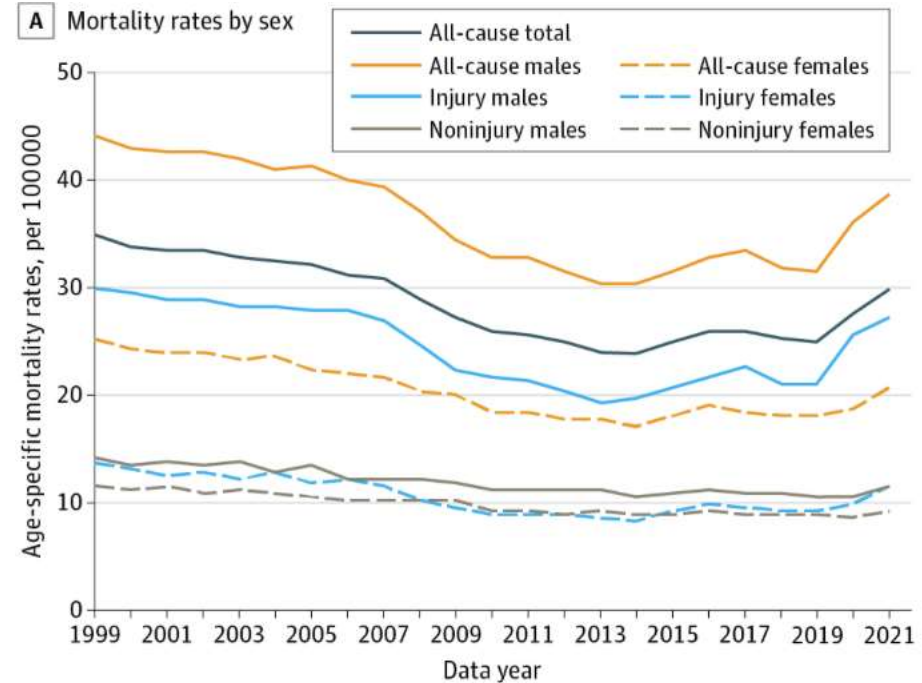
- **1 in 4 adolescents** have a sexual transmitted infection (STI)
  - Chlamydia, gonorrhea, syphilis and/or HIV
- Untreated new STIs ultimately cost \$16 billion in medical costs/year
- Adolescents and youth account for half of new STIs

**SOURCE:** Child and Adolescent Well-Care Visits, Immunizations. NCQA 2023; CDC. Sexually Transmitted Disease Surveillance, 2019; CDC. STI Prevalence, Incidence, and Cost Estimates, 2019

# INCREASING ALL-CAUSE MORTALITY IN ADOLESCENTS

## Dramatic shifts in recent years

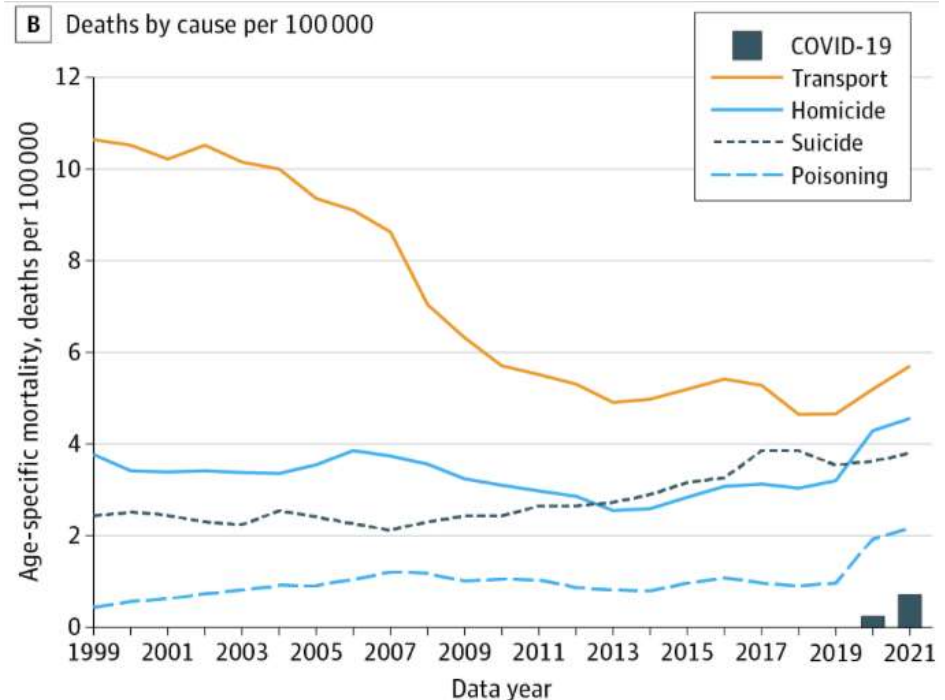
- 2019-2021, all cause mortality rate for ages 1 to 19 years **increased by 19%**
- All age groups, except infants <1 year, experienced a significant increase
- Large disparities across race, ethnicity & sex
- Biggest increase: **injuries among adolescent males**



# INCREASES DRIVEN BY INJURIES

## Reversal in pediatric mortality trajectory not caused by COVID-19

- Increases in homicide, suicide, poisoning (ie. Overdoses) and transportation-related
- Trends prior to but worsened through pandemic
- Previous gains being offset by **“bullets, drugs and cars”**



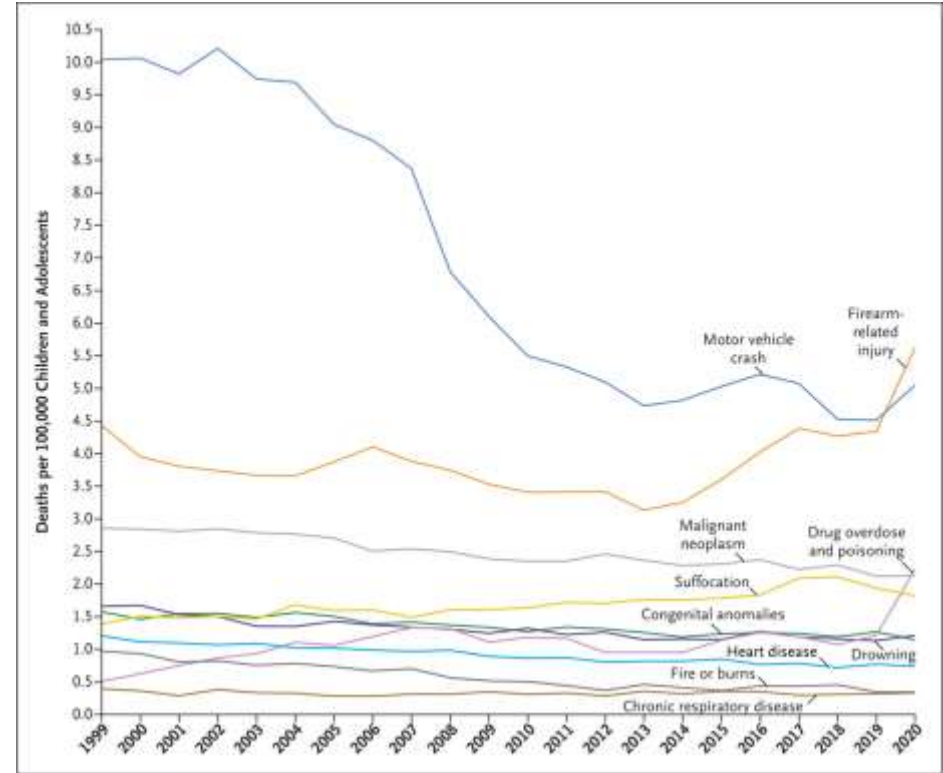
# FIREARM INJURIES #1 CAUSE OF DEATH FOR CHILDREN

## CDC updated mortality data

- Reduction in motor vehicle crash deaths has been dramatic
- Clear rise in firearm-related deaths

## Trend lines show 2 stories

- Concerted approach to injury prevention can reduce injury & death
- Public health problems can worsen in absence of such attention



# WE CAN DO BETTER

---

## **Adolescence: a critical time to intervene**

- Huge opportunity to improve healthcare quality and reduce long-term expenses

## **What are we doing at CHOP to support adolescents?**

- Improving adolescent visit rates
- Better systems to meet teens where they are
- Methods to better screen, treat, and support adolescents across a range of health risks



# KEY PROBLEM: GAPS IN PROVIDING APPROPRIATE ADOLESCENT CARE

---

## **Early detection of adolescent risk behaviors through preventive visits**

- Can improve health management & appropriate referral to care

## **Such behaviors NOT routinely captured in a systematized & actionable way in pediatric primary care**

- Few adolescents report ever having a confidential discussion about health risk behaviors with their pediatrician

## **Major barriers to these discussions:**

- Clinician lack of time
- Adolescent confidentiality concerns limiting disclosure of health risks
- Low pediatrician self-efficacy in delivering services to teens

**SOURCE:** Sieving RE, et al. Sexual and Reproductive Health Discussions During Preventive Visits. *Pediatrics*. 2021; Alexander SC, et al. Sexuality talk during adolescent health maintenance visits. *JAMA Pediatr*. 2014.

## OUR SOLUTION

---

### **Electronic, confidential adolescent health behavior questionnaire**

- On a tablet, with each “well” visit”

### **Adolescents prefer electronic screening**

- Compared to either paper screening or general questions by clinician during visit

### **Increased disclosure of health risk with electronic questionnaires**

- Especially when combined with private, confidential time with pediatrician
- Most adolescent social history screening is “negative” – speeds up visit
- 5-10 minutes of face-to-face time saved per encounter
- More time to identify and focus on “positives” for in-depth discussion

**SOURCE:** Santelli JS et al. Discussion of Potentially Sensitive Topics With Young People. Pediatrics 2019; Jasik CB et al. Teen Preferences for Clinic-Based Behavior Screens: Who, Where, When, and How? J Adolesc Health 2016; Thabrew et al. Comparison of YouthCHAT, an Electronic Composite Psychosocial Screener, With a Clinician Interview Assessment for Young People: Randomized Controlled Trial. JMIR 2019

# OUR PRE-VISIT ADOLESCENT HEALTH QUESTIONNAIRE



During the past 12 months how many days did you?

Please SCROLL to the bottom to complete this set of questions

	0 times	1-3 times	4-6 times	7 or more times
* Drink more than a few sips of beer, wine, or any drink containing alcohol?	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* Use any marijuana (weed, oil, or hash, by smoking, vaping, or in food) or "synthetic marijuana" (like "K2," "Spice") or "vaping" THC oil?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
* Use anything else to get high (like other illegal drugs, prescription or over-the-counter medications, and things that you sniff, huff, or vape )?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Continue Back Finish later Cancel

# INTEGRATED PHYSICIAN WORKFLOW & DOCUMENTATION

The screenshot displays a medical software interface with a top navigation bar containing 'SnapShot', 'Chart Review', 'Growth', 'Immunizations', 'Letters', 'Communications', 'Rooming', and 'Review'. Below this is a 'Review' section with various tool icons and tabs like 'Bedpractice', 'Care Assistant', 'Questionnaires', 'History', 'Visit Review', 'Verify Rx Benefits', 'Outside Meds', and 'Order Reconciliation'. The main content area is titled 'Questionnaires' and features the 'WEL CH ADOLESCENT HEALTH QUESTIONNAIRE'. The questionnaire includes an introduction and several questions with 'Yes', 'No', or 'Yes 1' responses. A right-hand panel shows a 'Notes' section with a 'My Note' entry, a service dropdown, and a text area containing a note about MyCHOP account logs. Below the note are fields for 'Grade' and 'School', and sections for 'Strengths', 'Nutrition and Activity', 'School', 'Friends and Family', and 'Weapons/Violence/Safety'. At the bottom right, there are 'Accept' and 'Cancel' buttons.

**WEL CH ADOLESCENT HEALTH QUESTIONNAIRE**

9/22/2021 12:00 PM EDT - Filed by Anthony Luberti, MD

These questions will help us to get to know you better, and understand what health issues are most important for you. Choose the answer that best describes what you feel or do. Your answers will be seen only by your healthcare provider and his/her assistant. Your responses will remain completely private unless we think you are at risk of serious harm. For example, if you were thinking of killing yourself or hurting someone else badly, or killing someone, or if you were abused in any way, our job would be to work as a team to make sure we can keep you safe.

----STRENGTHS----

Do your parent(s) or guardian(s) talk with you about your strengths (like working hard, using your talents/skills, etc.)? Yes

----NUTRITION AND ACTIVITY----

Do you eat 3 or more helpings of fruits and vegetables each day? No 1

Do you drink milk and eat yogurt, cheese, or other calcium-rich foods (such as dark-green leafy vegetables, or calcium-fortified orange juice or cereal) at least 3 times each day? Yes

Do you eat iron-rich food (such as meat, fish, spinach or beans) at least 5 times each week? Yes

Do you drink more than 1 soda or juice drink each day? Yes 1

During the past 7 days, on how many days were you physically active for a total of at least 60 minutes per day? 1 day 1

Do you watch TV, play video games, or spend time on the computer for more than 2 hours per day (not including computer time for homework)? Yes 1

Do you have any concerns or questions about the size or shape of your body, or your physical appearance? No

In the past year have you tried to lose weight or control your weight by vomiting, taking diet pills or laxatives, or intentionally skipping meals? No

Do you eat meals together as a family? No 1

----SCHOOL----

Are you or your parents worried about poor grades in school? No

Do you receive extra help at school for a learning problem? No

Have you been told you have a learning problem, or do you think you have a learning problem? No

Have you been suspended from school this year? No

Do you feel that you are being bullied? No

----FAMILY AND FRIENDS----

Do you know at least one person who you can talk to about problems? Yes

## ADOPTED ACROSS CHOP CARE NETWORK

---

**116,000+ questionnaires** completed by **75,000 adolescents**, as of September 2023 at 32 primary care sites

### High completion rates across practices

- Median 92% (Interquartile range: 88-96%)
- No meaningful difference by practice setting

**72%** patients preferred to answer these questions *electronically* than to be asked by the healthcare provider

On average, teens take **7 minutes** to complete the questionnaire

# STI TESTING CLINICAL DECISION SUPPORT

---

**Goal: Increase sexual transmitted infection (STI) testing for sexually active teens**

## **Intervention**

- Electronic health record solution that support testing and easy ordering of chlamydia, gonorrhea, HIV, and syphilis testing

## **Data**

- Prior to our range of interventions, >80% of sexually active teens were not appropriately tested within the past year



# OUR DECISION SUPPORT SYSTEM

Additional testing is recommended per AAP and CDC guidelines.

**CTIGC: Yearly testing for all teens.**

**HIV and Syphilis: At least once for all teens.** Repeat testing with new partners or in presence of STIs.

If not ordering labs, Acknowledge Reason is required.

**Testing guidelines**

Order	Do Not Order	<input type="checkbox"/> C.trachomatis/N.gonorrhoeae
Order	Do Not Order	<input type="checkbox"/> HIV Antigen/Antibody
Order	Do Not Order	<input type="checkbox"/> RPR Qualitative w/Rfx Titer
Order	Do Not Order	<input type="checkbox"/> Specimen Handling Fee - Do Not Order for CHOP LAB
Add Visit Diagnosis	Do Not Add	Routine screening for STI (sexually transmitted infection) <input type="text"/> Search

[Previous Lab Results](#)  
[Adolescent Health Questionnaire responses](#)  
[CDC Guidelines](#)

**View previous STI test results, return to AHQ responses, and review CDC testing guidelines**

**Toggle which STI tests to order**

**Add specimen handling fee if tests sent to external lab, and a visit dx**

Acknowledge Reason

**Not ordering a test today? Acknowledge why.**

# FIREARM SAFETY

---

**Goal: Screen for guns in the home, provide education & gun safety systems (e.g. locks)**

## **Intervention**

- New system in progress, directly screening parents and/or adolescents for guns/firearms in the home and automating connection to services

## **Data**

- **14%** of teens report a gun in the home
- **3%** of teens report being able to access a gun within a day
- **2%** of teens have a history of depression, suicidality, & report access to a firearm

# IMPROVING ADOLESCENT DRIVING SAFETY

---

**Goal: Connect more teens to a virtual driving assessment**

## Intervention

- New assessment, available at CHOP, that identifies areas for teens to improve their safe driving skills

## Data

- 45% of teens plan to learn to drive in the next 12 months



# ENGAGING ADOLESCENTS IN TOBACCO USE TREATMENT

**Goal: Connect teens to evidence-based tobacco use treatment**

## Intervention

- Direct screening for tobacco/nicotine/vaping use and interest in tobacco treatment services

## Data

- **4%** of all teens report current tobacco/nicotine use (past 30 days)
- **8%** of nicotine users interested in quitting
- **40%** of teens interested in quitting, remotely engaged, connected to behavior counseling and/or prescribed nicotine replacement therapy



# HAPPY TO TALK FURTHER

---

**Questions? Interested in collaborating?**

**Email:**

Brian Jenssen, MD, MSHP: [jenssenb@chop.edu](mailto:jenssenb@chop.edu)