The Practice Improvement to Address Adolescent Substance Use project is funded by generous support from the Conrad N. Hilton Foundation.
Presenters

Ruth Gubernick, PhD, MPH
RSG Consulting

Jose Rodriquez-Torres, MD, MBA
WellStar Medical Group, Kennestone Pediatric Associates

Linda Paul, MPH, Moderator
American Academy of Pediatrics
AGENDA

• Project Overview – 10 minutes
• SBIRT Implementation Measures - 10 minutes
• PDSA Cycle Exercise – 25 minutes
• SBIRT Implementation – 20 minutes
• Tips for implementing SBIRT – 15 minutes
• Questions & Answers – 5 minutes
SUBSTANCE USE AMONG ADOLESCENTS

2017 Data for High School Students:

• **15.5% had their first drink** of alcohol (other than a few sips) before the age of 13

• **29.8%** had at least one drink of **alcohol in the prior 30 days**

• **14% had misused prescription opioids** (used prescription pain medication such as codeine, Vicodin, OxyContin, Hydrocodone, or Percocet without a prescription or other than indicated)

SUBSTANCE USE AMONG ADOLESCENTS

2017 Data for High School Students:

- **42.2%** had used an electronic vapor product (including e-cigarettes, e-cigars, e-pipes, vape pipes, vaping pens, e-hookahs, and hookah pens)

- **19.8%** used marijuana at least once **during the prior 30 days**

- **14%** had ever used illicit drugs defined as cocaine, inhalants, heroin, methamphetamines, hallucinogens, or ecstasy

Prevention and early intervention can make a huge difference in the life of a future adult.
Periodicity schedule

- **Psychosocial/behavioral assessment** at every well-child visit
  *Bright Futures Guidelines, 4th edition*

- **Depression screening** at every well-child visit (12 y – 21 y)
  *Bright Futures Guidelines, 4th edition; Guidelines for Adolescent Depression in Primary Care (GLAD-PC); US Preventive Services Task Force*

- **Alcohol and drug use assessment** at every well-child visit (11 y – 21 y)
  *Bright Futures Guidelines, 4th edition*
  - And appropriate acute care visits
SBIRT

Mnemonic for...

• Screening
• Brief Intervention
• Referral to Treatment
Practice Improvement to Address Adolescent Substance Use (PIAASU)

Global Aim

• To improve health outcomes by adopting best practices for addressing substance use (SU) and mental health (MH) concerns in youth (defined as ages 11-21 years old).

Specific Aim

• Pediatric practices will demonstrate competence, confidence and successful implementation of SBIRT as part of health supervision visits and appropriate acute care visits.
Operates at 3 Levels

Chapter
- Leads learning collaborative
- Assess performance
- State partnerships

Practice
- Engages a team
- Registry
- Protocols
- Self-management support

Connecticut
Georgia
Utah

National
- Measure set
- Web-based data collection system
- QI expertise

34 practices
141 providers

34 practices
141 providers

Chapter Quality Network
program of the American Academy of Pediatrics
PIAASU ADAPTED IHI BREAKTHROUGH SERIES

Select Topic
(Develop Vision)

Expert Meeting
April 2015

Participant Teams

Develop Framework
& Changes

Planning Group

Pre-Work

PDSA – Rapid Cycle Change Process

Learning Session 1
February/March 2016

Learning Session 2
August 2016

Learning Session 3
November 2016

Learning Session 4
April 2017

Supports
Phone Conferences
Coaching Visits
Monthly Team Reports
PROJECT MEASURES

• Substance use: screening
• Substance use: follow up, if screen positive
• Mental health: screening
• Mental health: follow up, if screen positive
• Brief intervention (referral tracking)
• Referral to treatment (referral tracking and follow up)
• Confidence in brief intervention skills
• Competence in SBIRT
PROJECT MEASURES

• Community resource directory
  • Eg, % of participating practices with a Substance Use/Mental Health Resource Directory within 6 weeks after the initial Learning Session and a plan for sustainability.

• Building relationships with the community

• Confidentiality (system for ensuring privacy)

• Confidentiality (system for ensuring confidential documentation)

• Anticipatory guidance (distribution of resources)

• Anticipatory guidance (documentation)
WHY USE A QUALITY IMPROVEMENT STRATEGY?

- Provides a framework to show us how to get from where we are to where we want to be
- Uses measurement to show us where we are on the journey and to let us know when we’ve arrived at our destination
What are we trying to accomplish?

How will we know that a change is an improvement?

What change can we make that will result in improvement?

AIMS

MEASURES

IDEAS

From: Associates in Process Improvement
THE PDSA CYCLE

Act
- What changes are to be made?
- Next cycle?

Plan
- Objective
- Questions and predictions (why)
- Plan to carry out cycle (who, what, where, when)

Study
- Complete the analysis of the data
- Compare data to predictions
- Summarize what was learned

Do
- Carry out the plan
- Document problems and unexpected observations
- Begin analysis of the data
Sequential Building of Knowledge
Include a Wide Range of Conditions in the Sequence of Tests

Test on a small scale
Test a wider group
Test new conditions
Spread
Implement
Breakthrough Results

Learning and improvement
Evidence & Data

Theories, hunches, & best practices
Overall Aim: To demonstrate competence, confidence and successful implementation of SBIRT as part of health supervision visits and appropriate acute care visits for patients ages 11 through 21 years old.

Anticipatory guidance for mental health promotion and substance use prevention

Validated substance use screening tool administered, scored and interpreted.

Follow up, if screen positive (brief advice/brief intervention and/or referral to treatment and plan for follow up.

Demonstration of confidence and competence in SBIRT
Mr. Potato Head Exercise

What we will learn:

• How an aim statement will inform testing
• Understand rapid cycle PDSA testing
• Understand how theory and prediction aid learning
• See how to collect real time measurement
• Appreciate the opportunity of collaborative learning

Source: Williams, DM. Mr. Potato Head PDSA Collaboration Exercise. www.truesimple.com
Meet Sam
Mr. Potato Head Aim Statement

Our master clinician will correctly put together Mr. Potato Head (exactly as pictured in the photo) in 50 seconds or less. We will use iterative testing (Plan, Do, Study and Act) to identify implementation strategies.
AT YOUR TABLE - DETERMINE ROLES

• **Master Clinician**- will put Sam together based on groups/predictions/theories

• **Documenter**- will record data on data sheet

• **Time Measurer**- will use their stopwatch on mobile phone to report time for each cycle

• **Accuracy Score Inspector**- the rest of the team will judge accuracy according to the scale on the worksheet
# MR. POTATO HEAD DATA SHEET

<table>
<thead>
<tr>
<th>PDSA#</th>
<th>Theory being tested</th>
<th>Prediction</th>
<th>TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td>80</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>70</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td>60</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>50</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td>40</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>30</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td>20</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td>10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PDSA CYCLE #</th>
<th>PRECISION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

## Precision

- **3** - All pieces are put exactly in the same positions as the photo
- **2** - All pieces of the Mr. Potato Head are on him, but one or more pieces are not in the correct place or in the correct position
- **1** - One or more pieces are not in place on Mr. Potato Head

## Time

<table>
<thead>
<tr>
<th>SECONDS</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>70</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>80</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Our gracious volunteer is going to come up and help us establish our baseline data for this improvement initiative.

We will start the clock when the volunteer starts... stop clock when hands are off Mr. Potato Head

Time Keeper will record; Score Inspector will rank precision; Documenter will put data points on charts
TIPS FOR TESTING CHANGES

• Stay a cycle ahead
• Scale down scope of tests – START SMALL
• Pick willing volunteers (work with those that want to work with you)
• Avoid the need for consensus, buy-in, or political solutions
• Replicate changes made elsewhere
• Pick easy/feasible changes to try
• Avoid technical slowdowns
• Reflect on the results of every test (successful AND failed tests)
MOST VALUABLE TAKEAWAYS IDENTIFIED BY PRACTICES

Common Themes

• The value of SU/MH screening
• Communication with adolescents
• Learning about brief intervention/SBIRT
• The effort of testing/implementing new processes, using QI methodology, is worthwhile/benefits patients
• Learning about SU specific drugs
• Finding community resources for MH/referral tracking
OVERALL SUCCESSES

- Increased screening
- Reported increase in awareness of the extent of substance use among adolescents within their practice and community
- Reported increase in awareness of community resources
- Reported increase in patient comfort in discussing substance use and mental health concerns
- Reported increase in rapport with adolescent patients
- Reported establishment of relationships with community partners
CHALLENGES OR BARRIERS IDENTIFIED BY PRACTICES

• Required significant amount of skill development
• Finding time to meet as a team; general lack of time to implement project activities
• Following up with patients; making sure patients connect with services
• Incorporating/Integrating project with EMR/EHR system
• Implementing project in a large practice, staff turnover, staff reluctance to change
• Finding good local resources; lack of local resources, particularly for Spanish speakers; building relationships with local community organizations
• Patients are reluctant to speak honestly when parent is present; patient refusal
SUMMARY

• Practice teams achieved 7 of 11 (64%) of the projects’ QI target measures

• Interventions perceived to have the greatest influence on improving outcomes for youth with SU/MH concerns included the following:
  • substance use and mental health screening
  • developing community resources
  • building community partnerships

• Interventions perceived to have the least influence on improving outcomes for youth with SU/MH concerns
  • immersive learning experience
  • monthly chart reviews
SUMMARY

• Nearly all participating practice teams reported that they are using brief intervention more as a result of the project.

• Maintenance of Certification was a strong motivator.

• Significant amount of skill development was required.
  • This needs to be factored into future projects.

• Strategies to make SBIRT an “easy lift” are required to avoid resistance/reluctance
ADDITIONAL RESOURCES

• AAP Substance Use Screening, Brief Intervention, and Referral to Treatment Clinical Report
  • Available at http://pediatrics.aappublications.org/content/138/1/e20161211

• Substance Use Screening and Intervention Implementation Guide
  • Available at https://www.aap.org/en-us/ Documents/substance_use_screening_implementation.pdf

• AAP Committee on Substance Use and Prevention – www.aap.org/cosup
CONTACT INFORMATION

• Ruth Gubernick - gubernrs@hln.com

• Jose Rodriquez-Torres - Jose.Rodriguez@wellstar.org

• Linda Paul – lpaul@aap.org