

# Increasing Nutritional Assessment for Inpatient Adolescents: A Quality Improvement Project

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## QUALITY PROBLEM

- Eating disorders are defined per the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders (DSM-5) as a behavioral condition characterized by severe, persistent disturbance in eating behaviors and is associated with distressing emotions and thoughts.
- Many subtypes dependent on behavioral actions taken towards the goal of disordered eating including anorexia nervosa, avoidant/restrictive food intake disorders, binge eating disorders, bulimia nervosa, and rumination disorders.
- Major known risk factors are female sex, age, low self-esteem, perfectionism, depression, anxiety, and genetic dysregulations in dopamine or serotonin systems.
- Prevalence data for American Adolescents is variable.
- In a 2011 cross-sectional survey of 10,000+ representative US adolescents aged 13-18 years old estimated prevalence rates of Anorexia Nervosa was 0.3%, Bulimia Nervosa at 0.9%, and Binge eating disorders at 1.6%. The mean age of onset for each of these disorders was 12.5 years.
- Currently our institution does not have a consistent method for asking questions in a standardized assessment regarding nutrition, diet, and eating behaviors.
- This is the first step in identifying suspicious behaviors that could clue a provider into disordered eating prompting further questioning and screening tools.

## SETTING AND TEAM

Subjects of intervention include UNM Pediatric residents during the time-period of March 2023 to June 2023 who consent to participate.

## QI Project Aim

- To increase the number of Adolescents (ages 12-18) admitted to the inpatient pediatric service who are questioned regarding their eating/dietary habits by 10% in the next 3 months.
- To increase comfort with questioning of admitted adolescents for nutrition and eating behaviors by providers utilizing the HEADSS assessment.
- Perform intervention for pediatric residents, who perform HEADSS assessments, to help increase comfort with this questioning and encourage routine performance of this questioning.

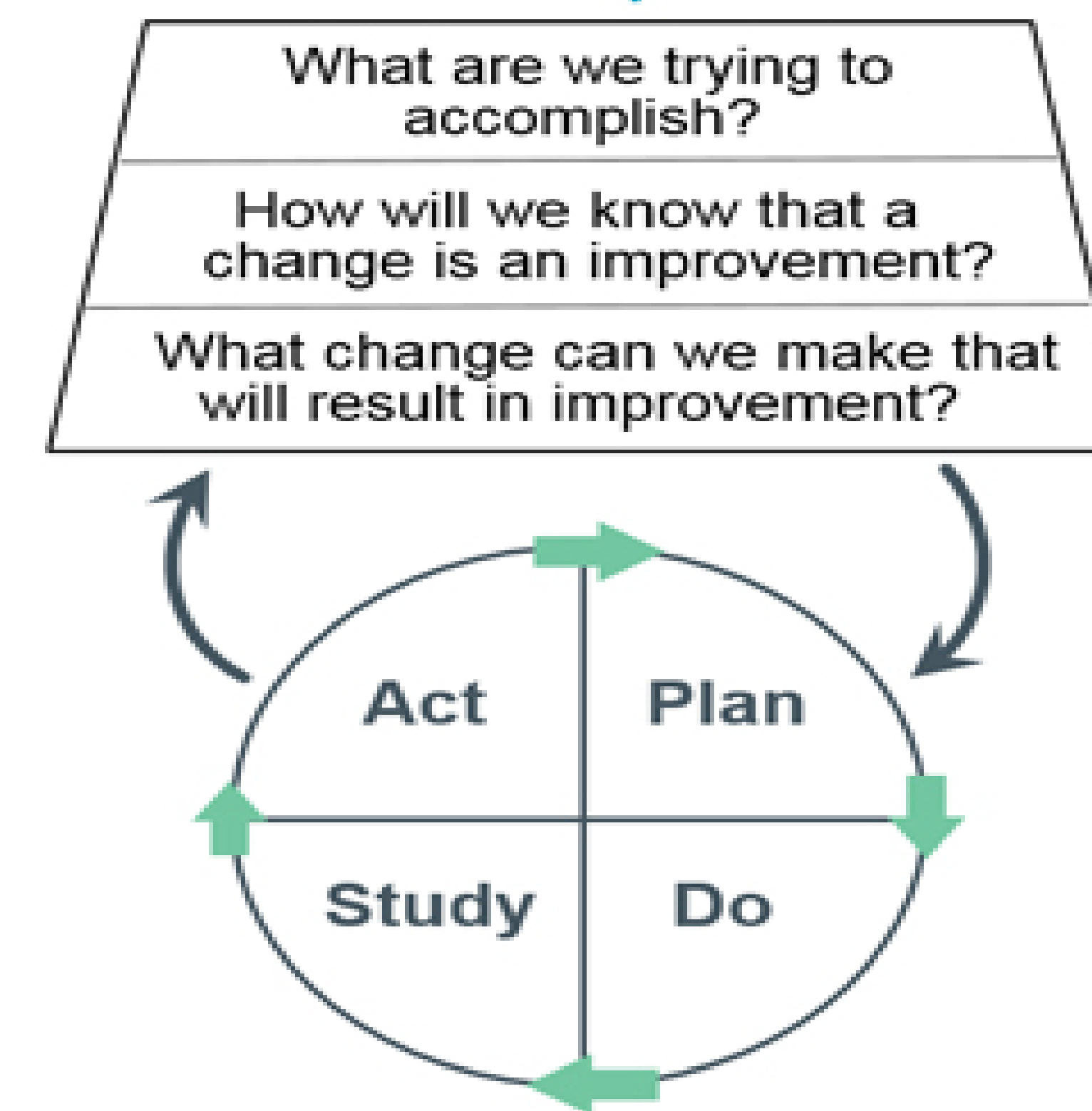
## SELECTION OF CHANGES TO TEST

The HEADSS questionnaire is an interview instrument for finding out about personal issues in adolescents' lives. It is also an acronym to help recall what personal questions to ask of pediatric patients in a confidential interview and stands for Home, Education, Activities, Drug use and abuse, sexual behavior, and suicidality. It is currently used at our institution during confidential interviews with adolescents. It is not a screening tool nor is it specifically used to diagnose any one condition. However, it may provide context clues or heighten suspicion for underlying disorders, at which time a separate screening is encouraged. Although traditionally the "E" stands for education, in recent years eating/diet questions have been encouraged within this subset to assess relationship with food. This is a practice that is encouraged at our institution, but we suspect is not being routinely performed by resident physicians.

## PDSA

PDSA	Description
1	
Plan	<ul style="list-style-type: none"> <li>Assess need by evaluating a random retrospective review of 20 adolescent charts who were admitted to a pediatric service between May 2021 and May 2022, and evaluate their admission history to see if questioning regarding eating, diet, and/or relationship with food in any context had occurred.</li> <li>This will serve as our assessment of how we are currently doing as medical providers in questioning our patients about their relationship with food.</li> </ul>
Do	<ul style="list-style-type: none"> <li>Issue a survey through REDCap to pediatric residents assessing comfort asking questions regarding nutrition during HEADSS exam.</li> <li>Goal of obtaining 45 responses.</li> </ul>
Study	<ul style="list-style-type: none"> <li>Education on the HEADSS assessment</li> <li>Encouragement to include questions regarding eating behavior</li> <li>Provide standardized questions of the HEADSS assessment for residents to use when admitting patients. These questions will include eating behavior.</li> </ul>
Act	<ul style="list-style-type: none"> <li>Evaluate success of interventions with retrospective chart review of standardized HEADSS assessment questions.</li> <li>Re-survey residents to assess provider comfort levels regarding questioning about diet and eating behaviors.</li> </ul>
	<ul style="list-style-type: none"> <li>Decide next steps according to results.</li> </ul>

## Model for Improvement



## SUMMARY

- Eating disorders are a group of conditions characterized by severe disturbances in eating behaviors and associated with distressing emotions and thoughts. The first step in identifying possible disordered eating is asking questions of adolescents about nutrition and their relationship with food.
- Currently, our institution does not have a consistent method for asking questions regarding nutrition and eating behaviors via standardized assessment.
- Our QI aims to primarily increase number of Adolescents admitted to a pediatric service who are questioned regarding their eating/dietary habits by 10% in the next 3 months.
- We plan to do this by identifying how frequently questioning is being performed, assessing comfort level of residents in questioning adolescents regarding nutrition, perform an intervention with education on how to ask these questions, create and disseminate standardized questions to facilitate easier questioning, re-evaluate comfort levels by survey, and track standardized HEADSS assessment question utilization.

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