**APPENDIX A: STORYBOARD**

**Local Health Department Name:** Mascoma Valley Health Initiative

**Address:**
1192 Route 4 E5, PO Box 102, Canaan, NH 03741

**Phone Number:** (603) 523-7100

**Size:** 3 employees

**Population Served:** 10,000

**Project Title:** Nutrition Education to Improve Oral Health in Elementary School Age Children

<table>
<thead>
<tr>
<th>PLAN</th>
<th>Identify an opportunity and Plan for Improvement</th>
</tr>
</thead>
</table>

1. **Getting Started**
   - Completed the NACCHO self-assessment tool. Identified Standard III-C 3 (*LHD uses the community health assessment to develop health education information*) as a target.
   - Based on current relationship built with local elementary school (K-4), decided to consider the school population in initial planning, with a focus on targeting education towards healthy behaviors and decision-making. Assessment data from a school-based dental program pointed towards a lack of knowledge around the role of good nutrition in oral health.

2. **Assemble the Team**
   - Met with school officials (superintendent, elementary school principal and guidance teacher), along with local pediatrician, and community health and benefits director at local hospital. Began discussions to look at various target areas. Interested in oral health and nutrition.

3. **Examine the Current Approach**
   - Reviewed current curriculum (taught in the ‘guidance’ period) related to oral health, which did not include an educational piece on nutrition. Education limited to information on brushing techniques, and the value of primary dental care. Nutrition education, which occurs later in the school year, does not include any information on the implications of nutrition on oral health.

4. **Identify Potential Solutions**
   - Agreed that integrating nutrition information into dental health curriculum would be valuable. Considered ways to combine teaching on nutrition and oral health. Also, agreed that finding a method for including parents of elementary school children would be ideal, especially as they have decision-making power regarding much of the food children consume.

5. **Develop an Improvement Theory**
   - Integration of nutrition information into oral health curriculum will result in improved decision-making around food choices, the benefits of healthy snacks, and the importance of good nutrition for continued dental health.

<table>
<thead>
<tr>
<th>DO</th>
<th>Test the Theory for Improvement</th>
</tr>
</thead>
</table>

6. **Test the Theory**
   - In light of school scheduling limitations in the fall term, chose to test the theory outside of the classroom at a family-centered event held at the school, the Fall Festival. Using an evidence-based dental health curriculum designed by the American Dental Association, created an interactive game with questions related to nutrition and oral health, specifically around healthy snacks, and good oral health techniques. Questions were age appropriate. Also included a teaching point for parents around the value of chewing gum with xylitol, which can decrease decay-causing bacteria in the mouth.

<table>
<thead>
<tr>
<th>CHECK</th>
<th>Use Data to Study Results of the Test</th>
</tr>
</thead>
</table>

7. **Check the Results**
   - Initially, fewer than 40% of parents and fewer than 20% of children could verbalize a connection between nutrition and oral health. Following the education intervention, the majority of children and parents could correctly identify the healthy snack from a selection of three. Fewer than half of children reported brushing their teeth at least the recommended two times per day.

<table>
<thead>
<tr>
<th>ACT</th>
<th>Standardize the Improvement and Establish Future Plans</th>
</tr>
</thead>
</table>

8. **Standardize the Improvement or Develop New Theory**
   - The improvement needs to combine education on oral health and nutrition, and reach out to elementary students and their families, both in and out of the classroom.

9. **Establish Future Plans**
   - Moving forward, the goal is to integrate an interactive educational piece on nutrition and oral health into the curriculum that is currently being taught in the elementary school guidance class. To ensure contact with all students in the school, the next step is to move into the classroom. Discussions are underway to combine the nutrition and oral health education already in place to facilitate an integration of the concepts.