Healthy Weight of Vineyard School Children
Assessing the impact of BMI letters
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Objectives
1. Evaluate use and utility of Body Mass Index (BMI) letters
2. Identify existing school and community resources to promote healthy weight among school children
3. Develop recommendations for Mass in Motion to improve health of school children on Martha's Vineyard

Background
• One third of US children are overweight/obese, and 70% will remain overweight/obese as adults.1,2
• In 2009, the MA Department of Public Health mandated that schools calculate BMI of children in grades 1, 4, 7, and 10; communicate the results to parents; and report them to MA DPH.3
• On Oct 16, 2013 MA eliminated mandate to communicate results of BMI screening to parents.4
• Year-round population on Martha's Vineyard is 17,000.5
• Cost of housing on MV is two times the state average, while per capita income is less than the state average.5

Methods
• Visited all schools on Martha's Vineyard
• Interviewed school nurses, teachers, cafeteria staff, Superintendent, parents, 40+ high school students, directors of afterschool programs, preschool directors, physicians, dieticians, Island Grown Schools staff
• Observed school lunchtime
• Conducted a robust literature search

Findings
• Island Grown Schools gleaning program and school gardens are already well integrated into school curricula
• High participation in healthy lunch program at elementary schools
• Free fruit available all day at elementary schools
• Eliminated unhealthy snacks in most elementary schools
• Safe bike access to some schools (“Safe Routes to School”)
• Lack of community resources (e.g. access to affordable nutrition counseling) for follow up to BMI letters
• High School cafeteria is run by a corporation and offers lower quality food than the elementary schools; fewer students participate in school lunch program
• Lack of cultural competency training for school and health professionals

Interprofessional Network

BMI Data Comparison

<table>
<thead>
<tr>
<th></th>
<th>MV*</th>
<th>MA*</th>
<th>USA**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students screened</td>
<td>593</td>
<td>205,975</td>
<td>2,939</td>
</tr>
<tr>
<td>Overweight</td>
<td>18.9%</td>
<td>16.7%</td>
<td>16.0%</td>
</tr>
<tr>
<td>Obese</td>
<td>15.0%</td>
<td>15.7%</td>
<td>18.7%</td>
</tr>
<tr>
<td>Overweight or Obese</td>
<td>33.9%</td>
<td>32.3%</td>
<td>34.7%</td>
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References

Recommendations
1. Support the school nurses in developing an island-wide policy for measuring height and weight
2. Consider developing island-wide wellness goals
3. Investigate increasing access to a nutritionist: community-based, school-based, or monthly visiting/telemedicine consult from Partners Healthcare
4. Raise quality of food at MV Regional High School to match that of island elementary schools
5. Increase availability of healthy snacks at both schools and afterschool programs
6. Increase utilization of the individual and family scholarships at the YMCA
7. Improve nutrition education for families
8. Increase activity throughout the school day

Mass in Motion of Martha's Vineyard has formed a task force to assess and act on these recommendations. The first community meeting will take place on November 8, 2013.

Authors presenting study findings to the community. Left to right: Jeremy, Rachel, Jacob, Kathryn, Molly