Connecting you with experts. Exploring the latest childhood obesity news and research.

We will begin at 1:05 to allow participants time to join the webinar.
1. Spotlight
   • Catalyzing Health Care Investment in Healthier Food Systems for Community Health
   • Developing a Logic Model for Clinical-Community Engagement

2. One on One

3. Upcoming Events
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Today’s Speakers

**Elaine Arkin**  
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INTERACTIVE POLL
Catalyzing Health Care Investment in Healthier Food Systems for Community Health

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Associate Director, Healthy Food in Health Care

Susan Bridle-Fitzpatrick, PhD
Senior Researcher, Healthy Food in Health Care
Healthy Food in Health Care

Leveraging the influence and purchasing power of the health care sector to build sustainable food systems that improve public and environmental health

Over 1,000 hospitals, 4,000 health professionals
Environmental Nutrition Framework

Not All Apples Are Created Equal

*Environmental Nutrition Redefines What Constitutes Healthy Food*

**TRADITIONAL NUTRITION**

Focuses on biochemical components of food and individual food consumption

*Asks:*

- How much Vitamin C?
- How many calories?
- How much fiber?

**ENVIRONMENTAL NUTRITION**

Accounts for social, political, economic, and environmental factors related to the food system as a whole

*Also asks:*

- Was it grown with harmful pesticides or synthetic fertilizers?
- What labor standards were used?
- Were toxic chemicals used in packaging?
Healthy Food in Health Care

Engaging the health care sector to support healthy, sustainable food systems for community health

Hospitals as Anchor Institutions
engaging a wide range of tools & resources to strengthen food systems, promote local economic development, advance health equity, and reduce environmental impacts

- Hospital food procurement of healthy, regionally and sustainably grown food
- Hospital community benefit activities to improve access to healthy food, reduce risk of diet-related disease & promote healthier food systems
- Other leverage points
  - community and food system development;
  - programmatic and monetary investments;
  - modeling healthy eating and employee wellness

Education
Capacity Building
Coalition Building
Policy Advocacy

Coalition Building
Education
Policy Advocacy
Capacity Building
Resilient Communities Initiatives

Procurement and Investment: A Powerful Combination

- Aggregate demand for healthy food products
- Increase community access to healthy foods
- Create jobs for community residents
- Increase markets for local producers

Production
- Farms, ranches, fisheries

Processing
- Processing facilities, slaughterhouses, dairies

Aggregation & Distribution
- Food hubs, storage facilities, transportation,

Retail & Institutional Markets

Food Services
- Mobile food vendors, commercial kitchens

Increased Healthy Food Access
Hospital Community Benefit

- Nonprofit hospitals
- Regulated by the IRS
- ACA: Shift toward community health promotion and disease prevention

“The health needs a tax-exempt hospital may consider in its CHNA include not only the need to address financial and other barriers to care but also the need to prevent illness, to ensure adequate nutrition, or to address social, behavioral, and environmental factors that influence health in the community.” (79 Fed Reg 250, pg 78969)
Hospital Community Benefit

- Community Health Needs Assessment (CHNA)
- Implementation strategy
- Annual community benefit (CB) report
- What counts?
- CB expenditures and reporting
  - Hospitals spent 7.5% of operating expenses on CB in 2009 (Young et al, 2013, NEJM)
    - Lion’s share: Medicaid shortfall, charity care, research, training, other patient care services
    - Very small % spent on community health improvement activities
      - 0.4% : activities undertaken by hospital
      - 0.2% : cash or in-kind contributions to community groups
Utilization of Community Benefit to Improve Healthy Food Access in Massachusetts

<table>
<thead>
<tr>
<th>Facility</th>
<th>Food Insecurity</th>
<th>Access to/ Affordability of Retail Outlets</th>
<th>Fruit and Vegetable Consumption</th>
<th>Participation in nutrition assistance program (SNAP, WIC or NSLP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baystate Medical Center</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Beth Israel Deaconess Medical Center Boston</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Boston Children’s Hospital</td>
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<td>X</td>
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<tr>
<td>Fairview Hospital</td>
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<td>X</td>
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<tr>
<td>Hallmark Health</td>
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<tr>
<td>Holy Family Hospital</td>
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</tr>
<tr>
<td>Beth Israel Deaconess Hospital Plymouth</td>
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<tr>
<td>Lahey Hospital and Medical Center</td>
<td></td>
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<tr>
<td>Massachusetts General Hospital</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Saint Elizabeth’s Medical Center</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>UMass Memorial Medical Center</td>
<td>X</td>
<td>X</td>
<td>X</td>
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</tr>
</tbody>
</table>

**Table 2: Incorporation of Diet, Access and Food Security in Community Health Needs Assessments**

**Interviews and CHNA analysis investigated:**

- Incorporation of food security, food access, and diet in CHNAs
- Types of food access, obesity, and diet-related disease interventions supported through community benefit resources
- Community benefit program evaluation

Source: Information based on the most recent Community Health Needs Assessment for each of the listed facilities.
Most facilities used implementation (process) measures to evaluate community benefit programs.

Obstacles to effective impact (outcome) evaluation included cost, time, and difficulty in designing evaluation strategies that can isolate the impact of a single initiative.

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Program</th>
<th>Evaluation Metrics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baystate Medical Center</td>
<td>Integrated diet and exercise intervention</td>
<td>BMI, lipid abnormality and fitness test</td>
</tr>
<tr>
<td>Beth Israel Deaconess Medical Center</td>
<td>Funding for varied programs at community health centers</td>
<td>Varied, all included BMI</td>
</tr>
<tr>
<td>Boston Children's Hospital</td>
<td>Integrated diet and exercise intervention</td>
<td>BMI, TV time, fruit and vegetable intake, sugar sweetened beverage consumption, and amount of physical activity</td>
</tr>
<tr>
<td>Fairview Hospital</td>
<td>Meal delivery</td>
<td>Pounds of food</td>
</tr>
<tr>
<td>Hallmark Health</td>
<td>Mobile farmers market</td>
<td>Pounds of food, number of people served</td>
</tr>
<tr>
<td>Holy Family Hospital</td>
<td>Fruit and vegetable prescription program</td>
<td>Use of coupons, number of participants</td>
</tr>
<tr>
<td>Beth Israel Deaconess Hospital Plymouth (previously Jordan Hospital)</td>
<td>Community coalition to address food environment</td>
<td>Participation in school lunch program, sales at corner stores</td>
</tr>
<tr>
<td>Lahey Hospital and Medical Center</td>
<td>Meals and nutrition education</td>
<td>Pounds of food, number of people served</td>
</tr>
<tr>
<td>Massachusetts General Hospital</td>
<td>Food insecurity screening and pantry</td>
<td>Pounds of food, number of people served, and food insecurity prevalence</td>
</tr>
<tr>
<td>Saint Elizabeth's Medical Center</td>
<td>Medically-tailored meal delivery</td>
<td>Readmission rates</td>
</tr>
<tr>
<td>UMass Memorial Medical Center</td>
<td>Community and backyard gardens and SNAP incentive program</td>
<td>Number of beds developed, number of people served, amount of incentive dollars distributed</td>
</tr>
</tbody>
</table>

Source: Evaluation metrics were provided through interviews with hospital staff.
Assessing the National Community Benefit Landscape
Programming to Address Healthy Food Access, Obesity and Diet-Related Disease

- National survey of tax-exempt hospitals (summer–fall 2016)
- In-depth interviews (fall–winter 2016/2017)
- Case studies (winter–spring 2017)

Central research questions:

- How are assessment of food access, obesity & DRD included in CHNAs?
- What agencies & community groups addressing food issues are collaborating in the CHNA process?
- What initiatives to address healthy food access & DRD are included in CB implementation strategies?
- How are these programs being evaluated?
- What are facilitators & obstacles to CB investment in initiatives to improve healthy food access, including initiatives with food system sustainability objectives?
Assessing the National Community Benefit Landscape
Programming to Address Healthy Food Access, Obesity and Diet-Related Disease

Survey

- Random sample of 900 tax-exempt hospitals

Interviews

- Community benefit professionals
- Public health depts
- CHNA consultants
- Hospital associations

Case Studies

- Program design
- Implementation
- Community partnerships
- Sustainable financing
- Program evaluation

Community health improvement
Resilient & sustainable food systems
Community building
Preliminary National Survey Findings

Representation on CHNA Committees
Based on first 99 respondents

- Hospital executive management: 87%
- Hospital board of directors: 39%
- Hospital philanthropic foundation: 25%
- Hospital PR/marketing: 65%
- State public health agency: 66%
- Local public health agency: 56%
- Health care practitioner: 41%
- Social worker: 43%
- Low-income community: 34%
- Ethnic/racial minority community: 34%
- Emergency food organization: 30%
- Supplemental meal program: 16%
- Food system advocacy group: 16%
- No committee: 6%
Preliminary National Survey Findings

Hospitals Reporting 0, 1, 2 or 3 Food Access or DRD CB Programs

Based on first 99 respondents
Preliminary National Survey Findings

Percent of Community Benefit Programs Addressing Health Need

Based on 167 total initiatives from first 99 respondents

- Obesity
- Diet-Related Disease
- Food Security / Healthy Food Access

Percent
0 25 50 75 100
Preliminary National Survey Findings

CB Programs Managed by Hospital Staff vs External Organizations
Based on 167 total initiatives from first 99 respondents
Preliminary National Survey Findings

Partners in Community Benefit Programs

Based on 91 respondents

- Emergency food organization
- Supplemental meal program
- Food system advocacy group
- Agency linking food insecure & resources
- Community org promoting HFA
- University addressing food/nutrition
- Other org addressing food/nutrition

Percent of Hospitals
Preliminary National Survey Findings

Percent of Food Access & DRD CB Initiative Using Evaluation Method

Based on 167 total initiatives from first 99 respondents

- Number of program participants: 79%
- Other implementation measures: 28%
- Health knowledge survey: 44%
- Behavioral change survey: 38%
- Participant satisfaction survey: 43%
- Bioindicators (e.g. BMI): 38%
- Assessment of env. change: 23%
- Impact on policy: 13%
- Healthcare use and cost: 11%
- Workforce development: 4%
Program Types

- Farmer’s markets, including mobile markets
- Fruit & veg Rx-type programs
- Double SNAP incentive-type programs
- Community gardens/CSAs
- Feeding programs
- Food bank & pantries
- Food hubs
- School-based programs
- Healthy food retail/stores
- Community development investment in local food businesses

Systems Interventions
Job creation, poverty reduction, food systems infrastructure, policy change, etc.

Community Interventions
Farmers market, mobile markets, healthy corner stores, etc.

Individual Interventions
Nutrition education, behavior change, etc.
Disseminate tools & resources

Examine Current & Best Practice
For community benefit investment in healthy food access & healthier food systems.

Disseminate Tools & Resources
To expand investment in healthy and sustainable food systems for community health.

Connect CB Community for Learning and Sharing
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QUESTIONS?

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Developing a Logic Model for Clinical-Community Engagement

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Daniel Kidder, PhD
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Program Performance and Evaluation Office
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Workshop Development

• Evaluating Clinical-Community Engagement Models: What Works and What Doesn’t
  – November 9–10, 2015

• Participants:
  – American Heart Association
  – Boston Children’s Hospital
  – Greater Rochester Health Foundation
  – Many more…
Workshop Aims

• Identify:
  – Examples of partnerships and engagement between communities and clinical settings (including hospitals and health care systems)
  – Features of the evaluation of those efforts, including facilitators and barriers
  – Gaps in the evaluation of these efforts
  – Opportunities and recommendations to promote valuation strategies and metrics for these engagement models
Workshop Products

- **Whitepaper**
  - Summarizing proceedings and key insights

- **Sample Logic Model and Metrics**
  - Developed as a framework to guide future evaluation
Why Develop a Logic Model?

• The importance of showing impact
• Creating a “roadmap” for your program
• How that roadmap helps you:
  – Identify what impact means
  – Refine your efforts to improve impact
• Refine roadmap + identify accountable outcome
• Indicators of success
“Measuring impact is so important because it allows us to prioritize what we’re going to do, to sustain it if it’s effective, and to improve it if it’s not effective.

The basic goal is very straightforward:

How can we have maximum health impact?”

- Dr. Tom Frieden, CDC Director
“…we have to have a **healthy obsession with impact**. To always be asking ourselves what is the real impact of our work on improving health?”

“…answering that very important, in fact, most important, question of ‘so what’?”

Dr. Tom Frieden, CDC Director
Science Impact: What Difference are You Making?
21 January 2014
“My question is: Are we making an impact?”
But…

- Public health programs are complex
- No magic pill for many chronic and infectious diseases.
  - Even if there is, contextual factors that play role (e.g., vaccination)
- Need to understand contextual environment
  - Clinical, policy, environment, etc.
- Makes route from program activities to making an impact challenging
- Identify/measure early outcomes that may indicate problems
6 Things Every Program Needs to Know…

1. Big “need” to which it is contributing
2. Basic roadmap: “what” → “so what” → need
3. “Accountable” outcome
4. Short term outcomes that → accountable outcome
5. “Strong” activities that → short term outcomes, AND what “strong” means
6. Contextual factors that help/hobble
Describing the Program: Roadmap or Logic Model

• Graphic depiction of the relationship between your program’s activities and its intended effects or outcomes
• Shows the ‘if-then’ relationships among the program elements
  – If I do this activity, then I expect this outcome.
• Helps ensure clarity and consensus about main strategies/activities and intended outcomes
The “core” of your program description:

- Big **need** your program is to address
- Key **target group(s)** who need to take action
- Kinds of actions they need to take
  - Your intended **outcomes** or objectives
- **Activities** needed to meet those outcomes

And then…
- The underlying logic
  - “Program theory” or “theory of change”
Complete Logic Model

Inputs ➔ Activities ➔ Outputs ➔ Short-term Outcomes ➔ Intermediate Outcomes ➔ Long-term Outcomes

What the program needs

What the program does

Who or what will change because of the program’s efforts [So What]

Context and Assumptions

External factors that influence getting to outcomes
Reality Checking: Logic Model

Review the columns

- Are the outcomes plausibly connected to the “need”?
- Is there something to drive each outcome?
  - Another outcome?
  - (At least) one activity?

If not…
- Refine as needed…
Filling in the Blanks....

"I think you should be more explicit here in step two."
Wrap up…

• Showing impact—or progress toward impact—is not easy
• But critical to improving programs and making a difference…
Sample Logic Model

Evaluation of Health Care-Community Engagement Efforts to Address Obesity: A Sample Logic Model

**Inputs**
- Pediatric primary care centers, providers, and staff
- Pediatric weight management programs in communities or clinics
- EHR & Health IT systems
- Leadership and community benefit offices

**Health Care**
- Weight management programs and other resources
- Faith-based groups
- Food policy councils
- Safe Routes to School
- Nonprofit organizations

**Communities/Organizations**
- Pediatric primary care centers, providers, and staff
- Pediatric weight management programs in communities or clinics
- EHR & Health IT systems
- Leadership and community benefit offices

**State and Other Partners**
- Medicaid and Medicare offices
- Education offices, including early care and education
- Parks and Recreation
- Women, Infants, and Children Program
- Supplemental Nutrition Assistance Program

**Strategies & Activities**
- Implement activities or interventions
  - Settings:
    - Schools
    - Early care and education
    - Community-based organizations
    - Health care
  - Target populations:
    - Child/adolescent & family
    - Parent/caregiver
    - Communities, provider
    - Mobilize, advocate & engage across sectors
    - Develop & advance partnerships

**Short-Term Outcomes**
- Individual/Family
  - Access to unhealthy options
  - Access to healthy options
  - Access to care
  - Access to care
  - Participation in prevention programs
  - Improved linkage with health care system/providers
  - Engagement & communication across sectors
  - Awareness & understanding of healthy behaviors
  - Opportunities for shared meals and physical activity

**Intermediate Outcomes**
- Individual/Family
  - Physical activity
  - Families making healthier routine choices
  - Healthy eating — fruit/vegetable consumption
  - Improved overall diet
  - Improved family cohesion
  - Self-management of healthier choices and related comorbidities

**Long-Term Outcomes**
- Individual/Family
  - Improved biomarker & health measures (e.g., behavior change, diabetes, and asthma comorbidities)
  - Parent/caregiver wellness & work productivity
  - Quality of life
  - Obesity prevalence
  - Health care costs (direct obstetric, comorbidity costs; emergency room visits)
  - Individual body mass index (BMI)
  - Morbidity & mortality

**Contextual Factors**
- Integration and collaboration across sectors (i.e., degree to which different community groups work together and with health care organizations and the degree to which state partners have collaborated)
- Primary care and weight management program environments (i.e., affiliations, organizational structures, payment structures, community investment-oriented leadership, and missions)
- Community resources (e.g., availability of social services, linkages between health care and public health programs)

This logic model presents activities and outcomes of community engagement interventions designed to address childhood obesity. This can be modified based on the specific goals of an intervention.
## Sample Metrics

<table>
<thead>
<tr>
<th><strong>INDIVIDUAL &amp; FAMILY</strong></th>
<th><strong>COMMUNITY &amp; BUILT ENVIRONMENT</strong></th>
<th><strong>POLICY</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Body mass index (BMI)</td>
<td>Number of early care and education best practices met for healthier food</td>
<td>Number of school wellness policies supporting criteria-driven healthy cafeteria or vending offerings</td>
</tr>
<tr>
<td>(prevalence change in age and gender specific percentile for children)</td>
<td></td>
<td>Development of policies supporting complete streets design</td>
</tr>
<tr>
<td>% Weight loss (for adults)</td>
<td>Number of fruit &amp; vegetable vouchers, coupons, or other benefits redeemed per pre-specified denominator</td>
<td>Development of policies supporting safe public transport, increased connectivity and commuting options</td>
</tr>
<tr>
<td>Behavior change (fruit &amp; vegetable consumption, physical activity, sugary beverage consumption, sedentary time, healthy sleep)</td>
<td>Increased engagement and enrollment of families needing assistance with food voucher programs</td>
<td></td>
</tr>
<tr>
<td>Comorbidities (e.g., incidence, prevalence of diabetes or asthma; measures of control (glycosylated hemoglobin); utilization (emergency room visits)</td>
<td>Number of Safe Routes to School programs per pre-specified denominator</td>
<td></td>
</tr>
<tr>
<td>Quality of life</td>
<td>Staff, project capacity, and service utilization surveys</td>
<td></td>
</tr>
<tr>
<td>Attendance, satisfaction, and utilization surveys</td>
<td>Community coalition surveys</td>
<td></td>
</tr>
</tbody>
</table>

This table lists a sample set of metrics relevant to childhood obesity that capture both processes measures and potential outcomes relevant to the child, family, community, built environment and systems. These can be tailored to intervention and community specific needs.
Next Steps

- Continue to fill in the gaps
- Promote and support evaluation
- Innovative solutions
- Learning communities
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QUESTIONS?

Please type your question(s) in the chat box located on the right.
UPCOMING EVENTS
NCCOR #ChildObesityChat Twitter Chat

To continue the discussion on health care-community collaborations to address childhood obesity

Tuesday Nov 15

2 PM ET

Join @NCCOR and @NIHprevents for a #childobesitychat
FURTHER QUESTIONS?

Other questions about NCCOR or upcoming activities?

Email the NCCOR Coordinating Center at nccor@fhi360.org
Connect & Explore

Upcoming Webinars
Mark your calendar for these upcoming Connect & Explore webinars!

- **NOV 10** Evaluating Health Care-Community Collaborations: Implications and Recommendations for the Field

Archived Webinars
Missed a webinar? Check out videos from past webinars.

- **OCT 27** Looking Back and Looking Forward: Nine Years of School District Wellness Policy Implementation
- **SEP 14** Evaluating Health Care-Community Collaborations - A Three-Part Series
THANK YOU!