Moving upstream:
Challenges & opportunities on the journey to improve care & social drivers of health and equity

Rishi Manchanda, MD, MPH
President, HealthBegins

The Region's Health and Health Care Systems:
Communities Achieving Excellence and Moving Upstream
Michigan Health Improvement Alliance (MiHIA)

January 24, 2020
About HealthBegins

A national mission-driven consulting and training firm dedicated to improving care and social drivers of health and equity.

We help partners move upstream to:
• Design strategy
• Drive improvement
• Transform systems

Client partners range from health systems and plans to foundations and self-insured employers.
The Problem

- The case for moving health care upstream has never been stronger
  - With the move to value-based care, the case for addressing patients’ health-related social needs by integrating social care into health care delivery has never been stronger.
  - At the same time, pressing concerns about equity are driving health care systems and professionals to articulate their role in improving community-level social determinants of health & structural determinants of health, like structural racism.
- Healthcare systems and community partners lack adequate support to lead this transformation
What we mean by “moving upstream”

- To “move upstream” means to continuously improve social drivers of health and equity at all levels –
  - individual social needs & networks,
  - community-level social determinants, and
  - broader structural determinants of health

Moving upstream is becoming mainstream
Quadruple aim

- Patient Experience
  - Satisfaction
  - Quality
  - Trust

- Provider Experience
  - Professionalism
  - Joy at Work
  - Recruitment & Retention

- Outcomes
  - Effective interventions
  - Less preventable illness
  - Decreased disparities

- Costs
  - Lower per-capita costs
  - Appropriate spending & utilization

- Equity
  - Societal opportunity
  - Decision making
  - Structural Fairness
CMS is testing an approach to identify and address health-related social needs among Medicare and Medicaid beneficiaries.

Goal: Reduce health care utilization and cost.

Disclosure: In 2017, CMS selected HealthBegins, along with Mathematica Policy Research and Center for Health Care Strategies to provide implementation and learning system support for AHC bridge organizations.
The group reporting that all their social needs were met experienced an 11 percent reduction, or $2601, in total healthcare costs in the year after social service referrals.

Costs Fell by 11% When Payer Addressed Social Determinants of Health

...the medically tailored meals program yielded net savings of $220 per patient, while the non-tailored program saw $10 in net savings.

Meal delivery programs reduce cost of healthcare in dually eligible Medicare and Medicaid beneficiaries

About 13 percent of U.S. households report food insecurity.
Does this sound familiar?

“I'm a primary care physician [in a rural county]...meth addiction, high school drop out rate... Many more issues. Understand upstream approach for years.

Try my best but falls by the wayside as I don't have resources – No help, city/county overwhelmed. Patients lost to follow up- I'm seeing over 30 a day. How to manage? Would like to discuss.”

- Physician
• National study of 1298 family physicians
• 27% of family physicians reported burnout
• Physicians with a high perception of their clinic’s ability to meet patients’ social needs were less likely to report burnout

**ORIGINAL RESEARCH**

Physician Burnout and Higher Clinic Capacity to Address Patients’ Social Needs

*Emilia De Marchis, MD, Margae Knox, MPH, Danielle Hessler, PhD, Rachel Willard-Grace, MPH, J. Nwando Olayiwola, MD, MPH, Lars E. Peterson, MD, PhD, Kevin Grumbach, MD, and Laura M. Gottlieb, MD, MPH*
No social needs integration = No quadruple aim

Worse Outcomes
- Ineffective interventions
- More preventable illness
- Continued disparities

Poor Patient Experience
- Lower Satisfaction
- Low Quality
- Low Trust

Rising Costs
- Rising per-capita costs for high need
- Wasteful spending & utilization

Poor Provider Experience
- Eroding Professionalism
- Frustration at Work
- Costly Recruitment & Retention

Less Equity
“Give a man a fish and you feed him for a day; teach a man to fish and you feed him for a lifetime.”

But…

• What if the pond is polluted?
• What if he is denied access to a fishing rod?
• Why not teach a woman to fish?
## A Glossary of Upstream Terms

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Source: Upstream Communications Toolkit, HealthBegins. May 2019
The question is no longer whether to address the upstream needs of patients and populations, but how.
Meet Mrs. M
She’s a 46 year old mother of two who also cares for her frail elderly mother.

Her Type II diabetes is poorly controlled (last HbA1c = 8.4) and she has mild heart failure with preserved ejection fraction. At the end of last month, she nearly fainted at work and was admitted at a local hospital.

The cause of her admission was hypoglycemia (low blood sugar).

Root cause: Food insecurity
A step-wise approach to charting a course upstream
First, what are your goals?
A step-wise approach to charting a course upstream

Identify our:
1. Priority populations
2. Priority social driver of health and equity
3. Goals & relevant solutions
4. Early wins
5. Roadmap to achieve early wins
1. Pick a Priority population

For example,

Adult diabetics with high rates of preventable hospitalization within 4 zip codes in defined catchment areas

The more precise the definition, the better.
1a. Place matters: Define geographic area when identifying a priority population

Important to upstream work is a focus on *place* in addition to demographic or health characteristics.

Narrow down to a specific neighborhood, set of zip codes or census tracts as you define your priority population.
A step-wise approach to charting a course upstream

Identify our:
1. Priority populations (e.g. Diabetics like Mrs. M)
2. Priority social driver of health and equity
3. Goals & relevant solutions
4. Early wins
5. Roadmap to achieve early wins
2. Pick a “Root Cause” social driver of health and equity, based on your priority population.

The more specific, the better.

For example, **Food insecurity**

- Individual social need: *Food insecurity*
- Community SDOH: *Food deserts*
- Structural determinant: *Structural racism*
A step-wise approach to charting a course upstream

Identify our:

1. **Priority populations** (e.g. Diabetics like Mrs. M)
2. **Priority social driver of health & equity** (e.g. food)
3. **Goals & relevant solutions**
4. Early wins
5. Roadmap to achieve early wins
3a. Clarify goals and, if possible, KPIs for priority populations and related social drivers of health.

- Utilization trends
- Quality measures
- Health status
- Financial outcomes
- Social conditions
- Other institutional and community-level goals
Core healthcare quality measures*

C-04 Improving or maintaining physical health
C-05 Improving or maintaining mental health
C-15 Diabetes care- blood sugar controlled
C-23 Getting needed care
C-24 Getting appointments and care quickly
C-25 Customer service
C-28 Care coordination
D-10 Medication adherence – diabetes
D-11 Medication adherence – hypertension (RAS)
D-12 Medication adherence - cholesterol

*Which healthcare quality measures can social needs interventions help improve?
### National Quality Forum

#### Proposed Food Insecurity Quality Measures

<table>
<thead>
<tr>
<th>Measure title and Description</th>
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<th>Data Source</th>
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<tr>
<td>1. Screening for Food Insecurity: The percentage of patients that have been screened for food insecurity</td>
<td>Process</td>
<td>EHR</td>
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<td>2. Appropriate Clinical Action After Screening: Percentage of patients that screened positive for food insecurity using the U.S. Household Food Security Module: Six-Item Short Form of the Food Security Module, U.S. Adult Food Security Survey Module (US AFSSM), U.S. Household Food Security Module (US HFSSM), or Hunger Vital Signs (HVS) screening tool that were assessed for food insecurity severity and appropriate clinical action taken</td>
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<td>3. A Change in Severity of Food Insecurity: Percentage of patients with a decrease in severity of food insecurity after appropriate clinical action</td>
<td>Outcome</td>
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Comments are due by January 31, 2020 at 6pm ET

[https://www.qualityforum.org/Food_Insecurity_Measures.aspx](https://www.qualityforum.org/Food_Insecurity_Measures.aspx)
### 2019 PCMH Initiative Participation Guide

#### Hunger Vital Sign™

A validated tool to screen for food insecurity

<table>
<thead>
<tr>
<th>Within the past 12 months, we worried whether our food would run out before we got money to buy more.</th>
<th>Within the past 12 months, the food we bought just didn't last and we didn't have money to get more.</th>
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| □ Often true  
 □ Sometimes true  
 □ Never true | □ Often true  
 □ Sometimes true  
 □ Never true |

A patient or family screens **positive** for food insecurity if the response is “often true” or “sometimes true” to either or both of these statements.

Learn more about screening for and addressing food insecurity in health care settings at [FRAC.org](https://www.frac.org/).
## Outcome measures for social services?

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<th><strong>% SNAP/WIC eligible who are enrolled</strong></th>
<th><strong>Increased county-level access to healthy food</strong></th>
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<td>Decreased out of pocket costs</td>
<td>Increased intake of healthy food</td>
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<tr>
<td>Decreased severity and/or chronicity of food insecurity</td>
<td>Increased payment aligned with healthy food services and outcomes</td>
</tr>
<tr>
<td>Decreased costs related to outpatient care and medications</td>
<td>Increased alignment of services</td>
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*Which social sector & public health quality and/or outcome measures can healthcare systems help improve?*
# Improve social drivers of health & equity at all levels

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Source: Upstream Communications Toolkit, HealthBegins. May 2019
Food insecurity is an individual/household level health-related social need.

Food deserts are community-level social determinants of health.
White people are overrepresented in home lending in Michigan - and it starts with applications.

In 2015 and 2016, white people in Michigan applied for conventional mortgages at nearly one and a half times the rate of people of color. Though only 76% of the population, white people applied for 82% of loans, and ended up getting 84% of them.

Most disproportionate counties

(counties where white people were overrepresented in lending by at least 10%).
Food insecurity is an individual/household level health-related social need.

Food deserts are community-level social determinants of health.

“Supermarket redlining” is a form of structural racism – a structural determinant of health equity.
Trends in food insecurity by race and ethnicity, 2001-18

3b. Bring clinical & community stakeholders together to chart a course for population health with the **Upstream Strategy Compass™**

<table>
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<tr>
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*Upstream Strategy Compass™, Manchanda R. HealthBegins.* Adapted from Chokshi and Farley (2012); Gottlieb et al. (2013); Cohen and Swift (1999); and Leavell and Clark (1965). Abbreviations: DM, diabetes mellitus.
3c. Then identify potential solutions to improve care and social drivers of health & equity for priority populations.

(Example: diabetes and food insecurity)

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<td><strong>Primary Prevention</strong></td>
<td>Financial literacy, support, &amp; nutrition programs for low-income families with strong family history of DM</td>
<td>Provide on-site Farmers’ Market, gym, walking trails, or financial counseling for employees and dependents</td>
<td>Support ban on trans fats or a tax on refined grain products with added sugar, with subsidy support for healthier foods</td>
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<td><strong>Secondary Prevention</strong></td>
<td>Screening &amp; assistance for DM patients at-risk of end-of-month hypoglycemia</td>
<td>Subsidize vouchers to a farmer’s market, incorporate the DPP into benefits plan for prediabetic employees</td>
<td>Change timing and content WIC &amp; school food programs to avoid food insecurity among DM</td>
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<td><strong>Tertiary Prevention</strong></td>
<td>Reduce hospital use among high-utilizer diabetics using medically-tailored meals</td>
<td>Coordinate with local banks, collectors, lenders, to reduce debt burden for utilizer diabetics</td>
<td>Support legislation/regulations to provide financial investments and support services to those in redlined areas</td>
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A step-wise approach to charting a course upstream

Let’s identify our:

1. Priority populations (e.g. Diabetics like Mrs.M)
2. Priority social driver of health & equity (e.g. food)
3. Goals & solutions
4. Early wins
5. Roadmap to achieve early wins
4. Early wins
A growing number of health systems and plans are making the business case to address social needs for high-cost, high-risk patients.

This is necessary, but not sufficient.

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4. Choose “early wins” that can improve social drivers of health and equity at all levels for specific communities and conditions (example: diabetes and food insecurity)

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A step-wise approach to building capacity and capability to go upstream

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4. Early wins
5. Roadmap to achieve early wins
Upstream Quality Improvement to achieve early wins
Go Upstream: Launch an Upstream QI Campaign

Example: A FoodRx program to reduce hospital admissions among food insecure patients

Improve screening of food insecurity among diabetics by 30% within 6 months

Improve provider confidence to address food insecurity by 30% within 6 months

Reduce hospital admissions among food-insecure patients by 30% within 18 months
What #UpstreamQI looks like in practice

- 95% Screening Rate for Food Insecurity
- 300% improvement in clinician & care team confidence
- 15x increase in food-resource referrals
- 92% of uncontrolled diabetics referred to clinical pharmacist
- 2% drop in HbA1c among diabetics who returned for repeat visit

Representative results from an HealthBegins-designed Upstream Quality Improvement Campaign at Alameda Health System – Hayward Wellness Center
What #Upstream QI looks like in practice
Upstream Investment Planning for Community Health

SDH Focus Areas:
- Food Security
- Housing Stability
- Transportation
- Financial Wellbeing
- Social Connection

Manage community health investments, not just program reports
We help healthcare and community leaders visualize data, develop insights, and assign performance metrics to programs, moving from just reporting on programs to proactively managing their own Upstream Investment Portfolio for Community Health.

Reinvest upstream
Enabled by partners, we help leaders reinvest returns to support multisector community health initiatives (e.g. BUILD Health & Accountable Communities for Health (ACH) and policy and advocacy efforts to improve community-level social & structural determinants of health equity.

Track Returns on Investment
Leaders and stakeholders track health, social, and financial returns of Community Health Investments in SDH Focus Areas. Portfolios are adjusted based on performance.
Bring upstream investment data to life
Community health investment management tools can help leaders visualize upstream investments and track the KPIs that matter most.

The Upstream Investment Dashboard (Upside) is a project of HealthBegins.
Move upstream with rigor to advance the quadruple aim and equity

Outcomes
- Effective interventions
- Less preventable illness
- Decreased disparities

Costs
- Lower per-capita costs
- Appropriate spending & utilization

Equity
- Societal opportunity
- Decision making
- Structural Fairness

Patient Experience
- Satisfaction
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- Trust

Provider Experience
- Professionalism
- Joy at Work
- Recruitment & Retention
Let’s move upstream
Thank you!

Rishi Manchanda
President
HealthBegins
rishi@healthbegins.org

www.healthbegins.org
(818) 333-5005
info@healthbegins.org
At a minimum, we believe upstream leaders should demonstrate knowledge and basic proficiency in core competencies identified by HealthBegins.

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<th>Basic Proficiency</th>
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<td><strong>Essentials of Population Health &amp; Community Health</strong></td>
<td>• Distinguish population health, community health, and social drivers of health at micro/meso/macro levels&lt;br&gt;• Describe the historical relationship between medicine &amp; public health&lt;br&gt;• Explain contemporary population health management and community health investment strategies</td>
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<td><strong>Structural Determinants: Race, Power, &amp; Equity</strong></td>
<td>• Summarize the history of organized medicine vis-à-vis structural racism&lt;br&gt;• Explain strategies for reconciliation and structural transformation</td>
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<td><strong>Community Health Informatics &amp; Social Epidemiology</strong></td>
<td>• Describe concepts, methods related to the application of health informatics &amp; data analytics to population health and community health&lt;br&gt;• Summarize social epidemiology and its use in understanding disease within defined populations and communities.</td>
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<td><strong>Upstream Quality Improvement &amp; Management</strong></td>
<td>• Design upstream QI campaigns to improve population and community health, social drivers of health, and equity&lt;br&gt;• Describe management approaches to achieve upstream goals</td>
</tr>
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<td><strong>Partnership &amp; Leadership for Health Equity</strong></td>
<td>• Explain the role of health systems in developing and leading partnerships and place-based collaboratives&lt;br&gt;• Describe characteristics of change management and leadership as it applies to complex project implementation, of authentic collaboration and community engagement</td>
</tr>
<tr>
<td><strong>Financing &amp; Sustaining Upstream Transformation</strong></td>
<td>• Explain and correctly use financial management terms and concepts as they relate to upstream population health and community health initiatives&lt;br&gt;• Describe the components of a balanced upstream investment portfolio for health systems</td>
</tr>
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How we help train upstream leaders

HealthBegins works with partners to help America’s health professionals understand and lead upstream transformation

### Activation & Engagement
- Improve awareness and buy-in for upstream transformation
- *Upstream Communications Toolkit* and materials
- Targeted strategic communications campaigns

### Education & Continuous Learning
- Support learners to lead upstream health care transformation using our proprietary *Upstream Approach*
- Modular training curriculum via in-person workshops & webinars
- Learning collaboratives

### Training & Capacity Building
- Train facilitators to run *Upstream Approach* workshops on their own
- In-person & web-based facilitator trainings
- Institutional *Upstream Training Network* members get ongoing support
Together, we can train 25,000 leaders of upstream transformation - “Upstreamists* - by 2021.

By 2021, at least 25,000 learners will successfully complete at least one educational module in a core competency area

Of those,

- At least 10,000 learners successfully complete three (3) core educational modules
- At least 5,000 learners successfully complete at least six (6) core educational modules
- At least 1000 learners commit to apply lessons in their own settings (Upstream leaders)

*Coined by Dr. Rishi Manchanda in 2013, the term “Upstreamist” refers to a health care professional who has responsibility and is equipped to improve outcomes by improving social drivers of health and equity at all levels –

- individual health-related social needs & networks,
- community-level social determinants of health, and
- broader structural determinants of health & equity

2016 example of an online upstream educational module:

- Medscape Upstream Medicine module w/ 0.5 AMA PRA Category 1 credit. Accessible for 3 months.
- 10,720 learners, 2000+ credits