COVID-19 has been challenging for all, but especially for people in low-income under-represented minority communities. Our PRC is proud that its community-based participatory research approach has become even more relevant under these circumstances. This includes studying the delivery of telehealth services combined with community health workers or parish nurses to prevent type 2 diabetes. In addition, during these challenging times, our PRC also made further inroads with key community and policy initiatives. We worked closely with CARE in responding to the urgent need to mobilize food pantries services to prevent the spread of hunger in New Haven and beyond. We also supported the Hispanic Health Council Breastfeeding Heritage and Pride Counseling Program and New Haven’s Breastfeeding Task Force. We also advised the World Health Organization on breastfeeding guidelines among COVID-19 positive mothers. This Newsflash nicely conveys how our PRC’s comprehensive work is guided by health equity, ant-racism, and social justice principles. Please engage with us and stay safe!
CORE RESEARCH PROJECT:
Improving Health in Low Income Communities: Virtual Delivery of a Diabetes Prevention Program Facilitated with Community Care Coordination

Our current 5-year project will assess the feasibility and health impacts of a virtually-delivered Diabetes Prevention Program (vDPP), facilitated by community health workers and hospital-based community nurses, to adults in New Haven, Ansonia, and Derby who have lower incomes and are at risk for type 2 diabetes. You can find an overview of our project in prior issues of our Newsflash and [here](#) on our website.

**PROGRESS ON OUR
FORMATIVE RESEARCH IN YEAR 1**

When we first proposed our research project to the CDC in 2018, we had no way to predict just how timely our plan to deliver the DPP on a virtual platform would become due to the COVID-19 pandemic. So while the pandemic will not affect the use of the program delivery platform, it has led to a revised formative research process timeline and the assessment of community needs via Zoom rather than in-person interactions with key informants and local residents.

We conducted key informant interviews in the summer of 2020 with people in the community who work with adults with limited resources in New Haven, Ansonia, and Derby. The purpose was to learn their perspective and seek their advice on offering a virtual version of the Diabetes Prevention Program (a year-long program with 16 weekly sessions followed by monthly sessions) to adults with limited resources, in combination with care coordination from community health workers (CHWs) or community health nurses (CHNs). We sought their opinions about offering this program and any perceived barriers and/or facilitators to the process and its potential success.

We interviewed 13 key informants, including community health workers, diabetes educators, residential housing coordinators, a physician, and a health and social service program manager.

The following themes emerged from our interviews regarding the virtual Diabetes Prevention Program:

- **So, Prediabetes?** Learning they’re at risk for diabetes might not sufficiently motivate adults to improve their health. We could also promote other benefits.
- **COVID Life** More people are feeling lonely and isolated. They might be more willing to connect, but need even more support during the pandemic.
- **Group Cohesion** Wellness programs offered in person can create a sense of community. We could consider how to promote group cohesion with the vDPP.
- **Active Approach** vDPP participants will likely need reminders and support. The CHWs and CHNs will need to be tuned in and respond to their needs.
- **Tech Equity** Some people lack access to Wi-Fi and devices, or have issues in setting up and using technology. Make it accessible / easy to use.

As we move into Year 2, we’ll conduct interviews with New Haven, Derby and Ansonia residents to assess their attitudes concerning healthy eating and exercise, perceived barriers to healthy eating and physical activity, attitudes regarding digital technology, and perceived barriers to using it.

Then we’ll conduct a pilot study to assess the delivery of the first 4 weeks of the vDPP, combined with care coordination from CHWs/CHNs, to a representative sample of our population of focus. Results will help us plan strategies to offer the full-length vDPP and related care coordination during our next phase.

For more information, contact PRC Co-Director Beth Comerford at beth.comerford@yalegriffinprc.org or PRC Co-Director Kathleen Duffany at kathleen.oconnorduffany@yale.edu.
REALIST REVIEW: What Does it Take for Type 2 Diabetes Prevention/Lifestyle Management Virtual Interventions to Work among Low-Income Communities?

Concurrent with our core research project, a team led by Associate Research Scientist Amber Hromi-Fielder, PhD, MPH is conducting a realist review of published research articles on Type 2 diabetes prevention/lifestyle management interventions in low-income communities. Realist reviews, unlike traditional systemic reviews, are not intended to locate every published paper. Rather, searches become refined as the conceptual framework guiding the search is continually improved.

The purpose of this review is to determine how, why and in what circumstances diabetes prevention programs (DPPs) delivered virtually can effectively improve diabetes risk factors among adults with lower incomes. The team will search for articles on: (1) diabetes prevention and lifestyle management programs, (2) virtual services, and (3) community health workers (CHWs), and will then look for areas of overlap between these topics to help address these questions.

Adults with lower incomes are at increased risk for Type 2 diabetes, but face barriers to participating in programs to help reduce this risk. Virtual services have been proposed as a way to reduce these barriers. Although they’ve been found effective in improving diabetes self-management among adults in general, less is known about their effectiveness in preventing diabetes in adults with lower incomes.

CHWs can serve as a critical link to providing health services to these adults. Research has been published on virtual delivery of DPPs, and the roles of CHWs in diabetes prevention. However, there is a gap in knowledge concerning the role of CHWS in the virtual delivery of DPPs. The realist review is intended to help fill in this gap.

UPDATE: Community Alliance for Research and Engagement (CARE)

In partnership with the New Haven community, CARE works in tandem with the PRC to take action against chronic diseases and other challenges that threaten the health of community members. For more information, contact CARE Director Alycia Santilli at santillia1@southernct.edu.

As part of its Racial and Ethnic Approaches to Community Health (REACH grant), CARE has received supplemental funding to promote flu vaccinations to Black and Brown residents in New Haven, and is mobilizing its extensive community-based network to deliver a locally-tailored educational campaign to increase access to flu vaccines and uptake of flu vaccinations.

As part of this grant, recipients create success stories involving our REACH programs that have made the most notable impact in the New Haven community. This year, CARE focused on the work done to mobilize food pantry services during COVID-19, and the impact of active transportation on safety and chronic disease. You can view the success stories here:

• Mobilizing Partners to Fight Hunger During the COVID-19 Crisis in New Haven
• Following a Route to Safety

This fall, CARE started its second cohort for the New Haven Health Leaders program. Its 12 members will participate from September through May. These local residents will put their training into practice by focusing on neighborhood-level health issues, while engaging other residents and community partners toward the mission of improving health for their communities.
Our Winter Newsflash mentioned our partnership with the Naugatuck Valley Health District and Griffin Health on the 2019-2021 CHIP and the work of its Heart Disease Working Group. PRC Co-Director Beth Comerford is chairing the working group, along with Eunice Lisk of Griffin Health and Walter Murphy as a representative of the Valley Chamber of Commerce. Other partners include Massaro Community Farm and TEAM, Inc.

Data from the 2019 Community Index Report shows that heart disease remains a leading cause of premature death among Lower Naugatuck Valley residents. By addressing heart disease, we can also influence other chronic diseases such as diabetes, obesity, stroke, and some cancers. Our overall goal is to reduce rates of premature death due to heart disease through community-wide initiatives addressing modifiable lifestyle risk factors (physical activity, healthy eating, and tobacco use). To accomplish this and address long-term sustainability, we have developed a strategic plan using established community Infrastructure, the Valley Chamber of Commerce, and the Valley Council of Health & Human Services.

Our working group is also collaborating with Dr. Mahmooda Pasha, Associate Director for the World Health Organization Collaborating Center on Social Marketing and Social Change at the University of South Florida, to develop and implement a social marketing campaign. We completed social marketing training this summer, and are developing plans to engage the Valley Chamber and Valley Council members as we enter the project’s second phase. This phase will include more formative research to inform the development of a creative brief, social marketing strategy, and concept testing prior to rolling out the implementation in 2020/2021.

**WELCOME TO MORE MEMBERS OF OUR PRC RESEARCH TEAM**

Susan Burger, PhD, MSN, Associate Professor of Nursing at Southern Connecticut State University, is contributing to the implementation of the PRC’s virtual Diabetes Prevention Program as well as other PRC evaluation projects.

Jaime Foster, PhD, RD, PRC Research Scientist, brings her nutrition and qualitative evaluation expertise and experience in food security to expand our work in those areas.

Amber Hromi-Fielder, PhD, MPH, Associate Research Scientist in the Yale School of Public Health, is leading the Realist Review team.

Debbie Humphries, PhD, MPH, Instructor of Public Health Practice at the Yale School of Public Health, is contributing to the cost-benefit analyses related to the PRC’s virtual Diabetes Prevention Program, as well as PRC evaluation projects such as Wholesome Wave.

Todd McGuire, Co-Founder, Chief Technology Officer, and COO of incentaHEALTH, is partnering with us on the virtual delivery of the Diabetes Prevention Program using his company’s platform.

Andrea Mayer, MA, PRC Research Associate and Ultrasound Technician, provides support to several projects in addition to doing ultrasound scans for our endothelial function studies.

Nisar Khan, MD, Preventive Medicine Resident at Griffin Hospital, is involved with our core research project and is also working on the Realist Review.

Welcome also to these students who are MPH candidates at the Yale School of Public Health:

- Amber Datta and Jasmine Rios are working on the Realist Review.
- Alyssa Kim is supporting implementation of the virtual Diabetes Prevention Program.
- Erin Mathios is supporting PRC evaluation projects, including Wholesome Wave.
- Christabelle Ong is working on the Wholesome Wave evaluation project.
- Roujia Jin is working on the cost-benefit analysis for the virtual Diabetes Prevention Program.
A recent article that I co-authored addresses the social, and economic implications of childhood obesity and its disproportionate effects on disadvantaged populations globally, and makes the case for an equitable nurturing approach to early childhood obesity prevention.

Evidence shows that hundreds of millions of children under the age of 5 years fail to reach their full potential due to the impact of developmental risks on health, well-being and productivity throughout life. Inequitable circumstances such as poverty, food insecurity, and reduced access to health care can lead to a double burden of obesity and undernutrition, due to excess intake of high-calorie foods that fail to provide adequate nourishment. Although inequities are often recognized, their link to obesity is not always addressed. To achieve equitable solutions, we propose a holistic approach in our article that:

1. considers the first 2000 days of life from conception to 5 years as crucial to improve nutrition and prevent obesity;
2. highlights the interaction of children and mothers within a broader context of social-ecological factors in promoting the quality of caregiving;
3. recognizes the role of racism and related stressors as part of adverse child experiences and social determinants of obesity;
4. co-designs interventions in partnership with socially marginalized families and communities.

BOOK REVIEW: Diabetes: A History of Race and Disease
Reviewed by Rafael Pérez-Escamilla, PhD

Our PRC core research project focuses on understanding how best to bring the benefits of telehealth to socioeconomically disadvantaged communities to prevent type 2 diabetes, with the support of community health workers or parish nurses. Given the recent unsettling events highlighting the effects of structural racism on the well-being of many communities, I’ve been looking for a book to help clarify the role of racism in the context of diabetes; and I found it!

In her book ‘Diabetes: A History of Race and Disease’ (Yale University Press, 2020), Arleen Marcia Tuchman takes us through over 100 years of history on the racialization of diabetes in the U.S. and its aftermath. Since the 1980s, medical organizations and the media have persistently linked diabetes with being African American, Hispanic or Native American. Tuchman’s book features an American Diabetes Association poster from the 1990s that displayed the very visible message ‘Diabetes Favor Minorities’ with images portraying a Hispanic man, and an African American and a Native American woman, without any historical or social context (p. 189).

Although there is compelling epidemiological evidence that these ethnic/racial groups have an increased risk for developing type 2 diabetes, the medical establishment and decision makers have instead chosen to focus heavily on failed individual choices or race defects. For example, Tuchman documents a well-known physician’s statement in the 1980’s that ‘Mexican Americans are a diabetic race’ (p. XIV), which failed to acknowledge any social determinants of health such as racism, chronic toxic stress, food insecurity and lack of health care access. This stereotype has been perpetuated even within the National Institutes of Health. Decades ago, Dr. Elliott Joslin, one of the founding fathers of diabetes research, referred to diabetes as the ‘penalty of obesity’ (p. 192), supporting the narrative that individuals who develop diabetes are deserving of it due to poor individual lifestyle choices including diet and physical inactivity.

Extensive research on social determinants of health shows that structural barriers (e.g., racism, social injustice and poverty) – not individual level choices – explain the majority of diabetes risk factors among so-called ‘minority groups.’ Further racializing diabetes also does a huge disservice to the millions of poor White individuals affected by it due to lack of proper access to resources that can help alleviate the social determinants of health.

In the spirit of Arleen Tuchman’s book, I take special pride in our PRC research project design, which is rooted in a community assets social justice perspective and supports the prevention of type 2 diabetes among socioeconomically disadvantaged communities and individuals with diverse ethnic/racial backgrounds.
In September, we sent a letter of intent to the Robert Wood Johnson Foundation in response to a request for policy research proposals to increase water and reduce sugary sweetened beverage intake among children ages 0 to 5 years. Although we were not selected to submit a proposal, we’ll look for other funding opportunities to conduct policy research on this topic.

To let us know what you are doing and how our research might assist you in your work, contact Beth Comerford, MS, PRC Co-Director at beth.comerford@yalegriffinprc.org.

This Newsflash is a product of a Health Promotion and Disease Prevention Research Center supported by Cooperative Agreement Number DP006380 from the Centers for Disease Control and Prevention. Its contents are solely the responsibility of the authors, and do not necessarily represent the official views of the Centers for Disease Control and Prevention and Prevention of the Department of Health and Human Services.