

# Improving Community Health by Reducing Risk Factors for Type 2 Diabetes

A Translational Science Benefits Model case study



## NAME/TITLE OF INVESTIGATOR:

This project is a result of an academic-community partnership between:

- Oregon Health & Science University (OHSU), Oregon Clinical and Translational Research Institute (OCTRI) Community Research Hub, Community Research Liaison, Steven Blakesley, MA
- Oregon State University Extension Services (OSU), Assistant Professor of Practice, Family & Community Health, Dusti Linnell, Ph.D.
- Tillamook County Wellness Coalition
- Tillamook County Community Health Centers (Backbone agency)
- Tillamook County Commissioners (Political support)
- Financial Support: Tillamook County Community Health Centers, Adventist Health Medical Center, Oregon Health Authority (OHA)



## SUMMARY OF THE PROJECT

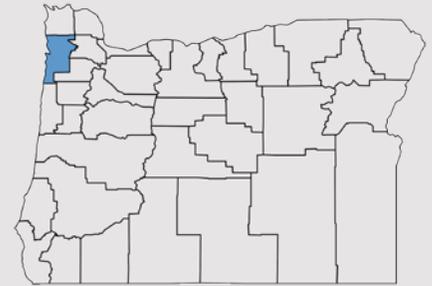
Tillamook County Wellness Coalition, a multi-sector collaboration which works to improve the health of its community, was established in 2016. Over sixty community members and employees in Tillamook County have joined the Coalition so far (see Coalition Representation).

In 2017, the Coalition, with support from OHSU and OSU, established a 10-year goal to reduce the risks for type 2 diabetes in Tillamook County. Recognizing that these risks are related to many complex social factors, the Coalition established via five areas for action:

1. Conduct health promotion campaigns to influence beliefs, attitudes, and knowledge;
2. Increase access to healthy foods;
3. Increase access to physical activity;
4. Increase diabetes risk screenings; and
5. Work with employers to develop and implement wellness policies and programs.

## PROJECT LOCATION

Tillamook County, Oregon



## PROJECT DURATION

2017-2027

## COALITION REPRESENTATION

- Chamber of Commerce
- Tillamook County People's Utility District
- Visit Tillamook Coast
- U.S. Department of Forestry
- Tillamook Family Counseling Center
- Columbia Pacific Coordinated Care Organization Community Advisory Council
- Bureau of Land Management
- Tillamook County Futures Council
- School District Superintendent
- City and county elected officials
- Tillamook County Creamery Association
- Oregon Health Authority
- Adventist Health Tillamook Regional Medical Center
- Oregon Dairy and Nutrition Council

## SIGNIFICANCE OF THE PROGRAM

Diabetes prevention was selected from five priorities derived from community health assessments conducted by various community stakeholders. Using a transparent and collaborative decision-making process, the coalition chose diabetes prevention for several reasons. First, the diabetes rate in Tillamook County was higher than the state rate,<sup>i</sup> and regional coordinated care organization (CCO) data showed that A1C control was below target.<sup>ii,iii</sup> Additionally, interventions for diabetes prevention were thought to have the potential to impact other chronic conditions such as heart disease and mental health.

Not only is the goal of this program to prevent diabetes in Tillamook County, but also it strives to build community capacity for addressing complex health issues through a Collective Impact approach<sup>iv</sup>. Academic partners provide support for coalition capacity building through education about diabetes and evidence-based prevention, guidance on measurement strategies, and leadership development for effective collaboration. Changes in collaboration will be assessed through the Collaboration Assessment Tool.<sup>v</sup>

## SIGNIFICANCE OF THE APPROACH

The Coalition model combines the strengths and resources of two academic institutions to build the skills and framework for facilitating collective action with a community goal. Community capacity has been built through targeted trainings, strategic planning, bringing in topic experts to work alongside the coalition, providing technical assistance, and on-the-ground meeting facilitation.

The Coalition's approach to reducing the risks of type 2 diabetes is to focus on social determinants of health by increasing healthy lifestyle choice options (e.g., physical activity, access to healthy food, better work environments), as well as provide better access to healthcare services, including general health screenings (See Translational Science Benefits Summary<sup>vi</sup>). This broad approach to complex problem solving is further strengthened through Collective Impact, which facilitates focus on broad and systemic efforts to create meaningful change.

TRANSLATIONAL SCIENCE BENEFITS SUMMARY		
Benefit	Domain	Indicator
Provide physical activity opportunities to youth & adults	 COMMUNITY	Disease Prevention & Reduction
Increase access to healthy eating options	 COMMUNITY	Disease Prevention & Reduction
Increase screening rates to identify diabetes risk factors, including social determinants of health	 COMMUNITY	Community Health Services
Reduce the number of people with pre-diabetes and diabetes risk factors	 COMMUNITY	Life Expectancy & Quality of Life
Increase and inspire health awareness	 COMMUNITY	Health Education Resources
Reduce social and economic costs related to pre-diabetes and unhealthy lifestyles	 ECONOMIC	Societal and Financial Costs of Illness
Inform local stakeholders	 POLICY	Committee Participation
Disseminate project progress	 POLICY	Scientific Research Reports

## BENEFITS OF THE PROGRAM

In the early stages of this program, physical activity opportunities have increased by providing school events that encourage students to explore the many hiking trails in the region; the reach and impact of these events are being measured via student surveys. Additionally, the U.S. Forest Service and local tourism agency are collecting data for mapping outdoor activity locations and trails throughout the county, with the goal of increasing trail accessibility. Step It Up, a walking program originally designed for cancer survivors but now open to the broader community, continues to track participation and now has over 50 participants. To increase healthy eating options, the Coalition is focusing on ways to increase accessibility of fruits and vegetables, including a mobile farmer's market that will travel to rural areas of the Tillamook County.

Increased screenings are being instituted both through the workplace and clinic efforts. A mixed-methods approach, including interviews and surveys, is being used to understand diabetes-related screening, referral, and follow-up in local clinical and community organizations. All county clinics are supporting health screenings by working collectively to develop a universal screening tool and initiating a closed loop referral system to ensure patients are obtaining the care they need. Large local

employers aim to support smaller businesses by providing opportunities (e.g., health fairs, screening days, immunizations) to not just employees and their families, but everyone in the community.

An overall health awareness video campaign has been launched that highlights both local efforts (e.g., the trail campaign) and stories from community members who are making changes to their health behaviors. Video dissemination is being tracked via web and social media analytics. Members of the Coalition keep both Tillamook County leaders and the scientific community informed of their efforts by participating in local advisory boards and presenting at conferences such as the Oregon Public Health Association and Oregon Rural Health Conferences.

Through these collective efforts, Tillamook County's aim is to reduce social and economic costs and increase the quality of life of its residents by reducing the risks of type 2 diabetes in the community – most notably through increased exercise and healthy eating habits. Changes will be monitored through required Community Health Assessments (CHAs) and other measures such as CCO metrics and Robert Wood Johnson Foundation County Health Rankings.

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<sup>i</sup> Columbia Pacific CCO (2014). Tillamook County Health Assessment. Accessed online October 4, 2019 at <http://colpachealth.org/docs/default-source/default-document-library/tillamookcha-20149266CC131061.pdf?sfvrsn=0>

<sup>ii</sup> Jozsa, M. (2016). A Walkthrough Chronic Disease in Our Community: Diabetes, Cardiovascular Disease, Colorectal Cancer. Presentation at the October 13, 2017 Tillamook County Year of Wellness Workshop: Tillamook, OR.

<sup>iii</sup> 2019 CCO Incentive Measure Benchmarks, published September 13, 2019. Accessed online October 4, 2019 at <https://www.oregon.gov/oha/HPA/ANALYTICS/CCOMetrics/2019-Incentive-Measure-Benchmarks.pdf>

<sup>iv</sup> Kania, John, and Mark Kramer. "Collective Impact." *Stanford Social Innovation Review* 9, no. 1 (Winter 2011): 36–41.

<sup>v</sup> Marek, L. I., Brock, D. P., & Savla, J. (2015). Evaluating collaboration for effectiveness: Conceptualization and measurement. *American Journal of Evaluation*, 36, 67–85. The seven domains assessed through this tool are: Context, Members, Process and Organization, Communication, Function, Resources, and Leadership.

<sup>vi</sup> Domains and Indicators are derived from Luke, D.A., Sarli, C.C., Suiter, A. M., Carothers, B.J., Combs, T.B., Allen, J. L., Beers, C. E., & Evanoff, B. A. (2018). The Translational Science Benefits Model: A new framework for assessing the health and societal benefits of clinical and translational sciences. *Clin Transl Sci.*, 11, 77–84.