

CT PHARMACIST P_RN LINK

Pre-Diabetes and the Diabetes Prevention Program

Pre-diabetes is a condition where blood glucose levels are higher than normal – but not high enough to be diagnosed as diabetes. Pre-diabetes can lead to heart disease, stroke, and type 2 diabetes. 5-10% of cases of pre-diabetes convert to diabetes a year. Many people with pre-diabetes do not know that they have the condition.

- According to the Centers for Disease Control and Prevention (CDC), only 7% of people with pre-diabetes in the U.S. are aware of their condition.
- An estimated 6.7% of Connecticut adults (18+) report that a health care provider told them they have pre-diabetes.
- Data from the National Health and Nutrition Examination Survey estimate that 79 million Americans (or 35% of U.S. adults aged 20 and older) have pre-diabetes.
 - When the applied to our state's population, **more than 930,000 Connecticut adults** aged 20 years and older are estimated to **have pre-diabetes**.

Please help get the word out about pre-diabetes!

Attached is the Diabetes Prevention Program to increase pre-diabetes awareness for you to display at your pharmacy.

If you would like copies of the cards mailed to your pharmacy, please contact cindy.kozak@ct.gov

JUNE 2017

Welcome!

As July 2017 nears, we want to welcome our 4th cohort of pharmacists!

- **Kristen Cyr**, Graeber's Healthmart Pharmacy in Meriden
- **Frank Deferio**, Oxford Pharmacy in Oxford
- **Sandy Grillo**, Utley & Jones Pharmacy in Norwich
- **Amy Kurzatkowski**, St. Vincent's Pharmacy in Bridgeport
- **Krista Mikkelson**, Utley & Jones Pharmacy in Norwich
- **Ed Schreiner**, Stolls Pharmacy in Waterbury

And to our returning pharmacists who will join us for another year-

- **Lukasz Jamrozek**, Beacon Prescriptions in Southington
- **Amy Ricupero**, Pequot Pharmaceutical Network in Mashantucket

Class of 2017 Graduates!

Congratulations to our student researchers, **Abigail Zeiner** and **Sarah Leverett**, who graduated with their Doctor of Pharmacy in May!

We are *so grateful* for their assistance over the past 4 years and wish them to best on their future endeavors!

Please share recent accomplishments and noteworthy information with Marissa (marissa.salvo@uconn.edu).

Our Success: Grant Update

Congratulations on all of your efforts in improving the care of our patients!

- **63.7%** of patients have **achieved a blood pressure goal** of < 140/90 mmHg.
 - This is an overall 48% improvement from the patients' initial encounter.
 - And has increased from 59.8% in September 2016.
- **75.9%** of patients have **achieved an A1C < 9%**.
 - This is an overall 27.4% improvement from the patients' initial encounter.
 - And has increased from 68% in September 2016.

Please continue sending your data

Importance of Lifestyle Changes

A major multicenter clinical research study showed that people with pre-diabetes who take part in a structured lifestyle change program can **reduce their risk of developing type 2 diabetes by 58%** (71% for people over 60 years old).

This finding was the result of the program helping people **lose 5% to 7%** of their body weight through **healthier eating** and 150 minutes of **physical activity** a week.

For a person who weighs 200 pounds, losing 5% to 7% of their body weight means losing just 10 to 14 pounds. It doesn't take a drastic weight loss to make a big impact. And the impact can last for years to come!

Further research has found that even after 10 years, people who completed a diabetes prevention lifestyle change program were 1/3 less likely to develop type 2 diabetes.

Research Team

Primary Investigators

Tom Buckley, RPh, MPH
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Marissa Salvo, PharmD, BCACP
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Pharmacy Students

Alex Kusher, Class of 2018

Corey Dinunno, Class of 2020

Please remember that Marissa is available as a resource via phone or e-mail.

Study Overview: Pharmacist Interventions on Cardiovascular Risk

Overview: This randomized controlled trial was conducted in 56 community pharmacies in which pharmacists recruited patients at high cardiovascular disease (CVD) risk.

Study Groups: Patients either received usual care (no intervention) or pharmacist intervention, including *medication therapy management review*, CVD risk assessment, and education.

Pharmacists caring for patients in the intervention group ordered lab work and prescribed medications.

Follow-up: Patients were followed up monthly for 3 months.

Primary Outcome: Difference in in estimated change of CVD risk, assessed using the highest of the Framingham, International, or United Kingdom Prospective Diabetes Study (UPKDS) risk score at 3 months.

Enrollment: 723 patients (mean age 62 years old, 58% male, and 27% smokers)

Results: A 21% difference in change in risk for CVD events ($p < 0.001$) was found.

Patients enrolled in the pharmacist intervention arm achieved statically significant reductions in:

- LDL (-0.2 mmol/L, $p < 0.001$)
- Systolic blood pressure (-9.37 mmHg, $p < 0.001$)
- A1c (-0.92%, $p < 0.001$)
- Smoking cessation (20.2%, $p < 0.001$)

Conclusion: Large randomized trial of CVD risk reduction led by community pharmacists, demonstrating a significant reduction in CVD events.

Take-away: Expanding community pharmacists' scope of practice could significantly and positively impact public health implications!