

Impact of Policy Changes on the Delivery of Community Medication Review Services Among Adults with Diabetes in Ontario

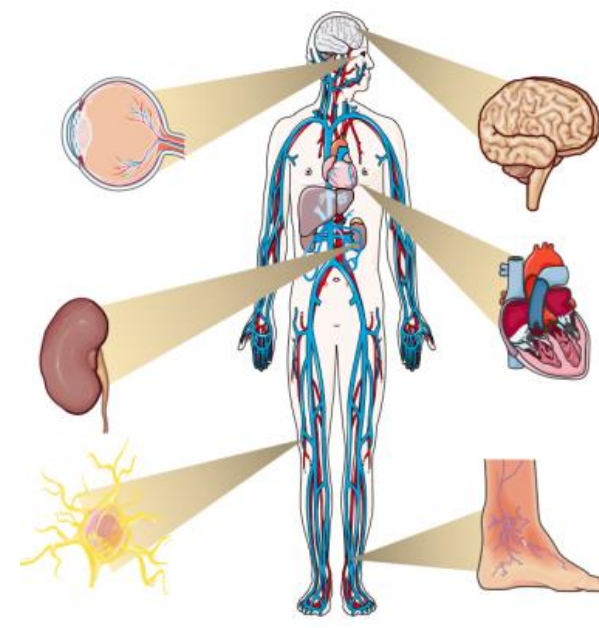
Ahmad Shakeri¹, John-Michael Gamble², Lori MacCallum¹, Lisa Dolovich¹, Nancy He¹, Suzanne M. Cadarette¹

¹ University of Toronto, Toronto, ON, Canada; ² University of Waterloo, Kitchener, ON, Canada

Background

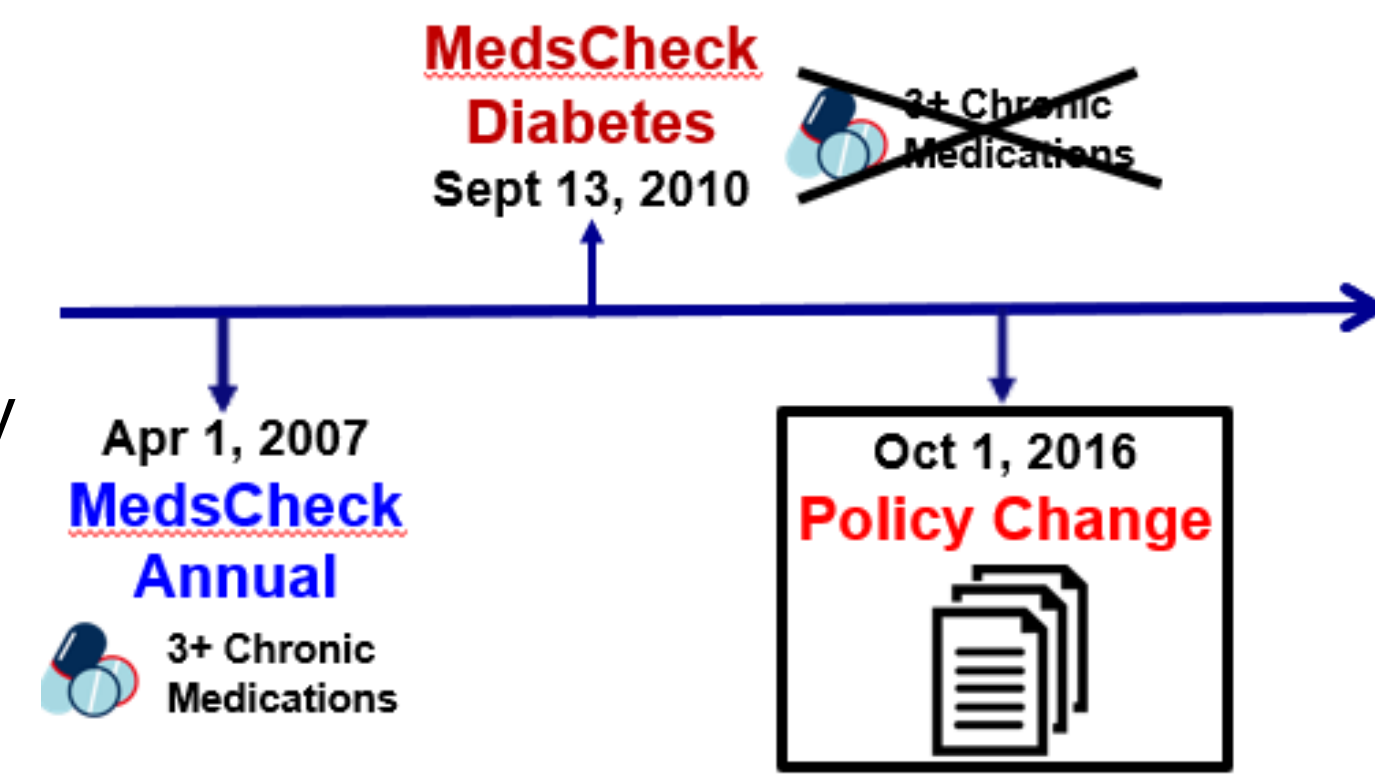
Diabetes

- Metabolic disorder characterized by hyperglycemia
- If left untreated, hyperglycemia is associated with various complications
- A complicated condition to manage:
 - Health/life-style, glucose monitoring, and medications



Ontario MedsCheck Program

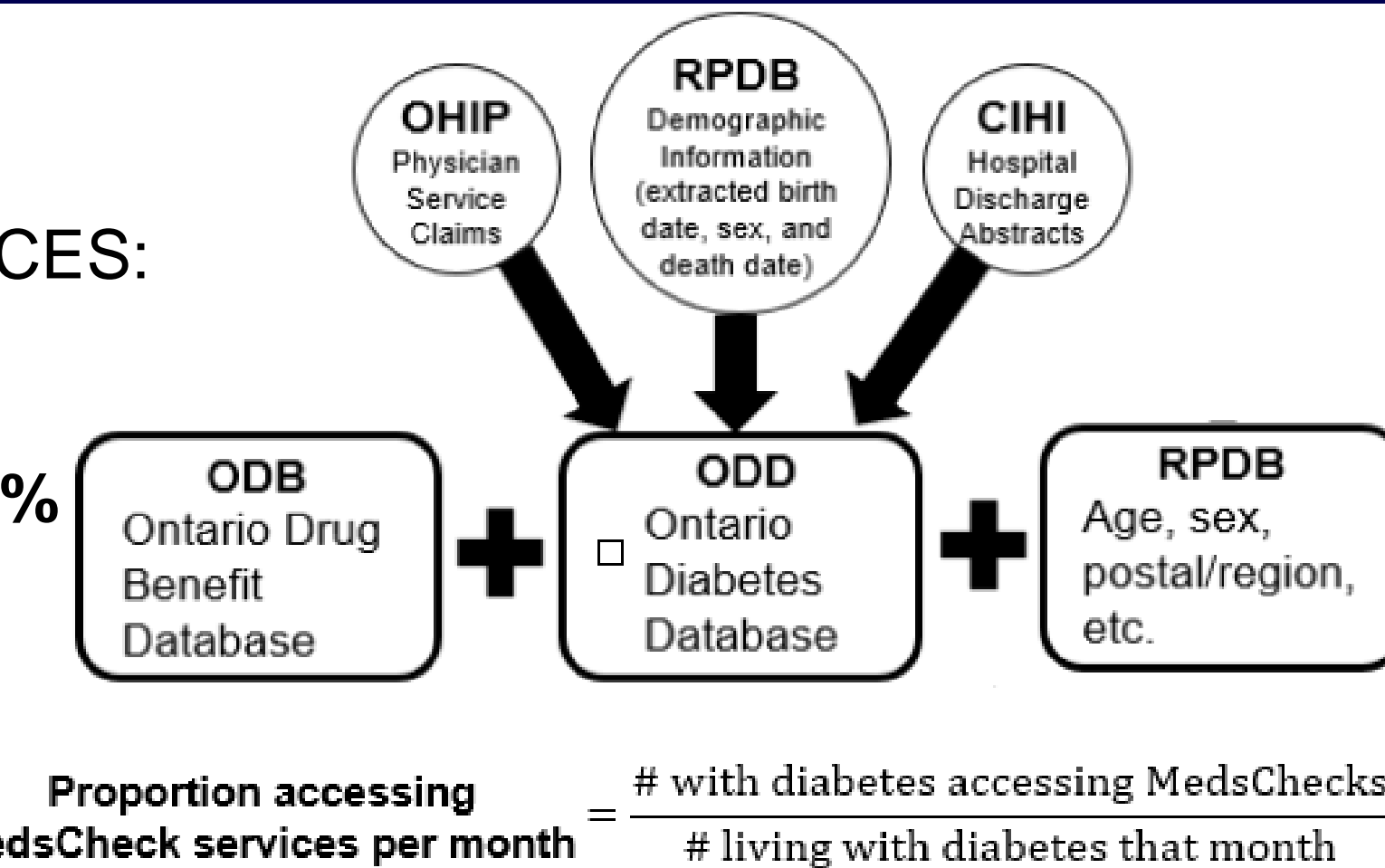
- Pharmacists improve diabetes health outcomes
- Medication review services provided by community pharmacists in Ontario:
 - MedsCheck Annual
 - MedsCheck Diabetes



Objective Describe and examine the impact of policy changes (2010 and 2016) on the proportion of patients with diabetes that receive MedsCheck services

Methods

- Administrative healthcare data at ICES:
 - Ontario Diabetes Database
 - Sensitivity: 90%
 - Positive-Predictive Value: 91%



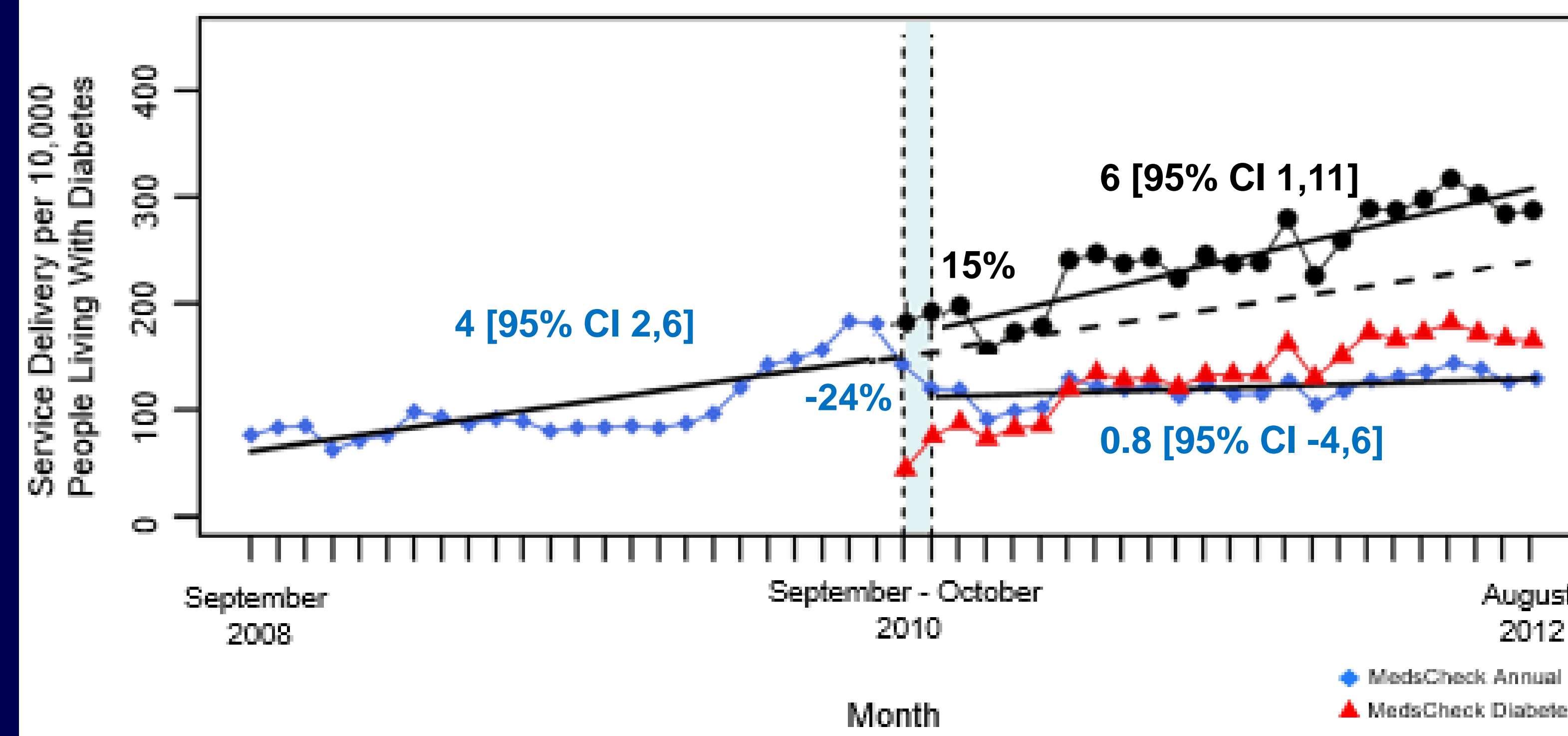
- Monthly proportion of patients with diabetes that receive MedsCheck services:
- Interrupted time series analysis (segmented linear regression) examined the impact of the policy changes on the proportion of patients living with diabetes that access MedsCheck services

$$y = \beta_0 + \beta_1 \times \text{time} + \beta_2 \times \text{policy change} + \beta_3 \times \text{time after} + e$$

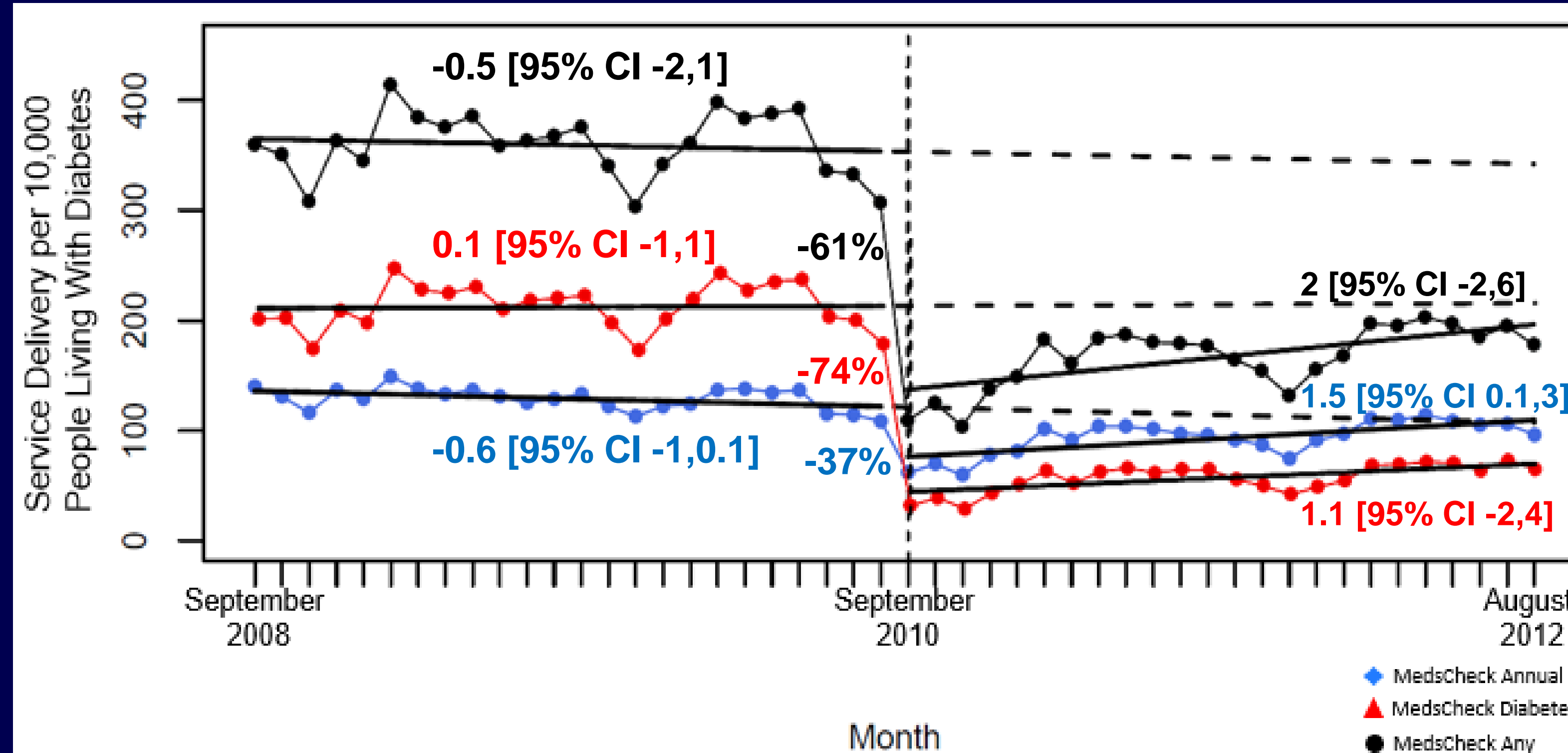
- Analyses were also stratified by patients ≥ 66 and < 66 years of age

Results

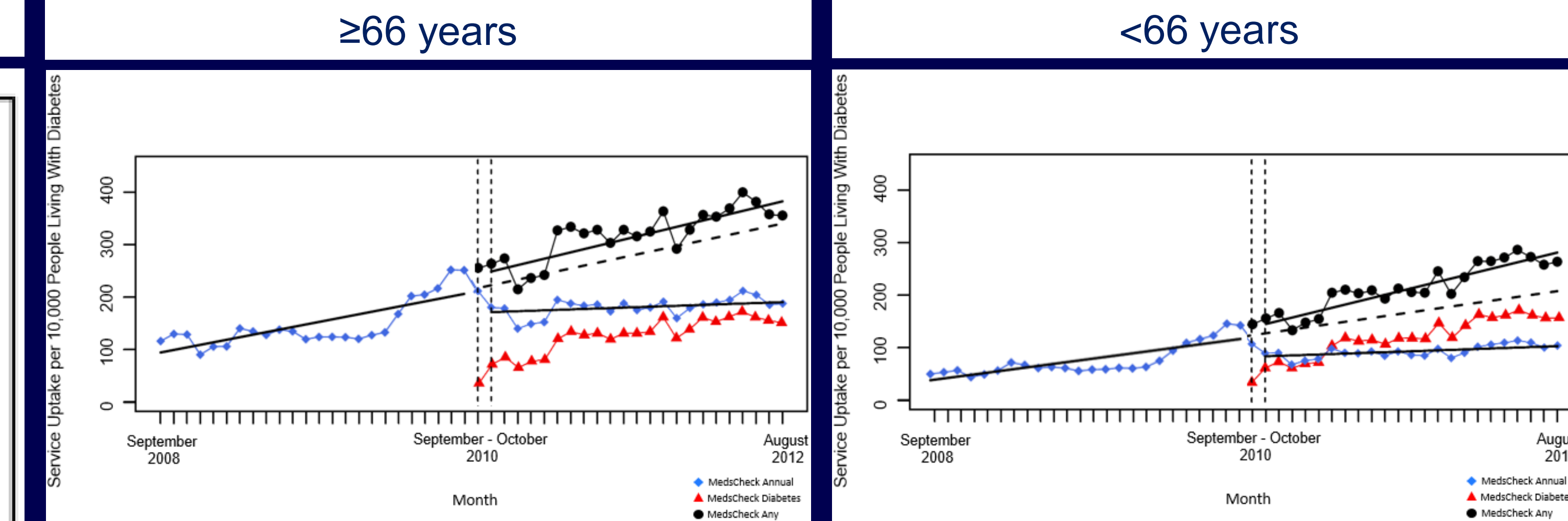
2010 Policy Change: Overall Analysis



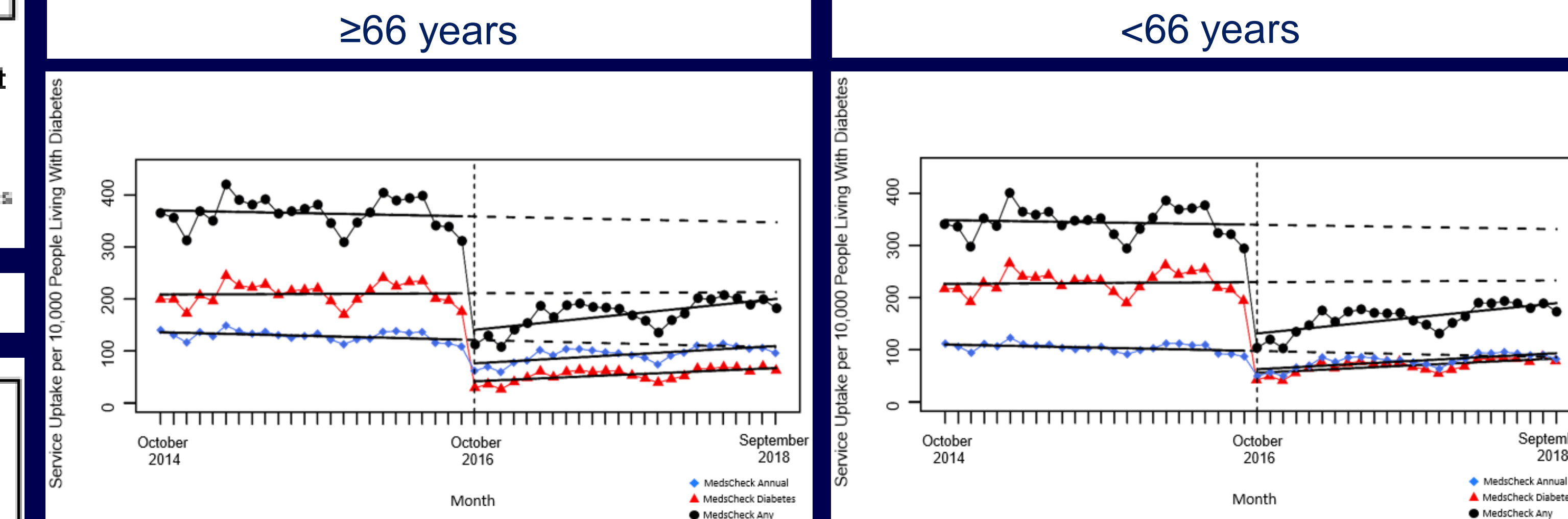
2016 Policy Change: Overall Analysis



2010 Policy Change: Age stratified Analysis



2016 Policy Change: Age stratified Analysis



Conclusions and Future Research

- 2010 policy change: **slight increase** in proportion of patients that access MedsCheck programs
 - Attributed to the introduction MedsCheck diabetes
- 2016 policy change: **dramatic decrease** in proportion of patients that access MedsCheck programs
 - Possibility of displacement
- Future research should aim to describe impact of policy changes on the **characteristics of patients** with diabetes that receive MedsCheck services

Acknowledgements