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## Background:

The rise in Diabetes Mellitus has become one of the major public health issues of our time. Fueled by the rise in obesity, the number of people with diabetes is expected to double to forty-eight million by 2023. The Chronic Care Model (CCM) was designed as a means to help enhance health care delivery by changing the routine delivery of ambulatory care.

## Objectives:

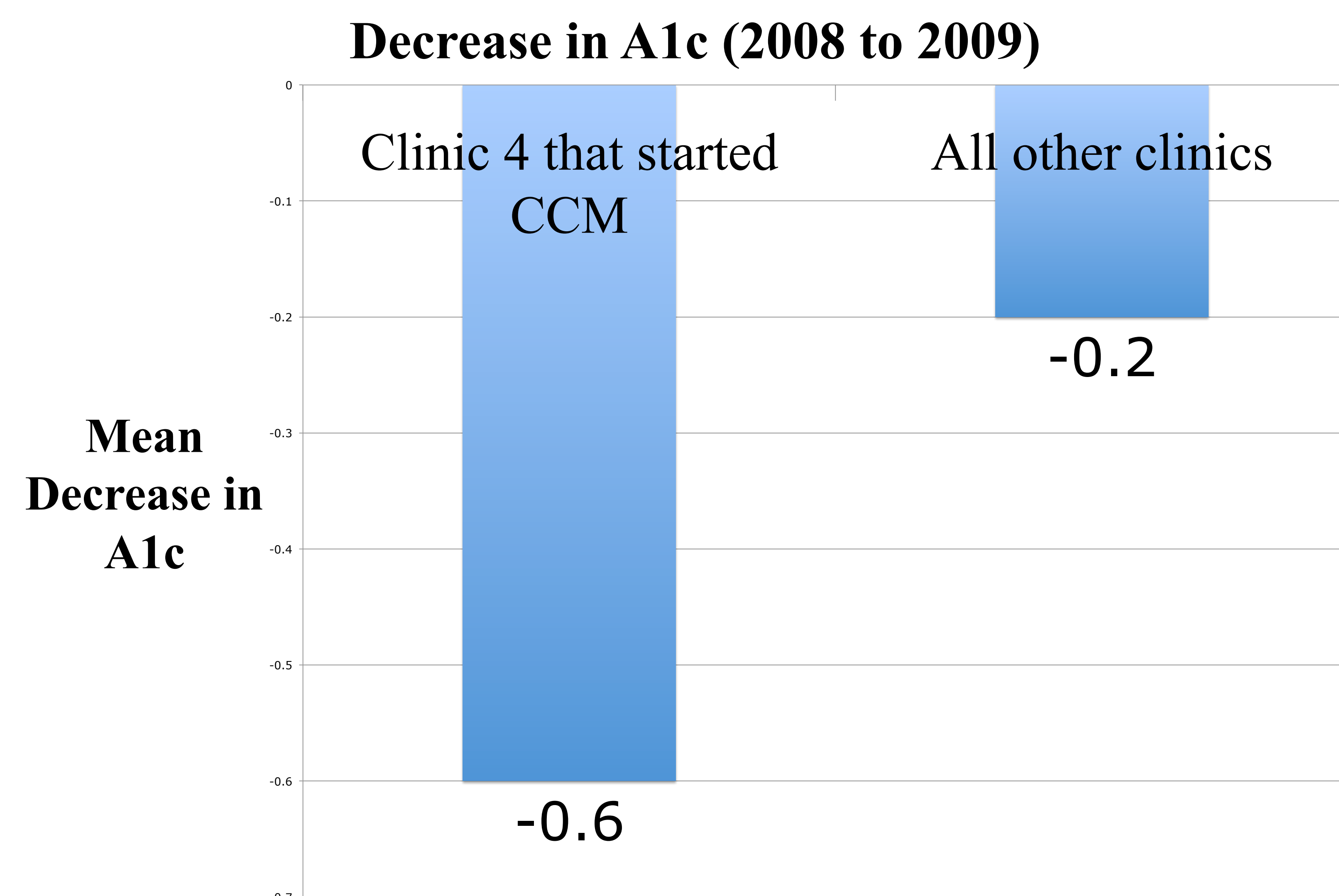
To determine whether using the chronic care model (CCM) in an inner-city indigent population leads to improved clinical outcomes for people with diabetes.

## Methods:

This was an observational case-control study of 744 diabetic patients inside the five Cincinnati Health Department clinics; 356 of those patients were treated at acute care clinics (ACC) and 388 were treated at CCM clinics during 2008 and 2009. Data was collected at two time periods (2008 and 2009) including: Hemoglobin A1C (A1C), Low Density Lipoprotein (LDL), and Blood Pressure. Demographic variables collected included: age, gender, race, weight, and height.

## Results:

- A total of 679 patients had matched A1c levels in 2008 and 2009
- Overall- A1C levels improved from 2008 to 2009 (8.1% vs. 7.8%; decrease -0.3%, 95% CI -0.41 to -0.15, p<0.001)
- Clinic 4, that introduced the CCM during the study period, had:
  - The largest mean decrease in A1c levels (decrease of -0.6% vs. -0.2%; 95% CI -0.73 to -0.12, p=0.006).
  - A1c levels in clinic 4 decreased from 8.5% to 7.9%.
- The clinic that had been using the CCM since 2006 had the lowest average A1C (7.4%), mean LDL (88mg/dL), and mean Blood Pressure (124/72) of all the clinics but also the lowest decrease in A1C (0.01%).



## Conclusion:

- The CCM improved diabetes care in a largely indigent inner-city population.
- Use of the CCM appears to maintain improvements; however, there appears to be a plateau in the effect.