

# Linking All-Payer Claims and Clinical Data: Diabetes Case Study

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# Data Sources

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Vermont Health Care Uniform Reporting and Evaluation System (VHCURES):  
Vermont's All-Payer Claims Database

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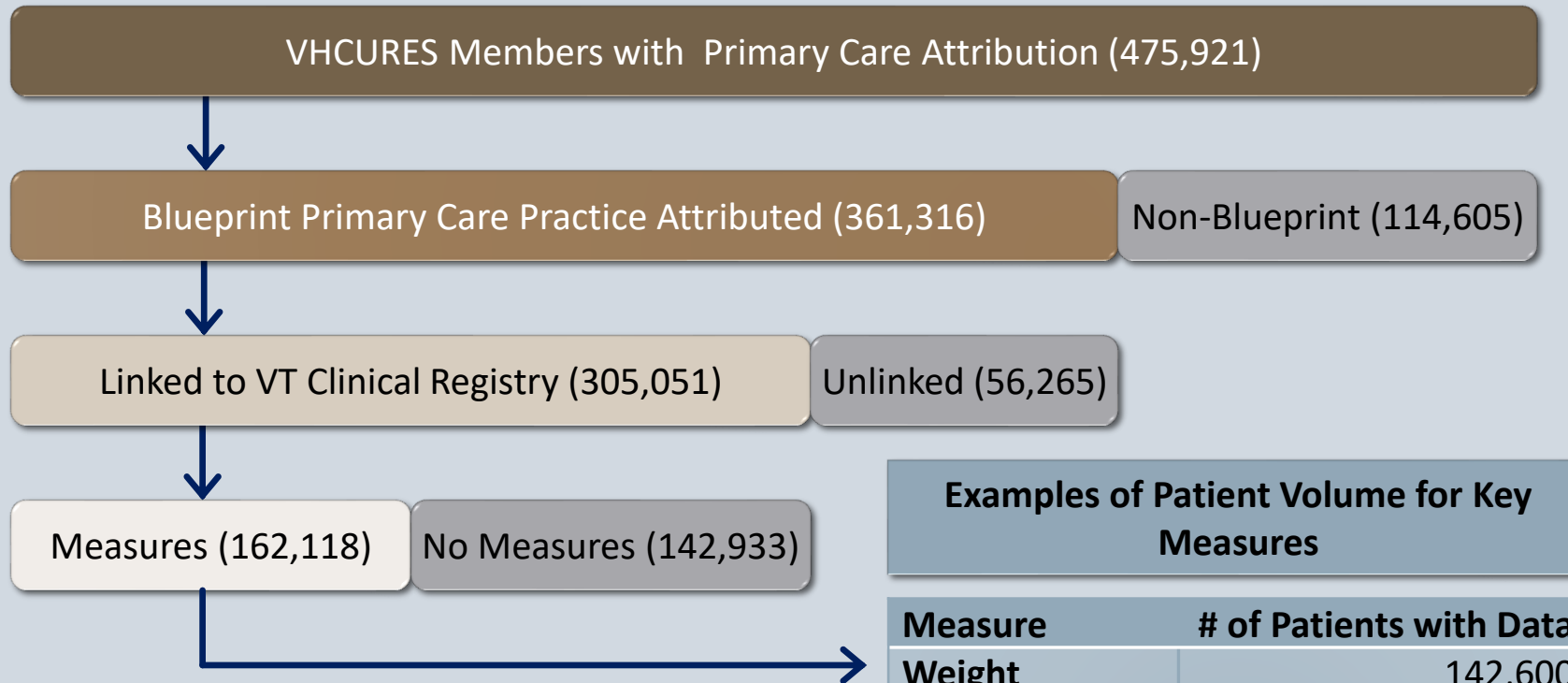
Vermont Health Information Exchange (VHIE), administered by Vermont Information Technology Leaders (VITL)

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Vermont Clinical Registry, populated by the VHIE

# Linking Claims & Clinical Data – 2014\*

## Enhancing Blueprint Reporting: Clinical Outcomes



Examples of Patient Volume for Key Measures	
Measure	# of Patients with Data
Weight	142,600
Blood pressure	140,286
BMI	122,428
Triglycerides	44,639
LDL-C	43,652
Tobacco use	28,779
HbA1c	21,418

\*Calendar year 2014 uses the following time periods:

- VHCURES Member Eligibility: 01/01/2014 -- 12/31/2014
- Primary Care Attribution: 24-month lookback
- VT Clinical Registry Linkage: No date limitation
- VT Clinical Registry Measures: 01/01/2014 -- 12/31/2014

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# Statewide Data Infrastructure Supports Population Health Management: Diabetes Case Study

Craig Jones, MD; Mary Kate Mohlman, PhD; David Jorgenson, MS; Karl Finison, MA; Katie McGee, MS; and Hans Kastensmith

The use of statewide data infrastructure is effective at identifying criteria for diabetes outreach and management at the whole-population level.

*Am J Manag Care. 2017;23(10):e331-e339*

# Population Health Management: Diabetes Case Study

## Goals:

1. Evaluate whether glycemic control was associated with same-year expenditures
2. Identify clinical risk factors and comorbid conditions with strong associations to same-year expenditures
3. Identify selection criteria for outreach and panel management

Study population included commercial, Medicaid, and Medicare beneficiaries 18-75 with continuous enrollment identified as having diabetes in the year 2014

# Study Population

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- Period: January 2014 through December 2014
- Age 18 to 75
- Continuous Enrollment
- Diabetes Categorization Defined:
  - At least 1 acute inpatient visit or 2 outpatient visit indicating diabetes, **or**
  - Received insulin, hypoglycemics, or antihyperglycemics
  - Lookback period: 24 months

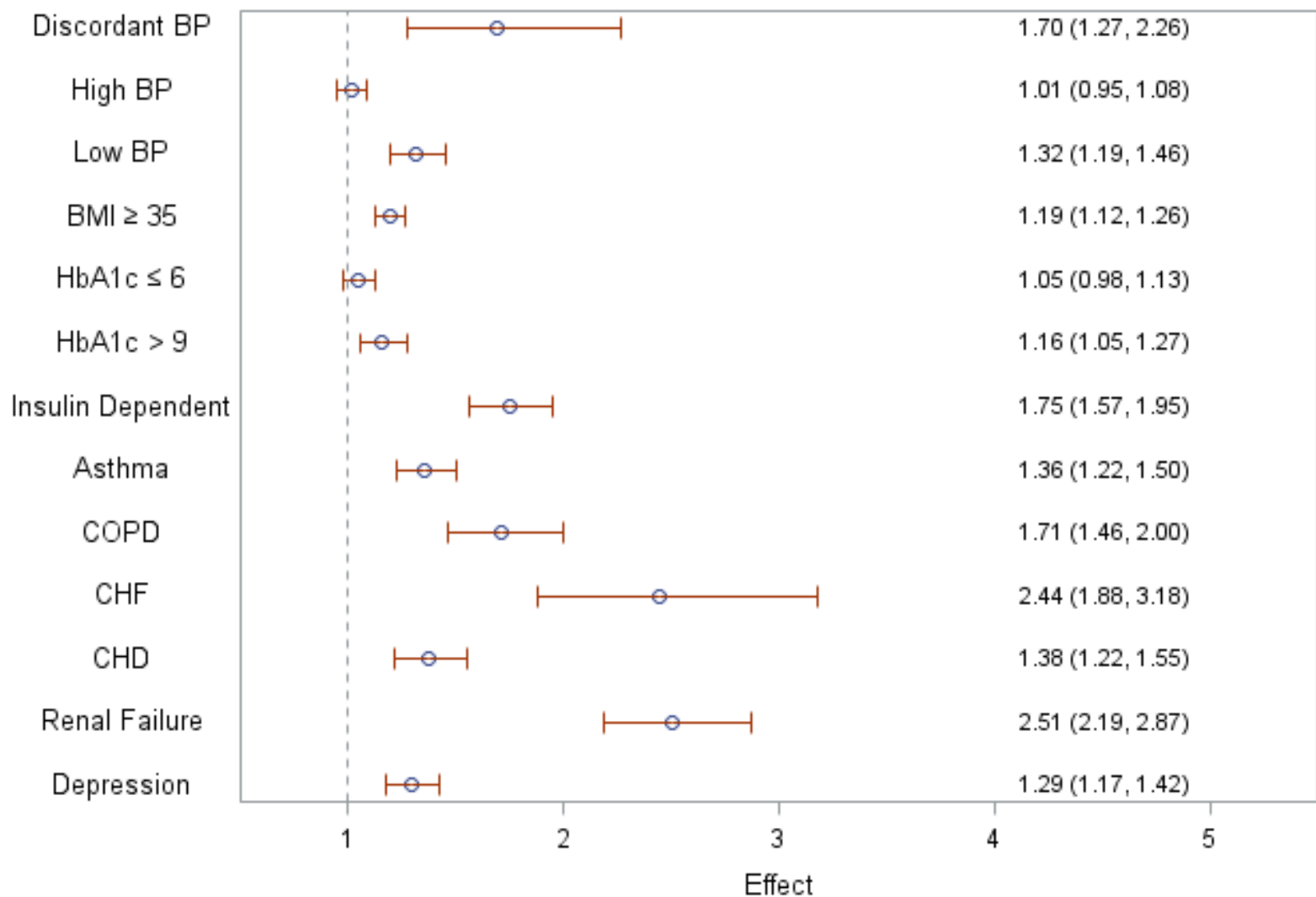
283,000 attributed to patient-centered medical homes

19,000 (6.7%) were categorized as having diabetes

6,719 (35.4%) had clinical data that could be linked to claims data.

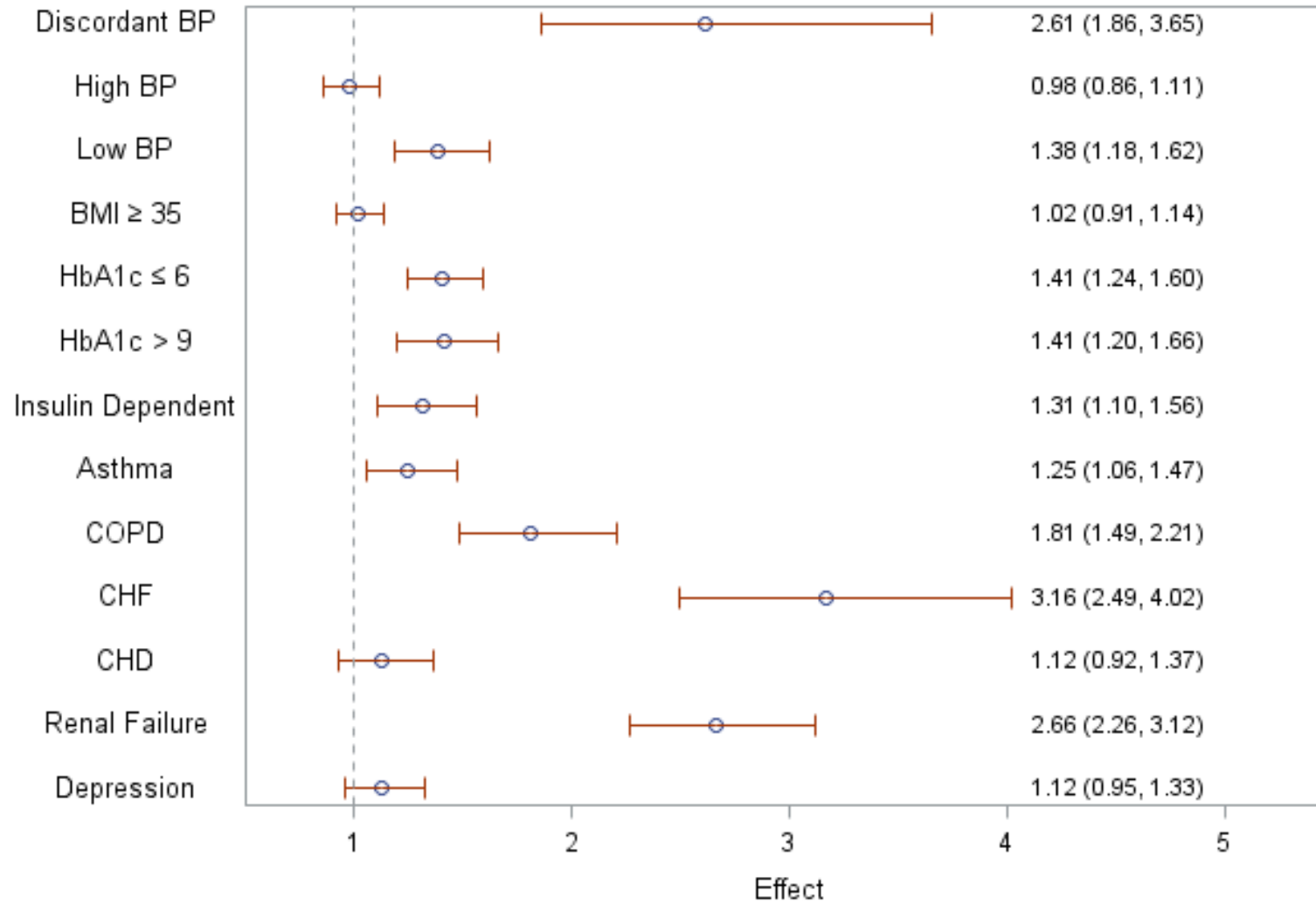


### Impact of Variable on Cost Relative Effect with 95% CL





### Impact of Variable on Inpatient Admissions Relative Effect with 95% CL



## ACKNOWLEDGEMENTS

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Onpoint Health Data

Capitol Health Associates

VITL

## QUESTIONS? COMMENTS?

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