#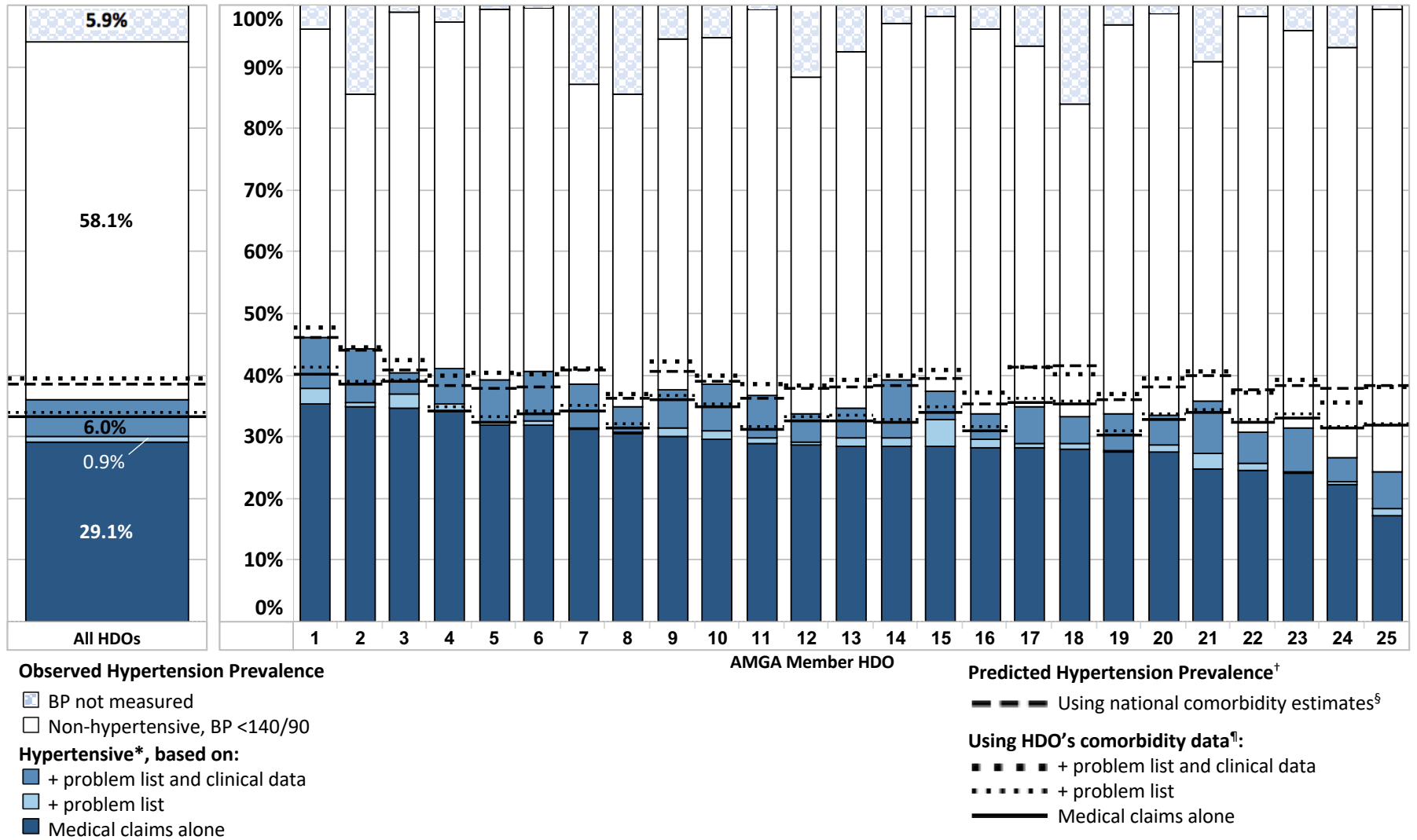 SUPPLEMENTARY FIGURE: Predicted vs. observed prevalence of hypertension among AMGA member health care delivery organizations, 2016

Observed Hypertension Prevalence

- ▦ BP not measured
- ☐ Non-hypertensive, BP <140/90

Hypertensive*, based on:

- ■ + problem list and clinical data
- ■ + problem list
- ■ Medical claims alone

Predicted Hypertension Prevalence[†]

- ▬ ▬ ▬ Using national comorbidity estimates[§]

Using HDO's comorbidity data[¶]:

- ▪ ▪ ▪ ▪ + problem list and clinical data
- • • • • • + problem list
- ▬▬▬ Medical claims alone

Abbreviations: HDO = healthcare delivery organization; BP = blood pressure
Footnotes on next page

* Defined using: 1) "Medical claims alone"—at least one diagnosis code for hypertension on an outbound billing claim (International Classification of Disease, Tenth Revision, Clinical Modification (ICD-10-CM) code of I10, I11.X, I12.X, or I13.X); 2) "+ problem list"—additional patients who had a diagnosis code for "hypertension" on their EHR problem list (same codes as designated for claims); and 3) "+ problem list and clinical data"—additional patients who had elevated in-office BP readings, defined as a single reading ≥160/100 mm Hg or two readings on different days ≥140/90 mm Hg.

† Determined by applying the Million Hearts Hypertension Prevalence Estimator Tool to the HDOs' data. The predicted hypertension prevalence is estimated based on the distribution of patients by age, gender, race-ethnicity, and predicted or diagnosed comorbidity prevalence (presence of 0, 1, or 2–3 of the following conditions: obesity, diabetes and chronic kidney disease).

§ Predicted prevalence of the three comorbidities within the HDO's patient population is used to predict the HDO's hypertension prevalence. Predicted comorbidity prevalence is estimated based on the HDO's age, gender, and race-ethnicity characteristics and use of National Health and Nutrition Examination Survey data.

¶ Observed prevalence of the three comorbidities within the HDO's patient population is used to predict the HDO's hypertension prevalence. Comorbidities were identified based on: 1) "Medical claims only"—at least one diagnosis code for the condition on an outbound billing claim (ICD-10-CM code of E66.09, E66.1, E66.8, E66.9, E66.01, E66.2, Z68.3X, Z68.4X, Z68.54, or R93.9 for obesity; E10.X or E11.X for diabetes; and I12.X, I13.X, or N18.X for chronic kidney disease); 2) "+ problem list"—additional patients who had a diagnosis code for each condition on their EHR problem list (same codes as designated for claims); and 3) "+ problem list and clinical data"—additional patients who had a body mass index ≥30 kg/m^2 for obesity; hemoglobin A1c of ≥6.5%, plasma glucose of ≥126 mg/dL, fasting plasma glucose of ≥126 mg/dL, or a glucose tolerance test of ≥200 mg/dL for diabetes; and an estimated glomerular filtration rate of <60 mL/min per 1.73 m^2 for chronic kidney disease.