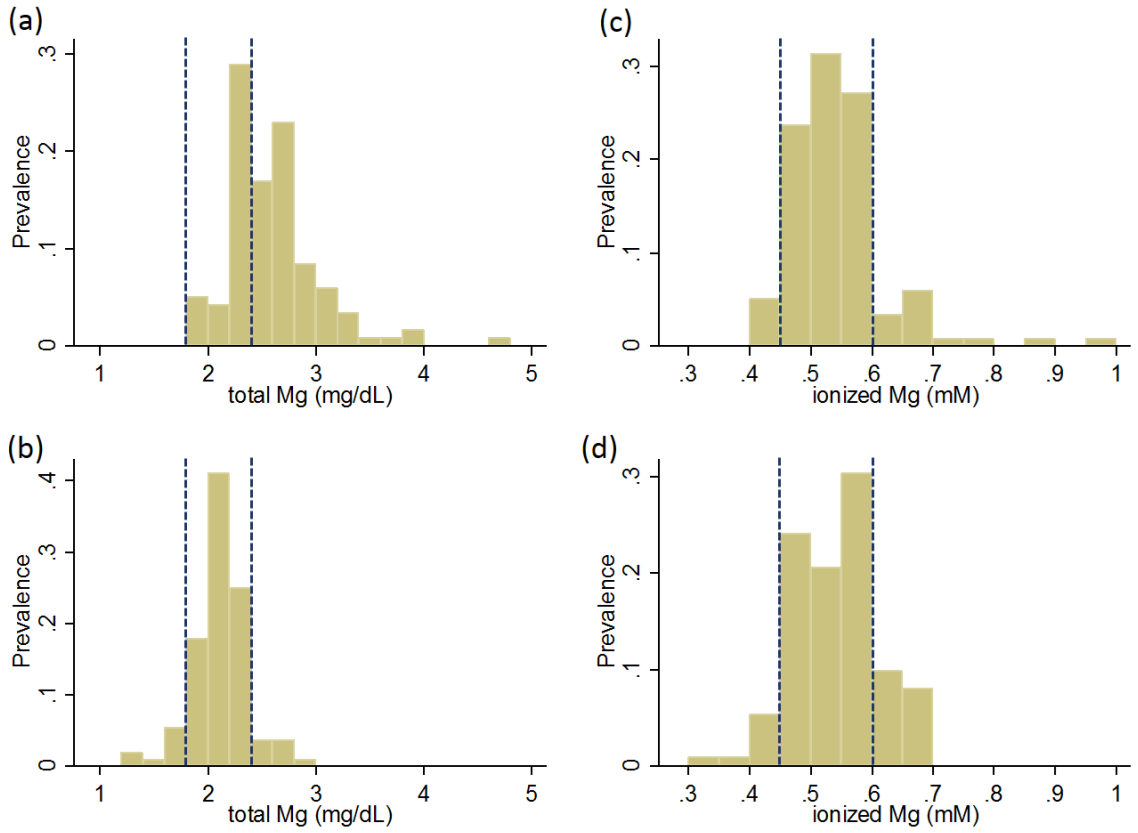
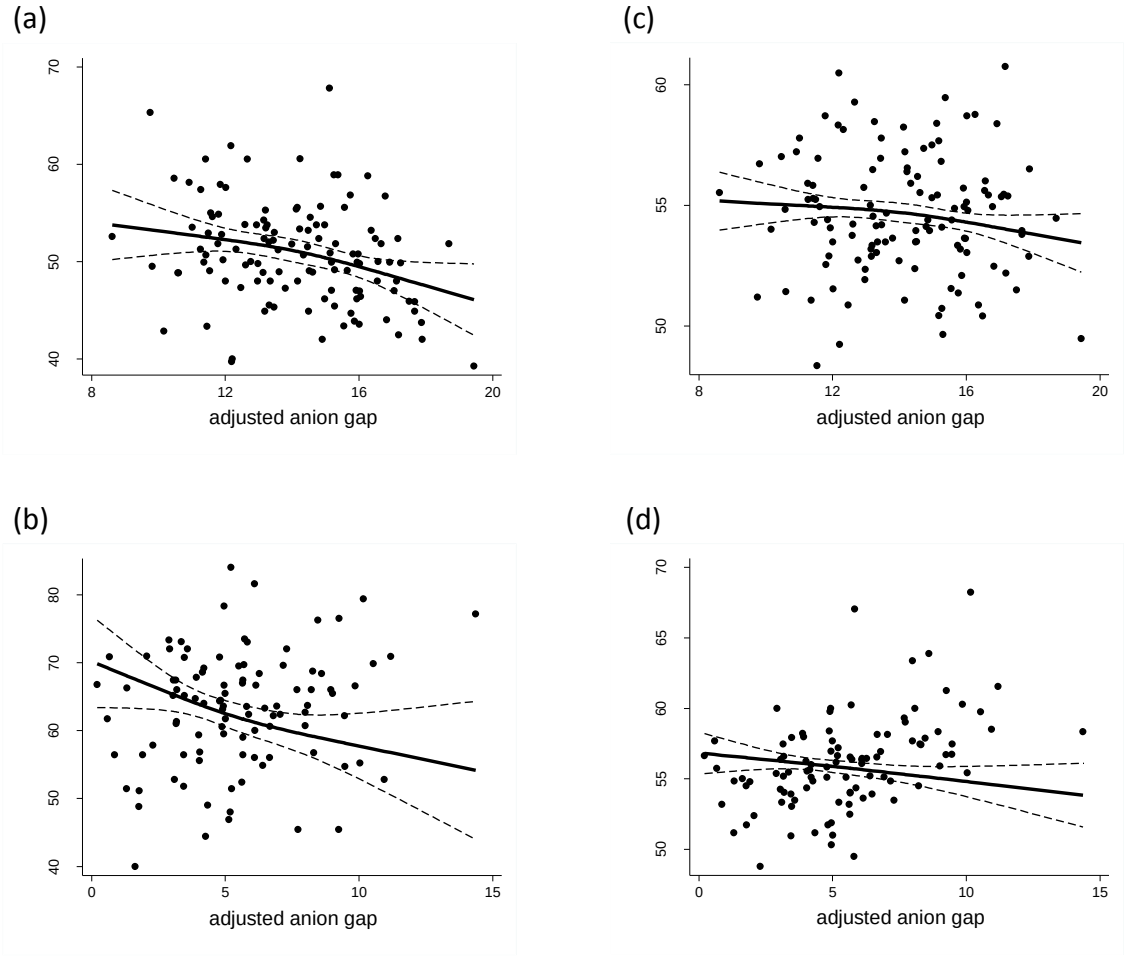
Supplemental Figure 1. Histograms of the total and ionized magnesium levels.



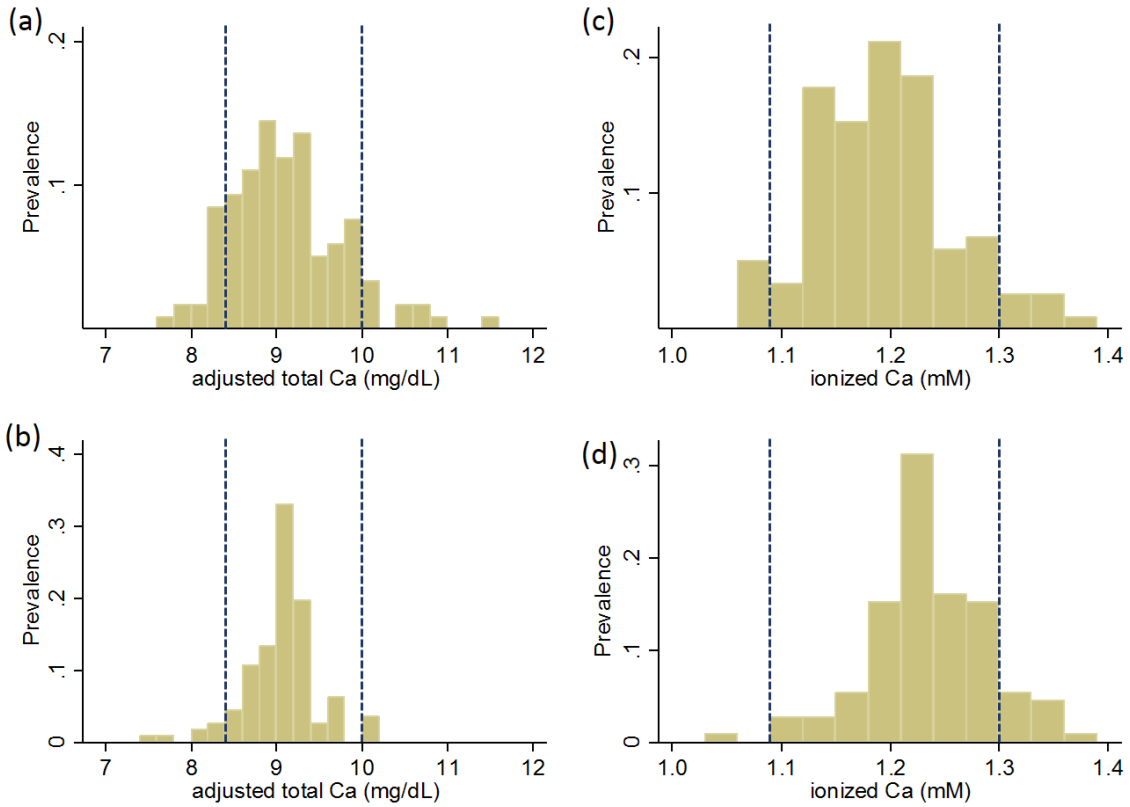
Total serum magnesium levels in (a) 118 hemodialysis patients and (b) 112 non-dialysis chronic kidney disease (CKD) patients. The prevalence of patients with serum magnesium levels higher than the upper limit of the reference range (2.3 mg/dL) was 69% for the hemodialysis patients and 12% for the non-dialysis CKD patients. Ionized magnesium levels in (c) 118 hemodialysis patients and (d) 112 non-dialysis CKD patients. The prevalence of patients with ionized magnesium levels higher than the upper limit of the reference range (0.60 mM) were only 13% for the hemodialysis patients and 18% for the non-dialysis CKD patients. The dashed lines represent the reference ranges for the total and ionized magnesium levels.

Supplemental Figure 2. Scatter plots and adjusted restricted cubic spline curves for the relationship between adjusted anion gap vs. ionized fraction of magnesium or calcium.



Relationship between adjusted anion gap and ionized magnesium ratio among (a) hemodialysis patients and (b) non-dialysis patients. Relationship between adjusted anion gap and ionized calcium ratio among (c) hemodialysis patients and (d) non-dialysis patients. Restricted cubic spline curves are adjusted for serum albumin levels, pH, bicarbonate levels, serum phosphate levels, and serum total magnesium or calcium levels.

Supplemental Figure 3. Histograms of the total and ionized calcium levels.



Total serum calcium levels in (a) 118 hemodialysis patients and (b) 112 non-dialysis chronic kidney disease (CKD) patients. The prevalence of patients with serum calcium levels within the reference range (8.4–10.0 mg/dL) was 82% for the hemodialysis patients and 94% for the non-dialysis CKD patients. Ionized calcium levels in (c) 118 hemodialysis patients and (d) 112 non-dialysis CKD patients. The prevalence of patients with ionized calcium levels within the reference range (1.09–1.30 mmol/L) were 90% for the hemodialysis patients and 88% for the non-dialysis CKD patients. The dashed lines represent the reference ranges for the total and ionized calcium levels.