## Appendix 4: Potential predictors of missing values in the imputation model [posted as supplied by author]

## **Patient characteristics:**

Presence of disease/symptom associated with abnormal values for serum sodium, blood pressure, serum creatinine, and serum B-type natriuretic peptide Including:

Hyponatremia

Hypernatremia

Dehydration

Vomitina

Diarrhea

Acute adrenal crisis

Rhabdomyolysis

Acute renal failure

Acute glomerulonephritis

Sepsis

Diabetic hyperglycemic hyperosmolar coma

Hypertensive encephalopathy

Hypertensive retinopathy

SIADH (syndrome of inappropriate antidiuretic hormone hypersecretion)

Hepatorenal syndrome

Diabetes insipidus

Addison's disease

Cushing syndrome

Hyperaldosteronism

Hypopituitarism

Cirrhosis

Kidney disease

Congestive heart failure

Ketonuria

Diabetes

**Hypertension** 

Nephritis, Nephrotic syndrome, and Nephrosis

Hydronephrosis

Renal failure

Stroke

**Hypotension** 

Ischemic heart disease

Disease of pulmonary circulation

Anorexia nervosa

Bulimia nervosa

Hypothyroidism

Hyperthyroidism

Obese

Atrial fibrillation

Ventricular hypertrophy

Valvular heart disease

Pulmonary hypertension

Aortic stenosis

Chronic mitral regurgitation Constrictive pericarditis

Hospital characteristics associated with abnormal values for serum sodium, blood pressure, serum creatinine, and serum B-type natriuretic peptide hospital region, located in Top 100 cities, trauma center, teaching hospital, medical school affiliation. bed size, total annual number of facility admissions, provision of medical/surgical intensive care, cardiac intensive care, adult interventional cardiac catheterization, adult cardiac surgery, adult cardiac electrophysiology, urgent care, heart transplant, or residency training.