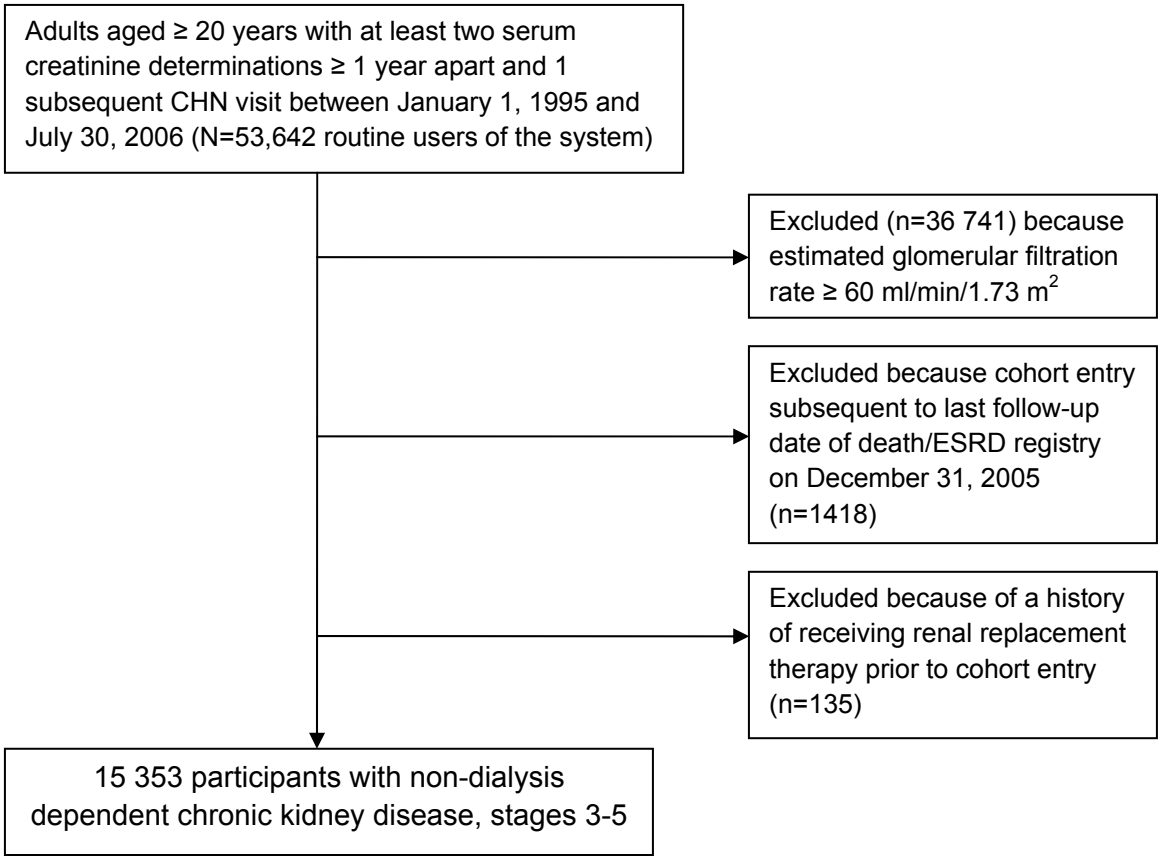
Supplementary Appendix A. Flow diagram of the adult cohort with non-dialysis dependent CKD stages 3-5 from the Community Health Network.



Supplementary Appendix B: Criteria used to define coexisting illnesses based on data recorded in the Lifetime Clinical Records of the Community Health Network.

Condition	Criteria	ICD-9 or CPT codes
Coronary artery disease	Primary discharge diagnosis or procedural code in hospitalization databases.[2]	**ICD-9:** 414.0, 414.8, 414.9, 36.01–36.02, 36.05, 36.06, 36.09, 36.10–36.17, 36.19 **CPT:** 92980–92981, 92982, 92984–92996, 33510–33519, 33521–33523, 33533–33536
Cerebrovascular Disease	Primary discharge diagnosis or procedural code in hospitalization databases.[2]	**ICD-9:** 433.x1, 434.x1, 436.0, 435
Congestive heart failure	Primary discharge diagnosis or procedural code in hospitalization databases.[2]	**ICD-9:** 398.91, 402.01, 402.11, 402.91, 428.0, 428.1, 428.9
Chronic obstructive lung disease	Primary discharge diagnosis of chronic obstructive pulmonary disease or chronic bronchitis in hospitalization databases, or physician-assigned diagnoses in ambulatory-visit databases.[2]	**ICD-9:** 491.x, 492.x, 493.x, 496, 518.1, 518.2
Depression	Primary discharge diagnosis in hospitalization databases, or physician-assigned diagnoses in ambulatory-visit databases.[2, 3]	**ICD-9:** 296.20-26, 296.30-36, 296.40-46, 296.50-56, 296.60-66, 296.7, 296.80-82, 296.89, 296.90, 296.99, 298.0, 311.
Diabetes mellitus	Two or more physician-assigned diagnoses in ambulatory-visit or hospitalization databases.[4-6]	**ICD-9:** 250, 357.2, 362.0, 366.41
Alcoholism	Primary discharge diagnosis in hospitalization databases, or physician-assigned diagnoses in ambulatory-visit databases.[3, 4]	**ICD-9:** 291, 303, 303.0, 303.00-303.03, 303.9, 303.90-303.93, 305.0, 305.00-305.03, 357.5, 425.5, 535.3, 571.0-531.3, 790.3, 980.0, 980.8, 980.9, V11.3, E860.0, E860.1, E860.8, E860.9
Drug abuse	Primary discharge diagnosis in hospitalization databases, or physician-assigned diagnoses in ambulatory-visit databases.[3, 4]	**ICD-9:** 292, 292.0, 292.1, 292.11, 292.12, 292.2, 304, 304.00-03, 304.10-304.13, 304.20-23, 304.30-33, 304.40-43, 304.50-53, 304.6, 304.60-63, 304.7, 304.70-73, 304.8, 304.80-304.83, 304.9, 304.90-93, 305.1, 305.20-23, 305.30-33, 305.40-43, 305.50-53, 305.60-63, 305.70-73, 305.80-305.83, 305.9, 305.90-93
Hepatitis C virus infection	Primary discharge diagnosis in hospitalization databases, or physician-assigned diagnoses in ambulatory-visit databases, or laboratory diagnosis based on American Association for the Study of Liver Diseases Guidelines.[7, 8]	**ICD-9:** 070.41, 070.44, 070.51, 070.54, V02.62
HIV/AIDS	Two or more physician-assigned diagnoses in ambulatory-visit or hospitalization databases.[3]	**ICD-9:** 042.0-044.9, V08
Hypertension	Two or more physician-assigned diagnoses in ambulatory-visit databases.[2]	**ICD-9:** 401–405
Tobacco Smoking	Primary discharge diagnosis in hospitalization databases, or physician-assigned diagnoses in ambulatory-visit databases.[10, 11]	**ICD-9:** 305.1, V15.82, 649.0, 989.84

Supplementary Appendix C. STROBE Statement—Checklist of items that should be included in reports of ***cohort studies***

	Item No	Recommendation
Title and abstract	1	(*a*) Indicate the study's design with a commonly used term in the title or the abstract (**Abstract, p2**)
		(*b*) Provide in the abstract an informative and balanced summary of what was done and what was found (**Abstract, p2**)
Introduction		
Background/rationale	2	Explain the scientific background and rationale for the investigation being reported (**Introduction, p4**)
Objectives	3	State specific objectives, including any prespecified hypotheses (**Introduction, p4**)
Methods		
Study design	4	Present key elements of study design early in the paper (**Methods, p5**)
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection (**Methods, pp5-6**)
Participants	6	(*a*) Give the eligibility criteria, and the sources and methods of selection of participants. Describe methods of follow-up (**Methods, pp5-6**)
		(*b*) For matched studies, give matching criteria and number of exposed and unexposed (**N/A**)
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable (**Methods, pp6-7**)
Data sources/ measurement	8*	For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there is more than one group (**Methods, pp6-7**)
Bias	9	Describe any efforts to address potential sources of bias (**Methods, p8**)
Study size	10	Explain how the study size was arrived at (**Methods, p6**)
Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why (**Methods, p8**)
Statistical methods	12	(*a*) Describe all statistical methods, including those used to control for confounding (**Methods, pp7-8**)
		(*b*) Describe any methods used to examine subgroups and interactions (**Methods, pp7-8**)
		(*c*) Explain how missing data were addressed (**Methods, p8**)
		(*d*) If applicable, explain how loss to follow-up was addressed (**Methods, p6**)
		(*e*) Describe any sensitivity analyses (**Methods, p8**)
Results		
Participants	13*	(a) Report numbers of individuals at each stage of study—eg numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analysed (**Supplemental Appendix 1**)
		(b) Give reasons for non-participation at each stage

		(c) Consider use of a flow diagram
Descriptive data	14*	(a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders (**Results, p9**)
		(b) Indicate number of participants with missing data for each variable of interest (**Table 1**)
		(c) Summarise follow-up time (eg, average and total amount) (**Results, p10**)
Outcome data	15*	Report numbers of outcome events or summary measures over time (**Results, p10**)
Main results	16	(*a*) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision (eg, 95% confidence interval). Make clear which confounders were adjusted for and why they were included (**Results, p9-10**)
		(*b*) Report category boundaries when continuous variables were categorized (**Tables 1-3**)
		(*c*) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period (**N/A**)
Other analyses	17	Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses (**Results, p10**)
Discussion		
Key results	18	Summarise key results with reference to study objectives (**Discussion, p11**)
Limitations	19	Discuss limitations of the study, taking into account sources of potential bias or imprecision. Discuss both direction and magnitude of any potential bias (**Discussion, p13-14**)
Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence (**Discussion, pp11-14**)
Generalisability	21	Discuss the generalisability (external validity) of the study results (**Discussion, pp11-14**)
Other information		
Funding	22	Give the source of funding and the role of the funders for the present study and, if applicable, for the original study on which the present article is based (**Acknowledgements, p14**)

*Give information separately for exposed and unexposed groups.

Note: An Explanation and Elaboration article discusses each checklist item and gives methodological background and published examples of transparent reporting. The STROBE checklist is best used in conjunction with this article (freely available on the Web sites of PLoS Medicine at http://www.plosmedicine.org/, Annals of Internal Medicine at http://www.annals.org/, and Epidemiology at http://www.epidem.com/). Information on the STROBE Initiative is available at http://www.strobe-statement.org.

Supplementary Appendix References

1. Levey AS, Bosch JP, Lewis JB, Greene T, Rogers N, Roth D. A more accurate method to estimate glomerular filtration rate from serum creatinine: a new prediction equation. Modification of Diet in Renal Disease Study Group. *Ann Intern Med.* 130(6):461-470. 1999.
2. Go AS, Chertow GM, Fan D, McCulloch CE, Hsu CY. Chronic kidney disease and the risks of death, cardiovascular events, and hospitalization. *N Engl J Med.* 351(13):1296-1305. 2004.
3. Goulet JL, Fultz SL, McGinnis KA, Justice AC. Relative prevalence of comorbidities and treatment contraindications in HIV-mono-infected and HIV/HCV-co-infected veterans. *Aids.* 19 Suppl 3:S99-105. 2005.
4. Veterans Aging Cohort Study Data Document. 2009; http://www.vacohort.org/. Accessed September 14, 2011.
5. Borzecki AM, Wong AT, Hickey EC, Ash AS, Berlowitz DR. Identifying hypertension-related comorbidities from administrative data: what's the optimal approach? *Am J Med Qual.* 19(5):201-206. 2004.
6. Choi AI, Rodriguez RA, Bacchetti P, Bertenthal D, Volberding PA, O'Hare AM. Racial Differences in End-Stage Renal Disease Rates in HIV Infection versus Diabetes. *J Am Soc Nephrol*. 18(11):2968-74. 2007.
7. Strader DB, Wright T, Thomas DL, Seeff LB. Diagnosis, management, and treatment of hepatitis C. *Hepatology.* 39(4):1147-1171. 2004.
8. Justice AC, Lasky E, McGinnis KA, Skanderson M, Conigliaro J, Fultz SL, Crothers K, Rabeneck L, Rodriguez-Barradas M, Weissman SB, Bryant K; VACS 3 Project Team. Medical disease and alcohol use among veterans with human immunodeficiency

infection: A comparison of disease measurement strategies. *Med Care.* 44(8 Suppl 2):S52-60. 2006.

9. Lok AS, McMahon BJ. Chronic hepatitis B. *Hepatology.* 45(2):507-539. 2007.
10. Jonk YC, Sherman SE, Fu SS, Hamlett-Berry KW, Geraci MC, Joseph AM. National trends in the provision of smoking cessation aids within the Veterans Health Administration. *Am J Manag Care.* 11(2):77-85. 2005.
11. VA-Department of Defense Tobacco Use Cessation Clinical Practice Guidelines. 2004; http://vaww.oqp.med.va.gov/CPGintra/cpg/TUC3/TUC_Base.htm. Accessed July 21, 2011.