Appendix Table A.1. Summary of Studies Comparing Quality of Care for Seniors in Medicare Advantage versus the Veterans Health Administration						
Study	Study Population	Data Time Period	Data Source	Metrics	Main Findings	Methodological Notes
Trivedi et al. 2011	MA beneficiaries (largely HMOs) ages 65+ included in HEDIS measures for plans with 3+ years of participation, and VA enrollees included in External Peer Review Program (EPRP) metrics.	2000–2007	Medicare HEDIS data for 5.8 million enrollees in 305 MA plans, and VA EPRP metrics for 0.3 million in 142 VAMCs.	Adherence to quality metrics for diabetes (6 metrics), coronary artery disease (4 metrics), and cancer screening (breast, colon cancer). 2006 and 2007 data, adjusted for age, sex, year, geographic region, and zip code-level income and education.	VA scored more highly than MA on 10 of 11 metrics in year 1 and all 12 measures in the final year. VA had more limited socioeconomic disparities on 9 of 12 measures. VA care was less variable by site, region, and socioeconomic status (as assessed from inter-quartile range calculations).	This study controls for location and demographic variables, though not health status. If one assumes the VA has adverse selection, this would increase the strength of the findings. Eligibility characteristics and documentation differ across the two systems.
Selim et al. 2010	Men ages 65+ in MA plan (mainly HMOs) surveyed in one of three cohorts of the Medicare Health Outcomes Survey (HOS) or treated in the VA and included in VA surveys.	1999–2003 (follow-up design)	Medicare HOS Survey 2–4 (1999-2001, 2000-2002, and 2001-2003) VA large health survey of veteran enrollees (1999) and follow-up ambulatory survey of health care experiences of patients.	Medicare metrics were based on the SF-36. VA metrics used the RAND 36–item Health Survey (VR–36) (for baseline) and the 12–item health survey (VR–12). Two summary scores were created: a physical (PCS) and a mental (MCS) component. Three outcome metrics: (1) the probability of being alive with the same or better PCS at 2 years; (2) the probability of being alive with the same or better MCS at 2 years; and (3) 2–year mortality. Outcomes factor in socio–demographics, comorbid conditions, and PCS and MCS baseline scores.	After adjusting for higher prevalence of chronic disease and worse self-reported baseline status, VHA patients scored better than MA on outcome metrics overall. Similar differences existed for vulnerable subgroups.	This study is one of the few longitudinal designs studied, though it had some data limitations. The surveys were not identical, and there were differences in the sampling strategies and time frames. Because MA scores were higher at baseline, there could be regression to the mean. However, authors say results are maintained with adjustments.
Selim et al. 2007	Men ages 65+ (1) who completed a Health of Seniors survey in June/July 1998 and whose MA plan (mainly HMOs) remained in the program through 2000; or (2) were surveyed from Veteran Administration's integrated service networks and had one outpatient visit in 1997.	Two-year period, beginning 1998	Medicare Health of Seniors Survey (1998), VA National Survey of Ambulatory Patients (1998), and Death Master File.	Medical Outcomes Study SF-36 (Medicare) and Veterans Rand 36 item VR–36. Two summary scores were created: a PCS and an MCS component. Three outcome metrics: (1) the probability of being alive with the same or better PCS at 2 years; (2) the probability of being alive with the same or better MCS at 2 years; and (3) 2–year mortality. Outcomes factor in socio–demographics, comorbid conditions, and PCS and MCS baseline scores.	After adjusting for higher prevalence of chronic disease and worse self-reported health in the VHA, VA had somewhat better 2–year health outcomes.	This study, like the previous one, has some challenges related to differences in data available from the VA and MA.

			Appendix Table A.1 *(continued)*. Summary of Studies Comparing Quality of Care for Seniors in Medicare Advantage versus the Veterans Health Administration			
Study	Study Population	Data Time Period	Data Source	Metrics	Main Findings	Methodological Notes
Selim et al. 2007	Men and women ages 65+ sampled in the Medicare Health of Seniors Survey of health plan enrollees or the 1999 Large Health Survey of Veteran Enrollees (LHSVE) (with 1+ visits).	1998–2000	Medicare Health of Seniors Surveys from 1998, 1999, and 2000; the 1999 LHSVE; and the Death Master File.	Mortality rates from surveys through January 2004 with risk adjustment based on socio–demographics, comorbid conditions, and baseline health status using PCS and MCS scores. Cox proportional hazards regression model used.	While the VA mortality rate for males was higher after adjusting for socio–demographics only, MA mortality was higher after adjusting for comorbid conditions, and more so after adjusting for baseline health status. Among males, vulnerable subgroups also did better in the VA system (too few females participated for analysis on this dimension).	This study, like the previous one, has some challenges related to differences in data available from the VA and MA. The surveys were not identical, and there were differences in the sampling strategies and time frames. Design used intention to treat, with no information on where care was received later.
Barnett et al. 2006	Medicare HMO patients ages 65 and older in 10 HMOs in diverse regions, matched to VA patients continuously enrolled in the same locations.	2000–2001 (Medicare HMO) and 2002–2003 (VA)	Claims data from administrative databases of HMOs and the VA's Decision Support System Outpatient Pharmacy Database.	Zahn criteria, with 33 potentially inappropriate drugs in three categories: always avoid, rarely appropriate, and some indications.	VA patients were less likely to receive any inappropriate medication overall, in each of the three classes. Rates were lower in the VA for males and for females, and consistent when stratified by age.	This study had some methodological limitations. The time frames for the cross–sectional analysis are not identical because VA data were not available for the earlier period. VA data include only drugs dispensed by the VA and not other providers. Statistical analysis also was limited by the form in which HMO data were available.
Keyhani et al. 2007	Community–dwelling Medicare male beneficiaries who are veterans ages 65+ surveyed in the Medicare Current Beneficiary Survey and who received care through the VHA, traditional Medicare (TM), or Medicare HMOs.	2000–2003	Cost and Use and Access to Care files from the MCBS (2000–2003)	Self–reported use of influenza vaccine, pneumococcal vaccine, serum cholesterol screening, and serum prostate specific antigen measurement. Veterans' status was self– reported and the preventive care covered the last surveyed year, so each was represented once in the survey. Sources of care categories were: (1) VHA only, (2) VHA and Traditional Medicare, (3) VHA and Medicare HMO, (4) Traditional Medicare only, and (5) Medicare HMO only. Multivariate analysis used to adjust for socio–demographics, comorbidities (Charlson Index), and other variables.	While preventive care use was high across all sources of care, those with any exposure to VHA care scored higher on preventive care measures. Dual users of the VHA and Medicare HMOs had higher use of preventive care than did Medicare HMO plans on only 3 of the 5 measures. Medicare TM users scored lower on 4 of the 5 preventive care metrics.	MA plans may be more internally diverse than the VHA. Over this period of time, the VHA instituted a comprehensive medical record system, including reminders that emphasized preventive care.

SOURCE: Authors' analysis based on review of published papers.