heart disease (207%), myocardial infarction (204%), asthma (186%), peripheral vascular disease (184%), stroke (144%), chronic ischemic heart disease (96%), and essential hypertension (74%).

CONCLUSIONS: The percent of patients with comorbid conditions increases as the observation window increases. Restricting a search of concomitant diagnoses to a short timeframe or timeframes of non-continuous enrollment can result in inaccurate identification of chronic comorbid conditions of a study population.

QOL INDICATORS OF SATISFACTION AND IMPACT ASSOCIATED WITH WEB-ENABLED DIABETES SELF-MANAGEMENT TOOLS
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According to the California Healthcare Foundation, 40 percent of Americans will suffer from a chronic disease by 2010. To reach and positively impact this growing segment of healthcare consumers, many health plans have initiated some form of disease management. In attempting to deliver the most effective and targeted intervention possible, many plans are turning to the Internet and online tools for patient-directed self-management.

OBJECTIVES: The purpose of this research is to evaluate the efficacy and patient outcomes associated with an online disease self-management tool for diabetics.

METHODS: During 1999–2001, 15,600 unique individuals registered as participants in MyDiabetes.com, completing two or more visits. Of these, 160 participants completed a baseline and follow-up DQOL survey online. Using the median number of visits (median = 25 visits) during their participation, this group was then equally divided into low and high volume visitors to the website. DQOL scale scores are based on a scale of 100 units derived from instrument question responses.

RESULTS: Among the high volume users (more than 25 visits), we found evidence of improvement over baseline in DQOL scale indicators for satisfaction (Bonferroni pairwise t-test = 3.7, p < 0.001) and impact (Bonferroni pairwise t-test = 1.7, p < 0.09). Because this group of participants was not randomly assigned to this intervention, some caution is advised in interpreting these results. It may be that healthier and more health-conscious patients with diabetes choose to engage in disease management programs and report improvement based on subjective factors. However, among those patients with diabetes who choose to register and participate in web-enabled disease self-management programming, this evaluation provides preliminary evidence of self-reported improvement in patients’ satisfaction and perceived disease impact associated with an Internet-based program.

CONCLUSIONS: Web-enable disease self-management programming for patients with diabetes may therefore be an effective model for health plans eager to engage their “at risk” members in patient-directed care. Given the magnitude of chronic disease prevalence in the US, more study of the impact and efficacy associated with these ‘new technology’ interventions is needed.

DIABETIC FOOT ULCERS: THE ECONOMIC CONSEQUENCES OF INPATIENT ADMISSIONS OVER FIVE YEARS
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OBJECTIVE: Diabetic foot ulcers (DFU) are a common and costly problem for patients with diabetes. This study was undertaken to identify patients with DFU who required inpatient management in 1995 and their readmissions for this problem over a five-year period, as well as the resulting costs.

METHODS: The index DFU admission was identified in the 1995 Massachusetts (MA) inpatient database by means of primary and secondary ICD-9 diagnosis codes, excluding cases with any type of lower extremity amputation or arterial graft. Readmissions for DFU care with and without lower leg osteomyelitis were tracked over five years (1995–1999) by means of a unique patient identifier. MA costs, adjusted to national values, were derived from the all payer state discharge databases. All accommodations, ancillaries and physician care were included in the cost estimates, which were adjusted for medical inflation, cost-to-charge ratios, and reported in 2000 US$. 

RESULTS: Males comprised 59% of the index group of 342 patients. The mean age was 63 years (range: 23–99 years) and 1.3% died during the index admission. Of the survivors, 53% were readmitted at least once (mean 2.1, range: 1–18) within five years for DFU management with or without osteomyelitis for a total of 9,143 inpatient days, including the index admission. The cumulative five-year cost for the index admission and all readmissions was estimated at $8.5 million.

CONCLUSIONS: A substantial number of patients with DFU requiring inpatient management can be expected to incur additional DFU-related hospital costs within five years. This is a conservative cost estimate, as post-acute care costs, such as rehabilitation and home health care services, were not included. This information supports the importance of diligent diabetes management in hopes of preventing or delaying neuropathic complications, such as DFU, and programs designed to detect and treat DFUs at an early stage.