

Context

The increasing prominence of practice-based research and continued under-representation of internal medicine specialty in this endeavor, especially at the national level, prompted the American College of Physicians to establish its own research network for internists.

Objective

To examine the impact of implementation and effectiveness of a tool-enhanced electronic education module, which focuses on reinforcing educational methods and readily adaptable practice tools, using established diabetes performance measures.

Pilot Study Design

The study employed a group randomized parallel design. Participants were assigned into two groups based on the use of EMR or computer-based diabetes registry, with each group randomized into "intervention" and "control" groups.

Participants:

The sample of this study includes 40 ACPNet members who completed the baseline data collection. The average size of practice is 15 physicians (median: 6, range: 1-100); on average participants see 81 patients per week (range: 28-150).

Outcome Measures

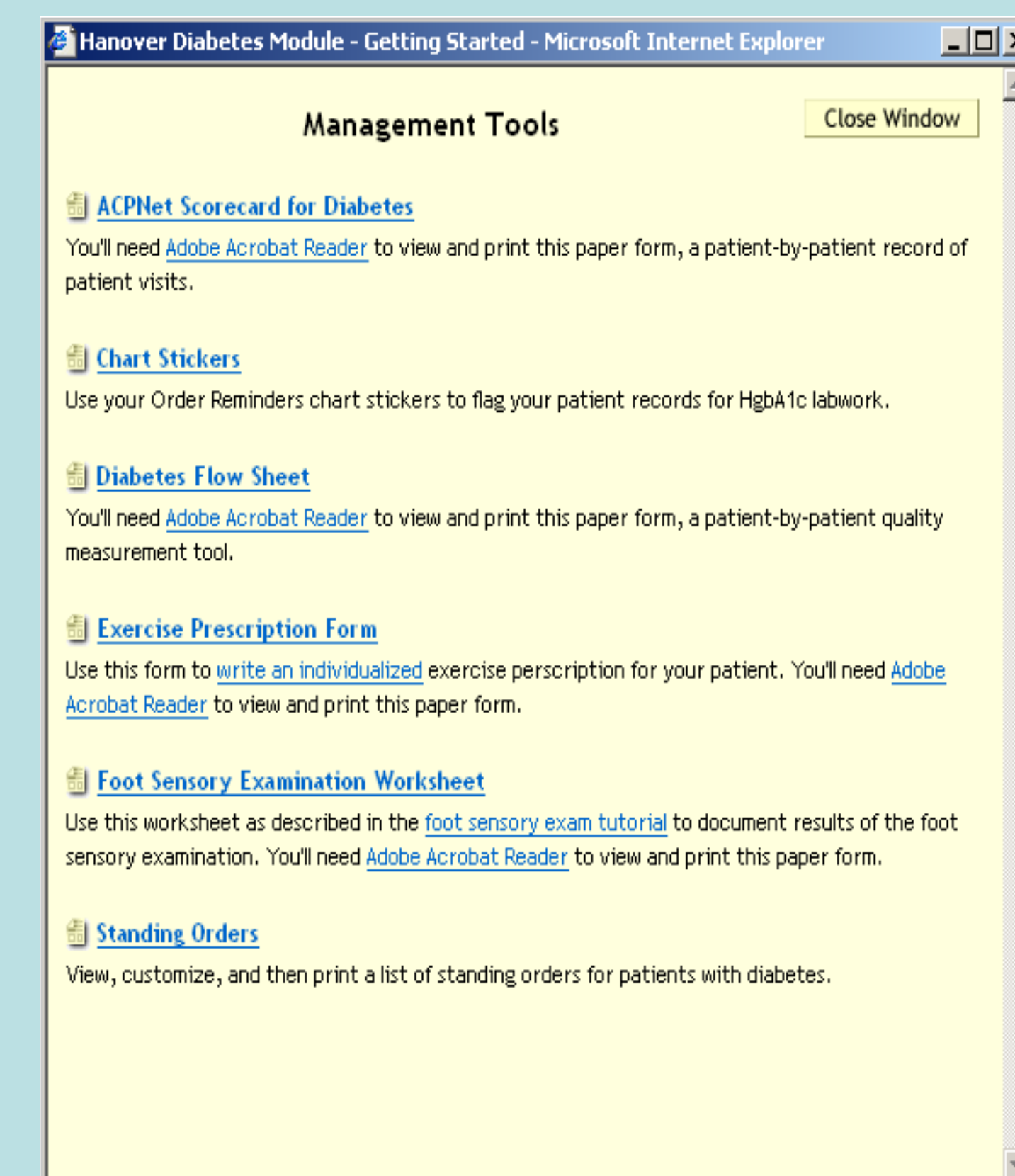
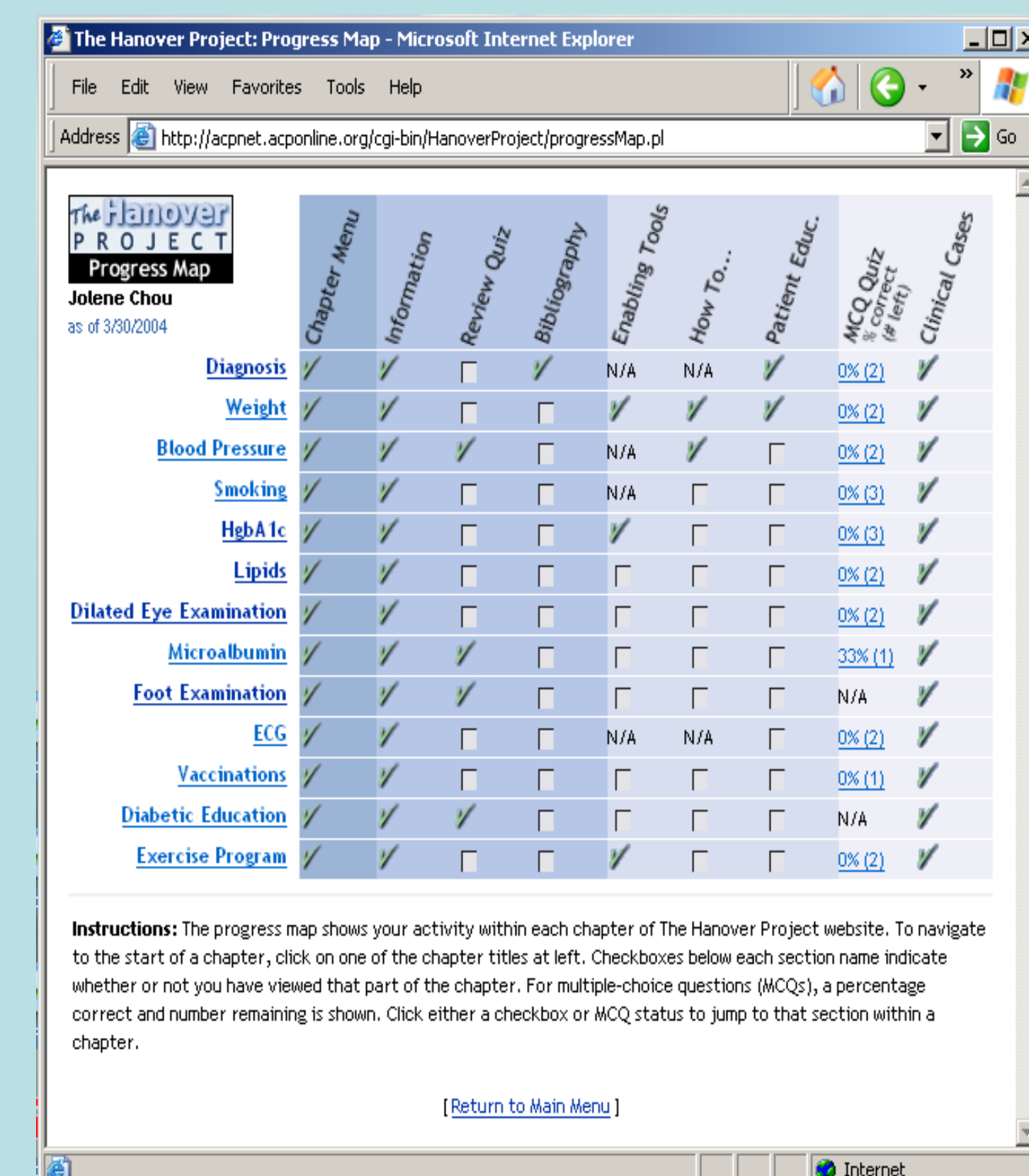
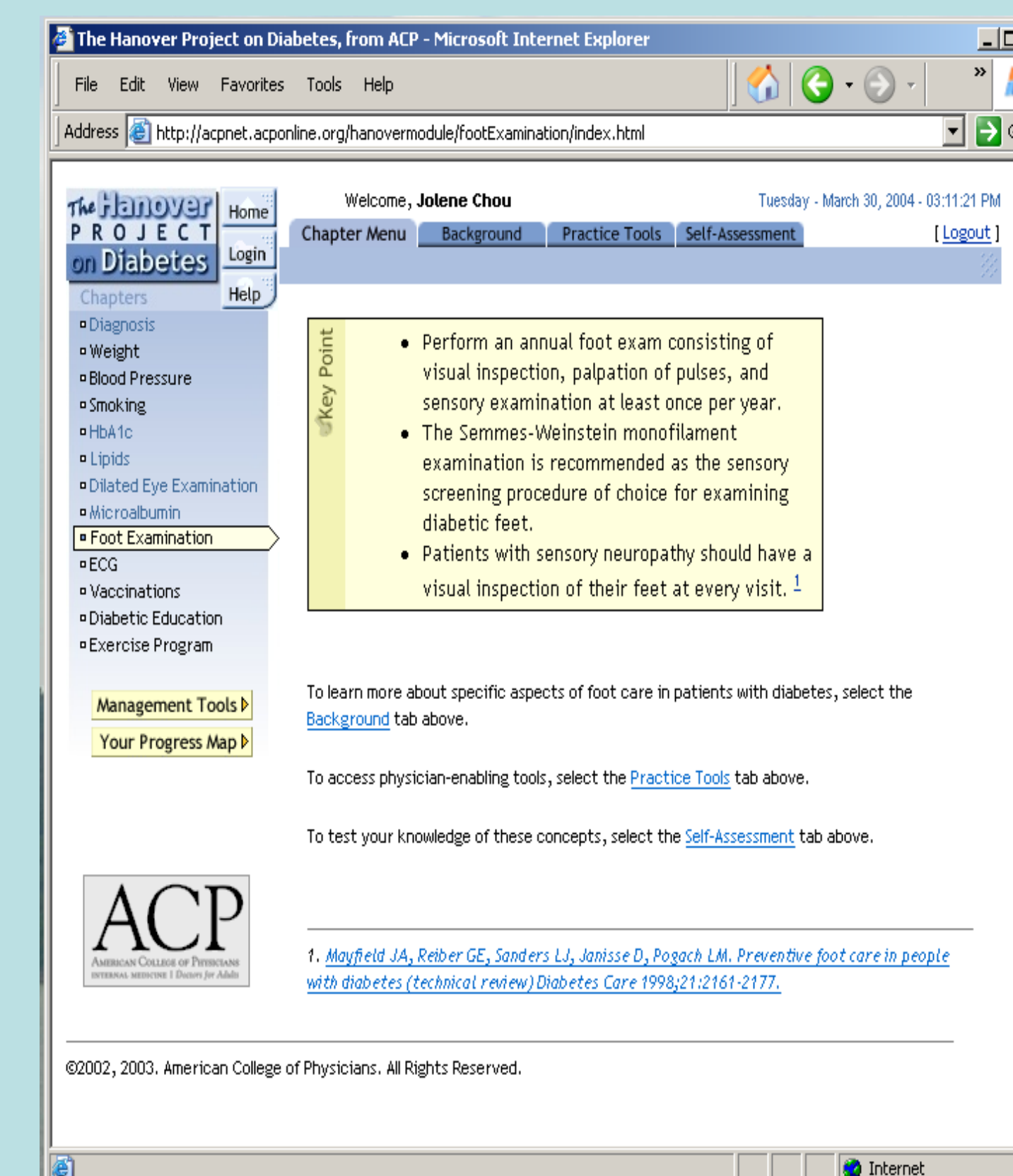
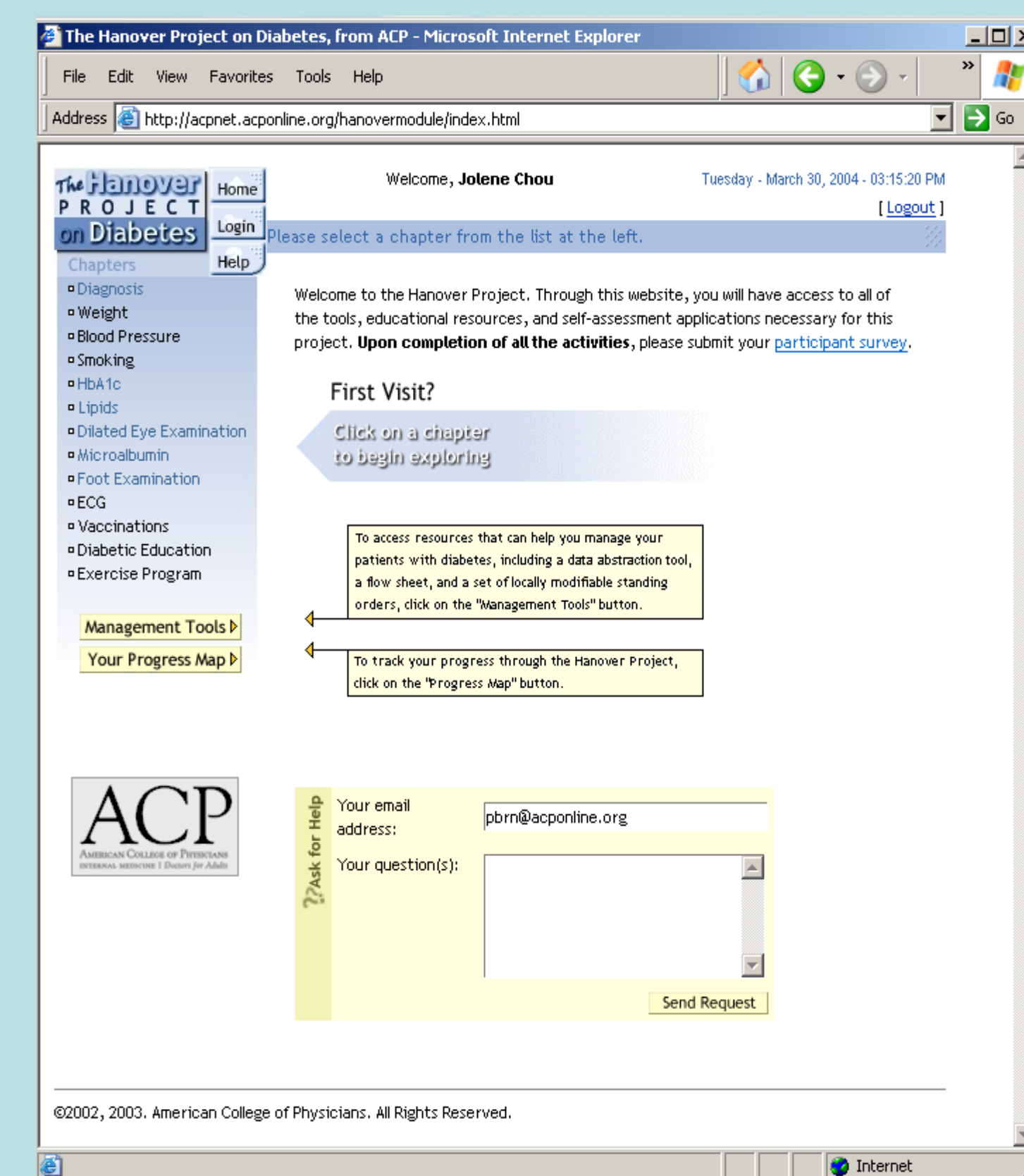
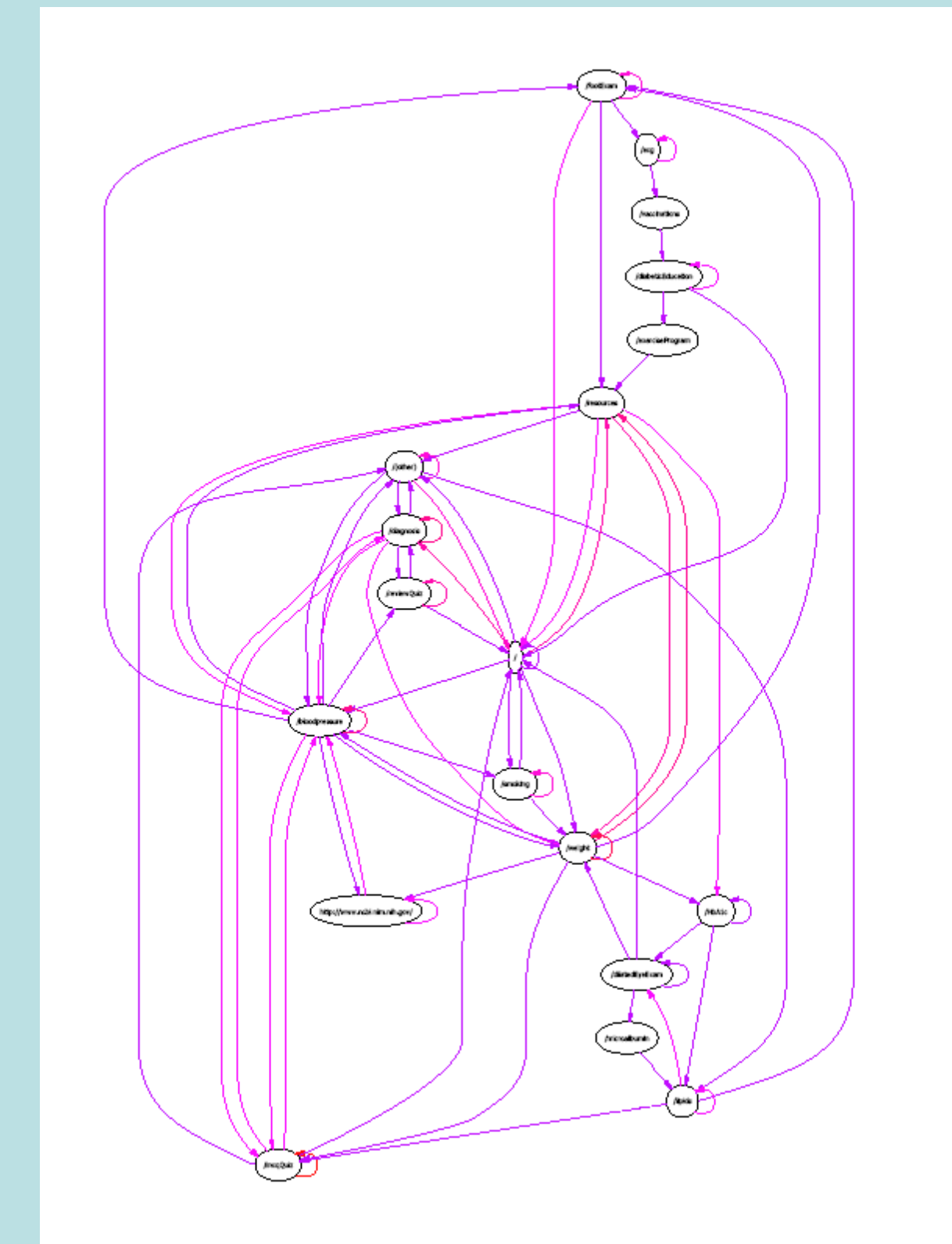
Diabetes process and outcome measures included frequencies and values of HbA1c, blood pressure readings, lipids, urinalysis, eye and foot exams, biometrics, and vaccination status.

Process & Outcome Measures

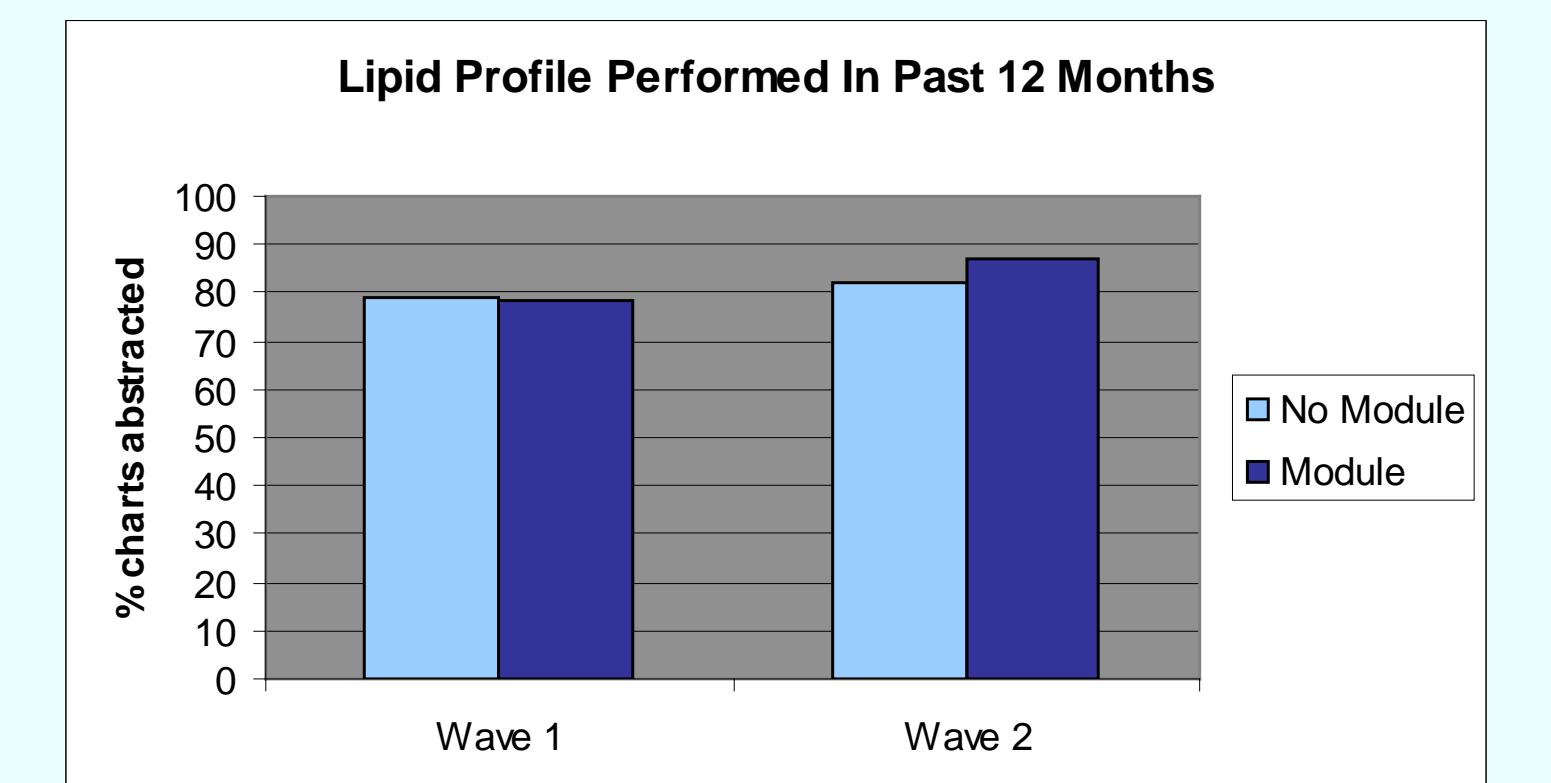
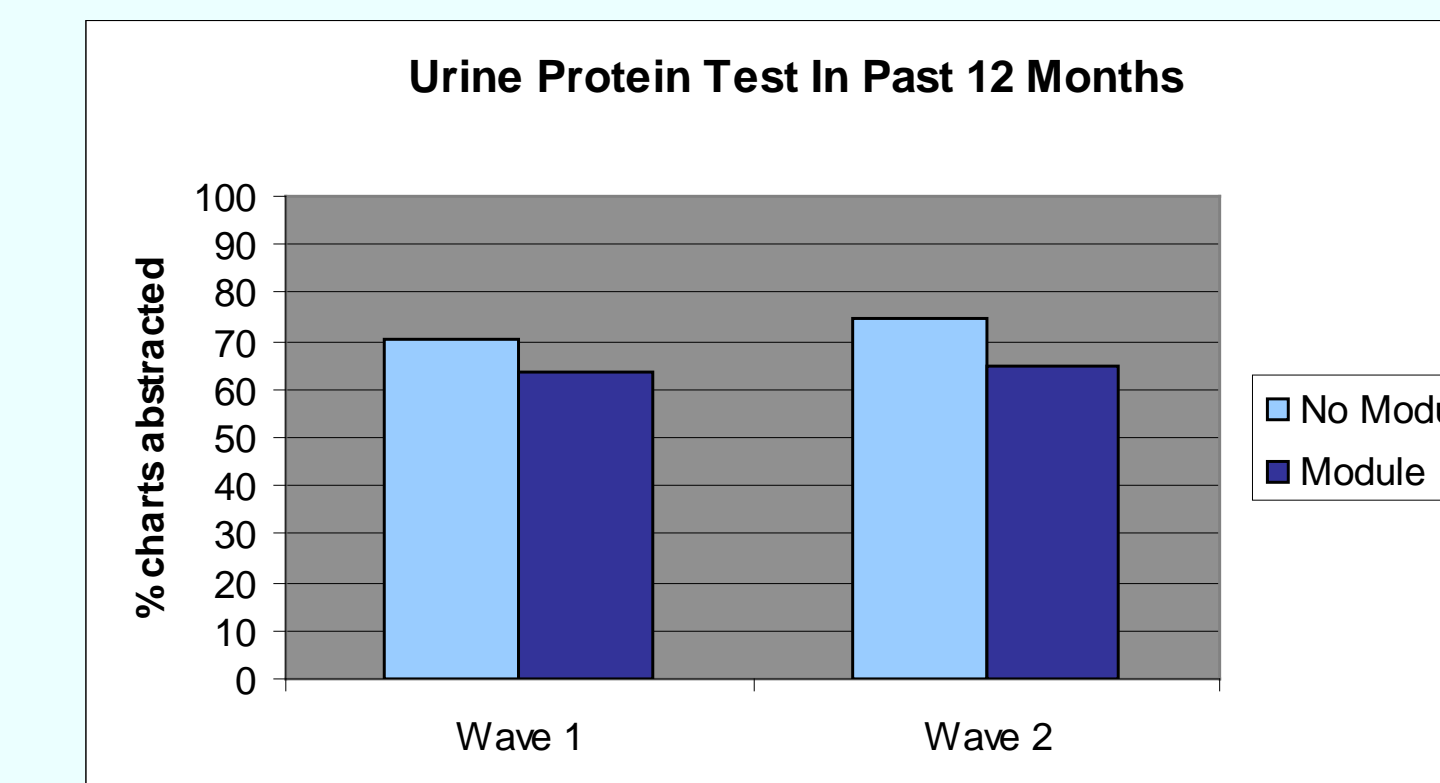
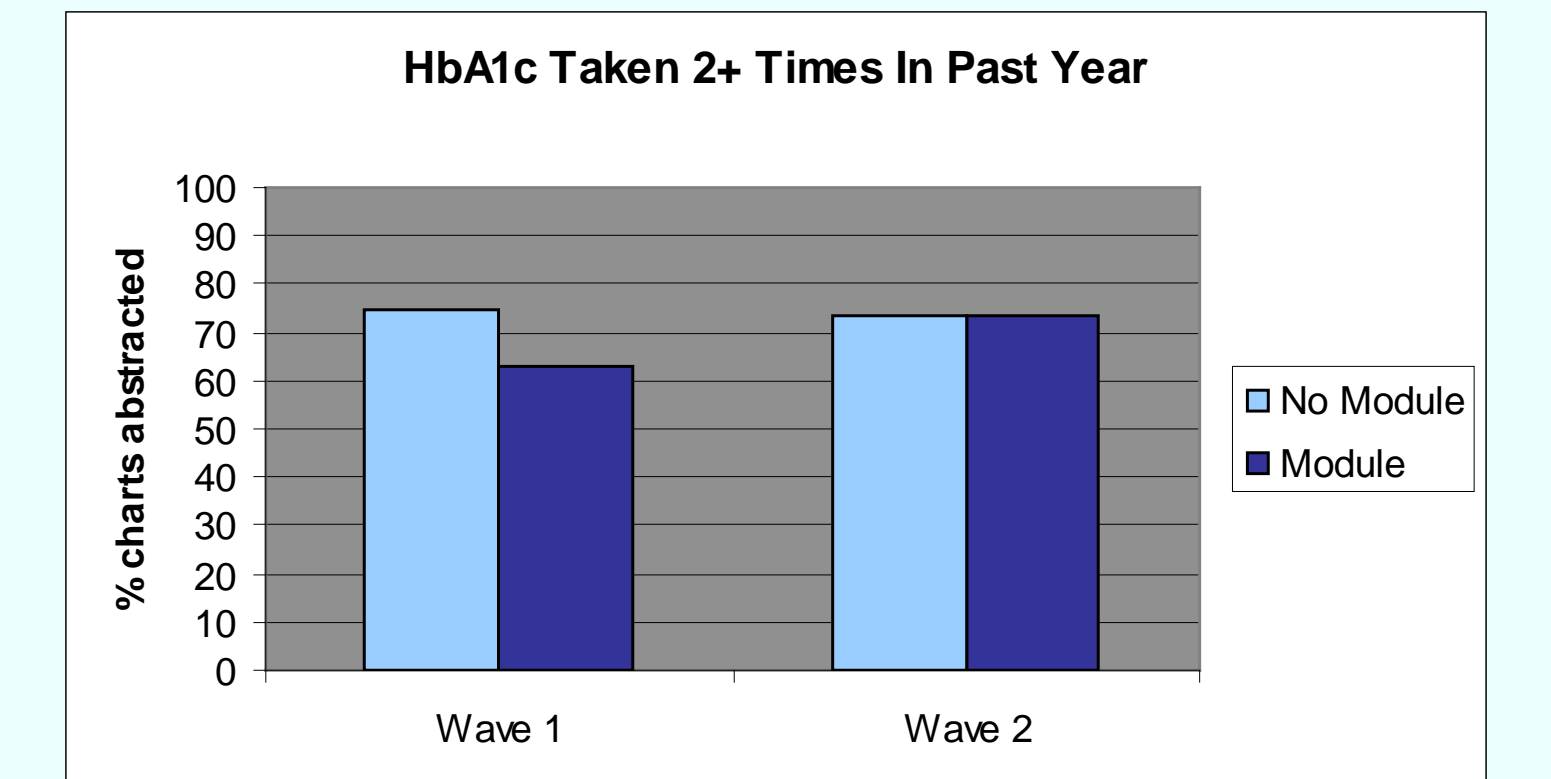
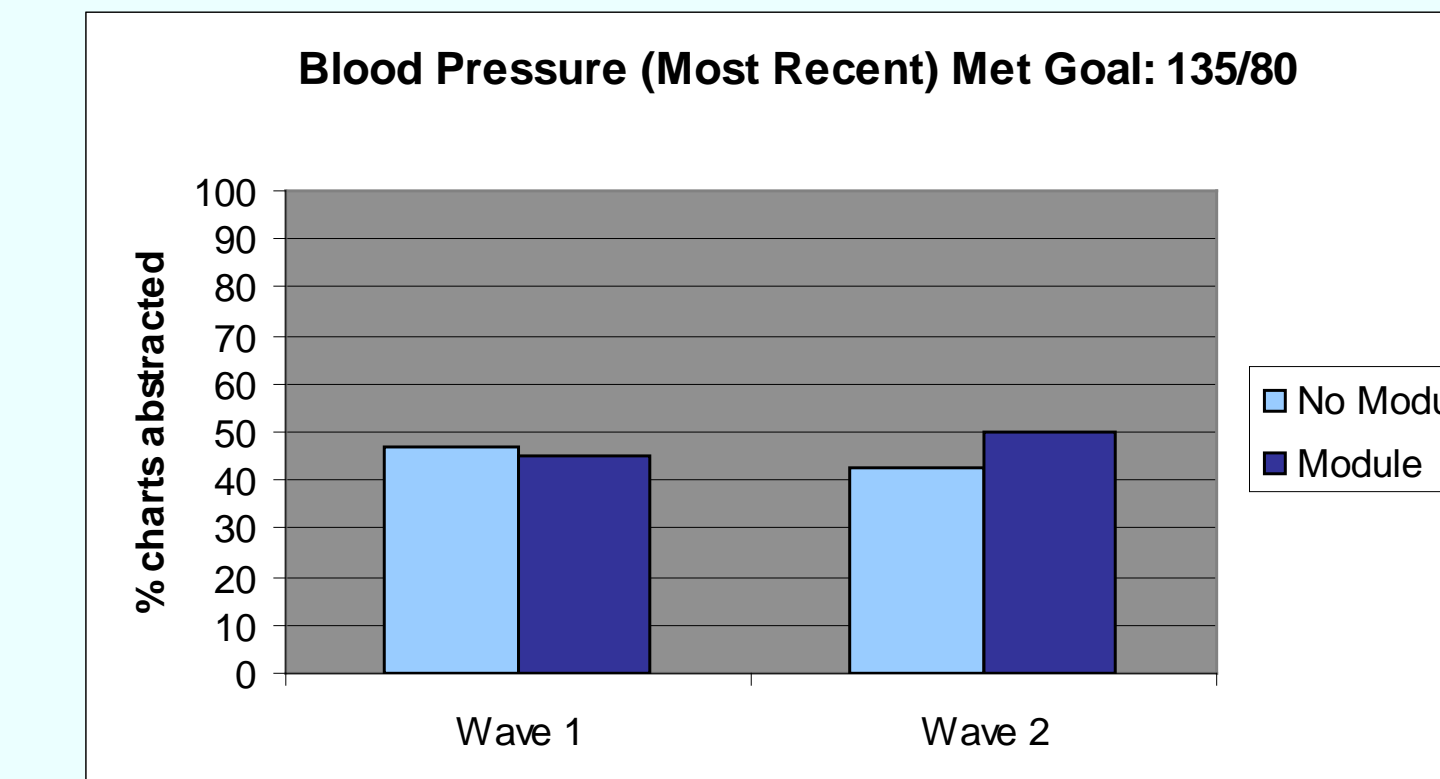
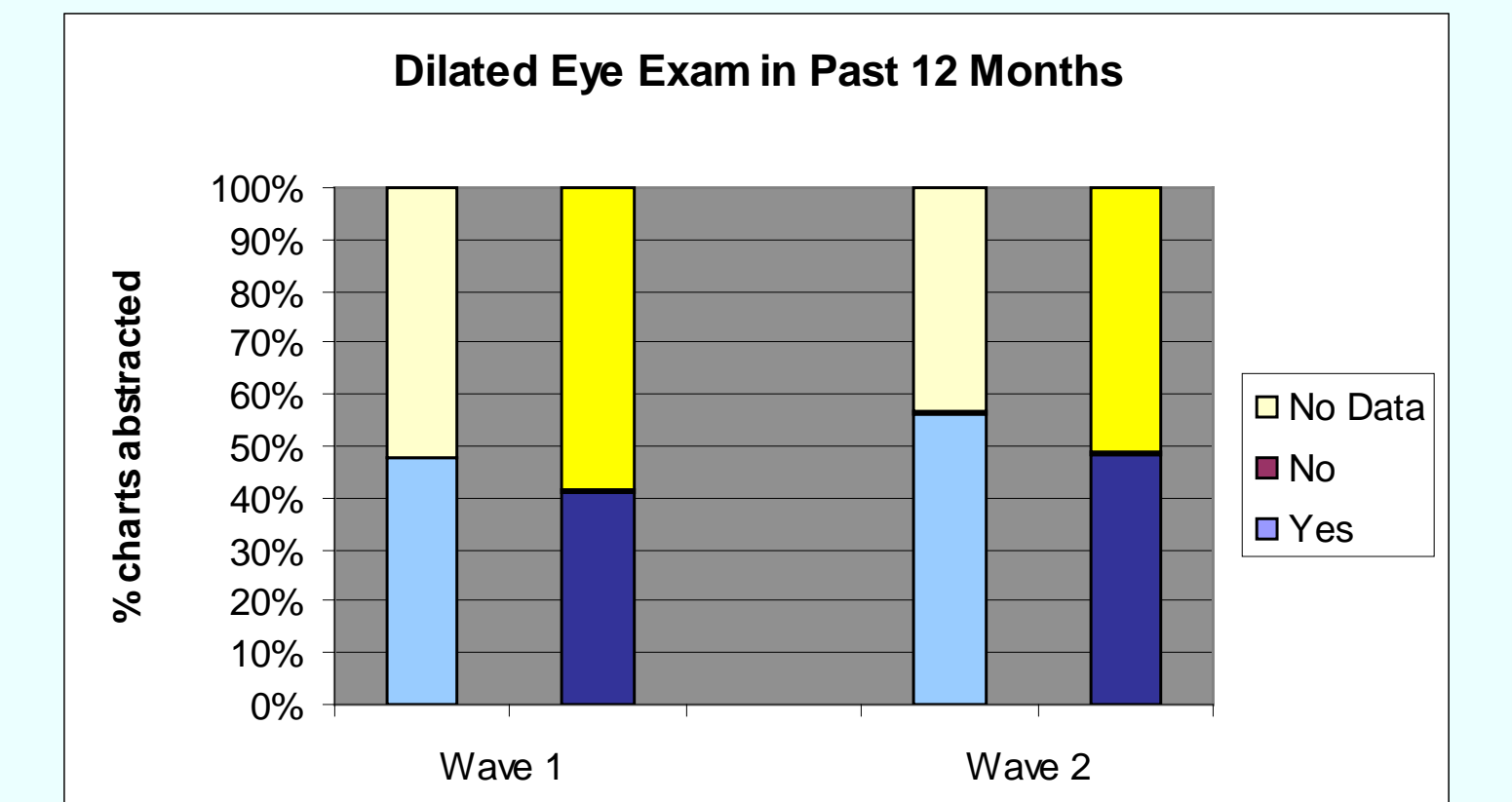
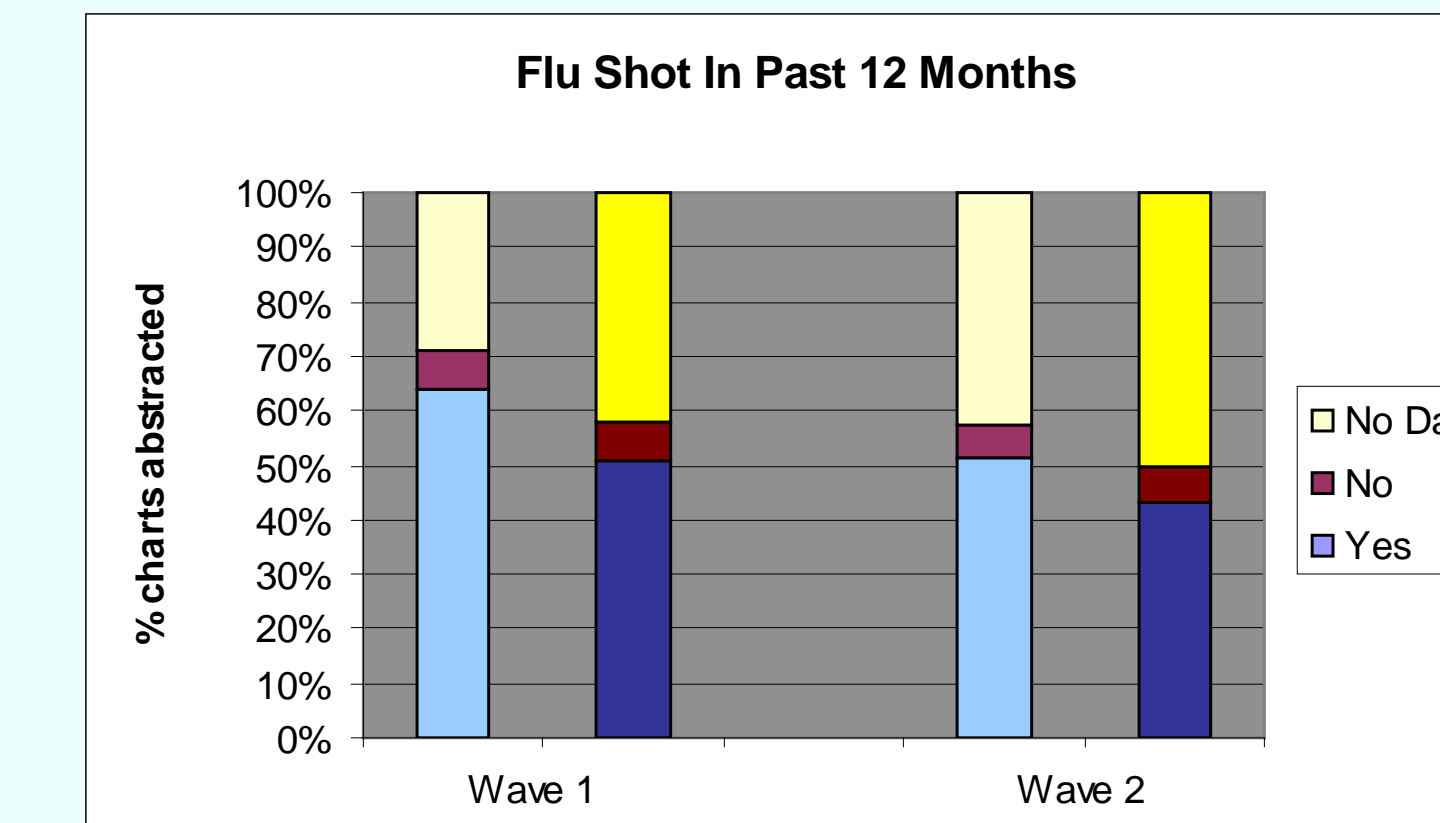
HbA1c	- 3 most recent results & dates
Blood Pressure	- 3 most recent readings & dates
Lipid Profile	- most recent results (LDL, total chol, trig) & date
Urine Protein Test	- most recent results & date
Dilated Eye Exam	- whether performed by ophthalmologist & date
Foot Exam	- visual, sensory, pedal pulse
Flu Shot	- date
Pneumococcal	- date

Intervention

The intervention in this study was the computer-based diabetes management education module for physicians. The module contains concise clinical information and a supporting reference bibliography, self-assessment questions, management tools, and patient education materials. The intervention group participants accessed the module in the months between baseline and 6-month data collections.



Selected Results



Current State and Future Directions

The study currently is in the third (final) phase of chart abstraction, and the project is expected to complete in the fall of 2005.

To date, data do not suggest that guideline dissemination through Internet led to significantly better overall adherence to guidelines. Evaluation of usage patterns and qualitative feedback may be warranted.

ACPNET is in the process of developing infrastructure to provide real-time feedback of performance measurements. Upcoming research efforts will shift away from assessment of practice guideline adherence and focus more on practice change and redesign.