

Ascensia® WinGLUCOFACTS® Professional Software Improves Diabetes Health Outcomes

Michael Janssen, M.D.,¹ Manuel Portalatin, M.D.,¹ Jane Wallace,²
Weiping Zhong, Ph.D.,² and Joan Lee Parkes, Ph.D.²

Abstract

Background:

Traditionally, people with diabetes keep handwritten blood glucose (BG) logs. Although a useful, and a necessary component of diabetes management, logbooks can be incomplete, inaccurate and illegible, which may lead to faulty analyses of BG trends associated with meals, medications and daily activities. Ascensia® WinGLUCOFACTS® Professional Software (WinGLUCOFACTS) from Bayer HealthCare was developed to assist in diabetes management by providing text and graphic presentations of downloaded data. It has a unique Data Wizard™ tool that automatically identifies BG trends.

Methods:

A one year outcome study was conducted at Baptist Primary Care (Jacksonville, Florida) to investigate whether use of WinGLUCOFACTS would improve BG control, diabetes related behaviors, and patient knowledge and attitudes. The cost effectiveness of this software in a primary care setting was also studied. Two physicians treated both the Test Group (90 subjects) and Control Group subjects (66 subjects). The Test Group subjects' diabetes was managed using WinGLUCOFACTS in conjunction with handwritten logs. The Control Group subjects' diabetes was managed using only handwritten logs. Both groups were scheduled to visit their physician 5 times, at 3 month intervals over the course of the 12 month study.

Results:

Hemoglobin A1C (A1C) dropped by about half a percentage point from baseline for both Control Group (-0.48) and Test Group subjects (-0.58) at the 3 month visit, a clinically significant change. The Control Group's A1C levels, however, increased at each succeeding visit, so that at 9 and 12 months it was statistically indistinguishable from baseline, whereas the Test Group's A1C remained significantly lower than baseline (-0.64 and -0.41; 90% confidence level). Based on published methodologies for calculating cost savings related to such a sustained reduction in A1C, annual cost savings would be \$75.04 to \$111.54 per patient or \$75,040 to \$111,540 per 1000 patients. The use of WinGLUCOFACTS also had a positive effect on patients' diabetes related behaviors and on their satisfaction with their care. A majority of Test Group subjects wanted their physician to continue using WinGLUCOFACTS. The physicians expressed satisfaction with this data management system, stating that it helped them to manage the Test Group subjects' diabetes by analyzing BG trends.

Conclusions:

The use of Ascensia® WinGLUCOFACTS® Professional Software from Bayer HealthCare helped in the management of patients' diabetes. It improved overall glycemic control, increased their knowledge of diabetes, increased SMBG frequency, and their satisfaction with care, and was cost effective. The primary care physicians confirmed the benefit afforded by this software in the real-world management of diabetes.

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Author Affiliations: ¹ Baptist Primary Care, Jacksonville, FL, ² Bayer HealthCare LLC, Elkhart, IN

Corresponding Author: Joan Lee Parkes, Ph.D, 1884 Miles Avenue, 18C3, Elkhart, IN 46515, joan.parkes.b@bayer.com