



Business Case Analysis of health e appSM

*A Web-Based Enrollment Application
for Public Health Insurance Programs*

Executive Summary

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EXECUTIVE SUMMARY

Results from the Health-e-App pilot test are encouraging. User satisfaction was very high, and elapsed time from start to finish of the application process was cut significantly compared to the paper application process. Findings on data quality were somewhat favorable, while information on costs proved hard to gauge. Lessons learned in the pilot test, coupled with a combination of policy changes and technical fixes, will help guide the ultimate implementation of Health-e-App.

In conjunction with Governor Gray Davis' e-government initiatives, the California HealthCare Foundation launched Health-e-App, an interactive Internet-based application, in order to simplify and expedite the enrollment process for Healthy Families and Medi-Cal coverage for children and pregnant women.

Health-e-App's Web-based design allows for electronic transmission of the application, signature, and supporting documents from the local enrollment site, through California's centralized application clearinghouse, known as the Single Point of Entry, and then electronically to the appropriate agency (either Healthy Families or Medi-Cal) for final processing and eligibility determination. Compared to the current paper process, which can involve up to three different processing steps and four different mail steps, Health-e-App requires at most two processing steps and one mail step.

The Foundation and the Medi-Cal Policy Institute, in partnership with the California Health and Human Services Agency, piloted Health-e-App in a controlled setting in San Diego County in January 2001. The pilot was conducted to test the application's functionality in the field, to identify and resolve outstanding technical issues, and to enable measurements for assessing Health-e-App's performance. The Lewin Group, a national health care management and policy consulting firm, was retained to conduct an independent business case analysis of the Health-e-App initiative.¹

Business Case Approach

As part of the business case analysis, Lewin assessed the benefits of the automated application from the perspective of all key stakeholders, including applicants and several levels of program administrators. Lewin used the four-week pilot test held in San Diego County as the basis for gathering both quantitative and qualitative evidence to support the business case analysis. During the pilot test, Lewin measured Health-e-App's performance in the field and compared it to the current paper process to gauge the following:

- ◆ Users' satisfaction with the application experience;
- ◆ Efficiencies for state and county agencies, the Certified Application Assistants, and potential program beneficiaries;
- ◆ Changes in accuracy and completeness of applications received; and
- ◆ Implementation issues to consider for countywide or statewide roll-out of the automated application.

¹ The findings of the business case analysis and the recommendations in the report are The Lewin Group's and not those of the Foundation, the Institute, or any of the participating state or county agencies.

Input collected from participants at different points in the process yielded qualitative data regarding the pilot and helped to identify opportunities and challenges associated with broader implementation. To further assess Health-e-App's performance in quantitative terms, Lewin consolidated and analyzed data on both paper and electronic application processing provided by the organizations involved in eligibility determination and enrollment processing. Based on available data, Lewin evaluated aspects of the paper process (e.g., time to completion and completeness of data) and compared them to Health-e-App's performance during the pilot period.

Key Findings

The pilot was conducted at six locations including private and community clinics, a school-based outreach program, and other community-based organizations. During the four-week pilot period, 246 applications for roughly 494 individuals were submitted using Health-e-App. Lewin measured Health-e-App's performance during the pilot relative to the paper process and analyzed the findings in three major areas: user satisfaction, time and processing efficiencies, and data quality.

The pilot had goals beyond the performance assessment, including testing Health-e-App's technical functionality in a real world setting and simultaneously enhancing the online application and fixing problems identified in testing. Lewin's objective in assessing Health-e-App's performance, therefore had to be balanced against these competing demands. As a result, the data are imperfect, and the observations may not be fully relevant to other contexts.

1. User Satisfaction

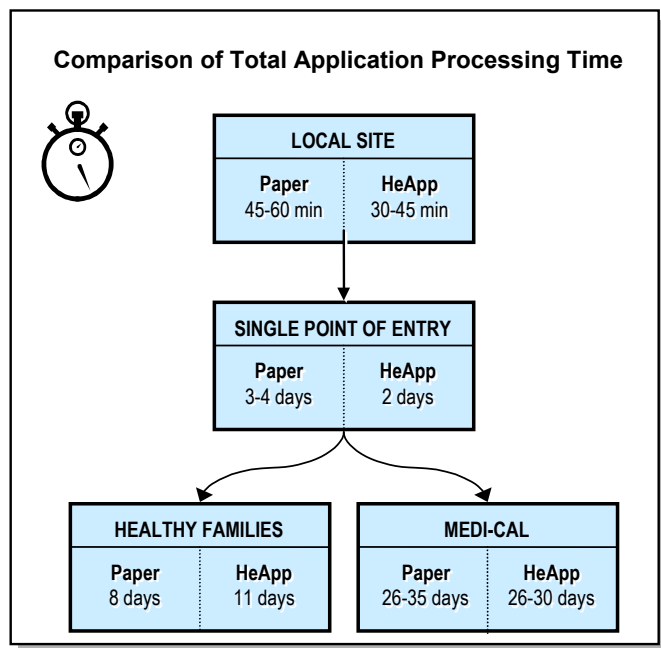
- ◆ **Applicants viewed the automated process favorably. Applicants expressed heightened confidence in the automated process, specifically citing the real-time preliminary determination feature of Health-e-App as beneficial.** Ninety-three percent of Health-e-App applicants surveyed noted that they liked applying on the computer. We found that 99 percent responded enthusiastically to the preliminary determination feature and found it useful to gauge which program they might be eligible for, if any. Some applicants felt “peace of mind” upon receiving the immediate, automated response, citing that mail responses often take too long. None of the applicants expressed concern about applying online or hesitancy regarding the confidentiality of data. On the contrary, applicants mentioned that use of the computer heightens their confidence in the application process and made the process “more professional.”
- ◆ **Certified Application Assistants (CAAs) preferred Health-e-App to the paper application because they felt the automated application was more credible and efficient, and it made them feel more effective when serving clients.** Health-e-App appears to reduce the CAAs' manual work, allowing them additional time to provide client education and explain the insurance programs in greater detail. CAAs felt that the preliminary determination feature of Health-e-App allowed them to better serve client needs. Based on their experience during the pilot, eleven out of twelve CAAs preferred using Health-e-App to the paper application and indicated a strong preference to continue using Health-e-App past the pilot period. From the CAAs' perspective, several of Health-e-App's features led to

notable process improvements, including minimized paperwork, automated calculations, clarified eligibility questions, red flags when an entry error occurred, and satisfied applicants who left with a more positive attitude knowing which program they may be eligible for.

- ◆ **Staff that process applications and determine eligibility all expressed support for the automated application.** Staff at all levels, from administrators to eligibility workers, noted that Health-e-App has the potential both to improve application completeness and to speed processing time given a combination of policy changes, technical fixes, and increased familiarity with the application over time. Agency staff expressed confidence that most technical problems uncovered in the pilot were surmountable, and they were willing to dedicate labor time and resources to address the issues.

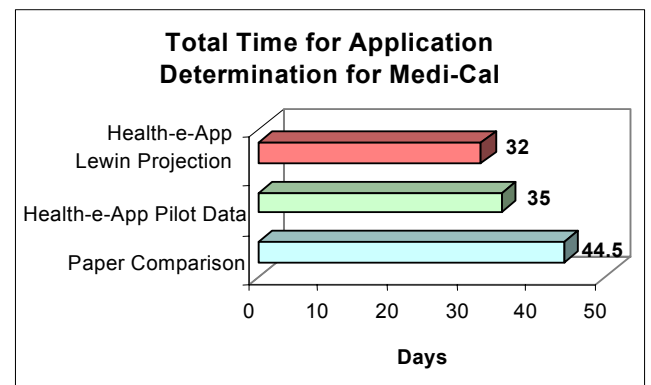
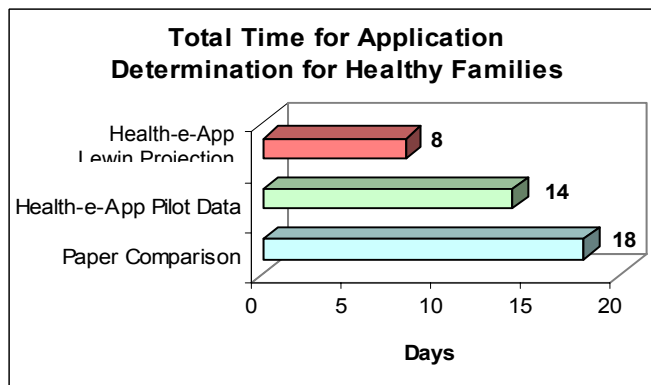
2. Time and Labor Efficiencies

- ◆ **The time spent by applicants and CAAs to complete an application at the enrollment site decreased during the Health-e-App pilot period.** More than half of CAAs surveyed by Lewin reported that their average appointment time with clients decreased from 45 to 60 minutes using the paper application to 30 to 45 minutes. Almost all CAAs noted that Health-e-App took longer to complete during the first few days of the pilot, but by the end of the pilot, the majority of CAAs experienced time efficiencies when using Health-e-App as compared with the paper application.



- ◆ **For Healthy Families applications, Health-e-App is projected to perform as well as, or better than, the paper process assuming key modifications are completed.** Health-e-App lowered the elapsed time between application submission and eligibility determination from 17 to 13.5 calendar days. With several operational fixes at Single Point of Entry and Healthy Families (e.g., developing an automated mechanism for applicants to pay the required premium payment and resolving several issues involving handling and smooth transmission of the supporting documents that accompany the electronic application), Lewin projects that Health-e-App has the potential to reduce total processing time by a total of 2 to 4 days. Savings in processing time combined with the elimination of 6 days in mail time would reduce total elapsed time between application submission and eligibility determination to 8 to 10 days for Health-e-App as compared with 18 days for the paper application. These estimates include the time spent completing the application at the local enrollment site, which for the purposes of our analysis is counted as one day.

- ◆ **For Medi-Cal applications, Health-e-App lowered the total time between application submission and final eligibility determination—efficiency gains that are mainly attributable to elimination of mail time at several different points in the process.** Health-e-App lowered the total elapsed time from application submission to Medi-Cal eligibility determination from 44 or 45 calendar days with the paper process² to 35 days for those applications approved or denied within the data collection period of the pilot. This reduction in time is attributable to 1 or 2 days of saved processing time at Single Point of Entry, up to 5 days of reduced processing time at the county, and 8 to 13 days of eliminated mail and transmission time. If outliers in the paper comparison data (values that extend farther than most others) are included in the analysis, the total elapsed time from application submission to Medi-Cal determination was 52 calendar days. As illustrated in the graph, Lewin projects that the county, with several technical and operational modifications, has the potential to sustain and build upon the efficiency gains in Health-e-App and in the Medi-Cal enrollment process. As a result, total elapsed time between application submission and eligibility determination would be 32 to 35 days for Health-e-App.



3. Data Quality and Related Improvements

- ◆ **During the pilot, Health-e-App’s features substantially reduced the number of errors in critical fields, such as date of birth, and provided a safeguard against losing applications at different transfer points in the processing.** During the pilot period, only 2 percent of individuals who applied for Healthy Families using Health-e-App had application fields with invalid or incomplete data as compared with nearly 5 percent of those who applied using the paper application. Every single Health-e-App could be identified and traced across the entire spectrum of processing sites, while an audit of paper applications found that just under 2 percent were lost or untraceable.
- ◆ **Health-e-App produced highly reliable, real-time preliminary eligibility determinations.** Health-e-App offers a reliable mechanism for getting applications to the right agency (either Healthy Families or Medi-Cal) for processing once Single Point of Entry returns the real-

² According to federal regulations (42 CFR 435.911), states have 45 days from the date of application to process Medicaid applications. The regulations also allow additional time for processing of particularly complex applications, for example those missing required documents. The estimate presented here includes time spent at the local enrollment site and one mail step that both occur prior to the official “date of application” as reported by DHS.

time preliminary eligibility determination through Health-e-App. Although no paper comparison is available, based on preliminary and final eligibility determination data, 97 percent of Health-e-App's preliminary determinations were correct for applications that were granted coverage. Applications submitted electronically could flow through SPE without some of the manual steps to which paper applications are subjected.

Implementation Considerations

The Health-e-App pilot test showed that the new electronic application system offers the potential to improve many aspects of the Healthy Families and Medi-Cal enrollment process. However, the pilot also revealed some structural and procedural gaps, not all strictly associated with Health-e-App, which limited Health-e-App's ability to reach its full potential. At the writing of this report, several operational and technical fixes were underway that were expected to improve Health-e-App processing. These improvements include automation of the first month's premium payment for Healthy Families and successful implementation of the CAA workload monitoring feature and payment tracking system. Should full expansion of Health-e-App be pursued, The Lewin Group offers these suggestions for development in addition to the operational modifications underway.

- ◆ Enhance CAA training, not just for Health-e-App but also for programmatic issues such as documentation requirements and benefit options, and devise methods for real-time technical assistance for CAAs.
- ◆ Reconcile differences in information/documentation sought by the state and county for application completion and processing (e.g., applicant's date of birth).
- ◆ Make the electronic image files containing applicants' supporting documentation less fragmented and more readily accessible to agency staff.
- ◆ Develop methods to facilitate submission and tracking of premium payments, and consider changes to current policies with regard to the initial Healthy Families premium payments.

A further consideration pertains to the unique role that the California HealthCare Foundation played in the creation of Health-e-App. The Foundation funded the development and testing of the application and worked closely with the state to resolve policy issues, such as the use of electronic signatures. As an independent entity, it rallied key stakeholders to consider seriously this novel approach to enrolling Healthy Families and Medi-Cal applicants. The Foundation also played an important role in pushing Health-e-App's technological capabilities. Keeping the momentum going as the Foundation's initiative recedes will be a challenge for the state and counties should full implementation be pursued.

The pilot test, together with the developmental effort that preceded it, demonstrated that state-of-the-art technology could be applied to improve systems for enrolling low-income individuals in public health insurance programs. The development and testing process also improved understanding of the entire application process at different levels among all stakeholders, which will help in the ongoing development and enhancement of Health-e-App, as well as the overall improvement of the Healthy Families and Medi-Cal enrollment processes.

FOR MORE INFORMATION

The complete report by The Lewin Group is available online at <http://www.healtheapp.org>.

Additional information about this project may be obtained by contacting:

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