The LEWIN GROUP

Business Case Analysis of

health-e-app[SM]

A Web-Based Enrollment Application for Public Health Insurance Programs

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ACKNOWLEDGMENTS

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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.[*]

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.

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[*] 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.
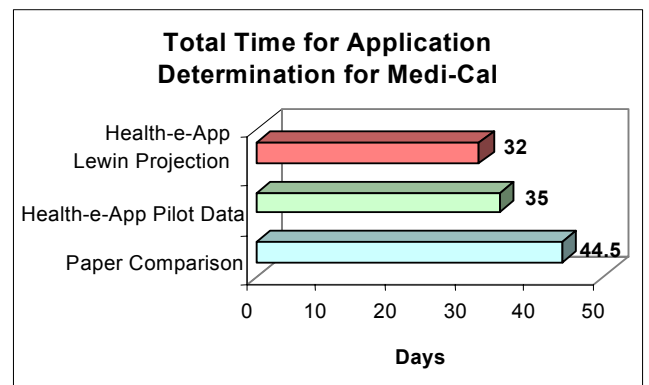
2. Time and Labor Efficiencies

♦ **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.

Comparison of Total Application Processing Time

LOCAL SITE	
Paper 45-60 min	HeApp 30-45 min

SINGLE POINT OF ENTRY	
Paper 3-4 days	HeApp 2 days

HEALTHY FAMILIES	
Paper 8 days	HeApp 11 days

MEDI-CAL	
Paper 26-35 days	HeApp 26-30 days
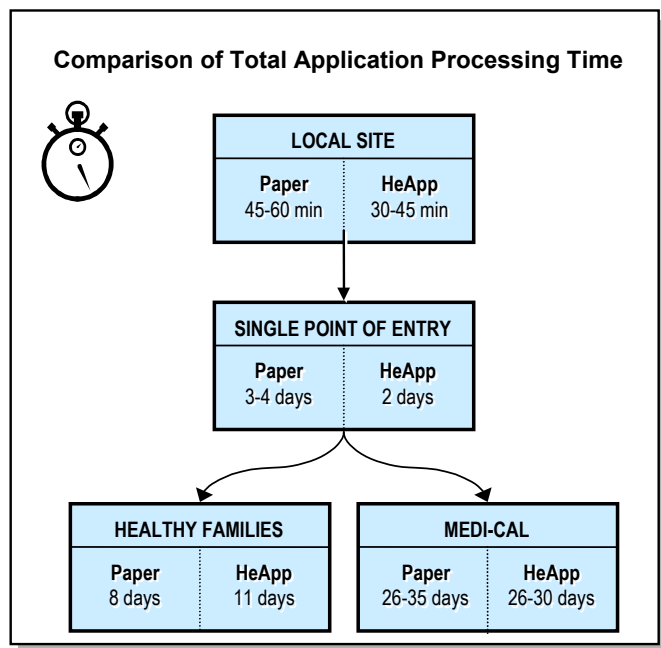
♦ **For Healthy Families applications, Health-e-App is projected to perform as well as, or better than, the paper process assuming key modifications are completed.** Health-e-App lowered the elapsed time between application submission and eligibility determination from 17 to 13.5 calendar days. With 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 process[1] 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.

Total Time for Application Determination for Healthy Families

	Days
Health-e-App Lewin Projection	8
Health-e-App Pilot Data	14
Paper Comparison	18

Total Time for Application Determination for Medi-Cal

	Days
Health-e-App Lewin Projection	32
Health-e-App Pilot Data	35
Paper Comparison	44.5
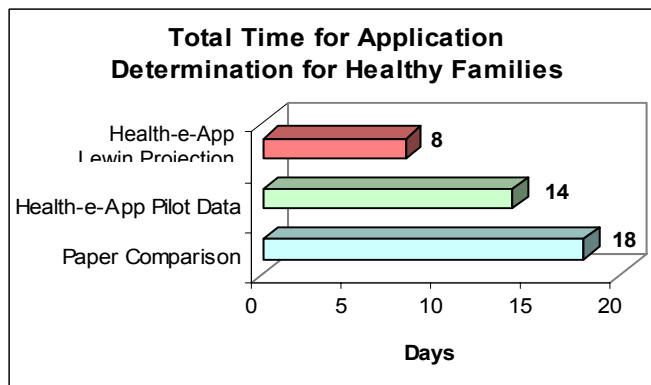
3. Data Quality and Related Improvements

♦ **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-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.

I. INTRODUCTION

In response to federal legislation authorizing the State Children's Health Insurance Program, in July 1998 California broadened its coverage of children under age 19 by expanding its Medi-Cal program and implementing a stand-alone program called Healthy Families. At that time, the state also developed a joint, mail-in application for Healthy Families and Medi-Cal, thereby removing the need for face-to-face meetings to apply for Medi-Cal. In October 1998, California streamlined the original Healthy Families and Medi-Cal mail-in application from a 28-page to an eight-page application (four pages of forms and four pages of instruction) and created a Single Point of Entry to receive and screen the applications.

The California HealthCare Foundation saw an opportunity to develop an interactive Web-based application in order to further simplify and expedite the enrollment process. The new automated application process, coined Health-e-App, was designed to help enroll children in Healthy Families and pregnant women and children in Medi-Cal through an interactive, interview-style process. The Foundation, 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 Foundation commissioned The Lewin Group, a national health care management and policy consulting firm, to conduct an independent business case analysis of the Health-e-App pilot. The criteria for conducting the analysis were reviewed and agreed to by the California Health and Human Services Agency, DHS, MRMIB, EDS and the Foundation. This report describes the analysis that Lewin conducted.

For the reader's reference, below is an alphabetical list of terms, acronyms, and organizations associated with the Health-e-App project and frequently mentioned in this report.

♦ **California Health and Human Services Agency (CHHSA):** State department responsible for administering state and federal programs for health care, social services, public assistance, job training, and rehabilitation.

♦ **California Department of Health Services (DHS):** State agency under CHHSA that manages Medi-Cal (California's Medicaid program) and public health functions.

♦ **California HealthCare Foundation (CHCF or "the Foundation"):** A private philanthropy and sponsor of the Health-e-App project.

♦ **Certified Application Assistants (CAAs):** Designated workers in community-based organizations who provide outreach, education, and assistance to Healthy Families/Medi-Cal applicants.

♦ **Electronic Data Systems (EDS):** The state's contractor for operation of the Single Point of Entry, and the state's contractor for Healthy Families' eligibility processing and determination. Under a separate contract, EDS also serves as the eligibility system contractor for San Diego County.

♦ **Deloitte Consulting:** The Foundation selected Deloitte Consulting through a competitive bid process to design, develop, test and provide technical support for Health-e-App.

♦ **Healthy Families (HF):** California's version of Title XXI, the State Children's Health Insurance Program (S-CHIP) for children under age 19 whose family income falls at or below 250 percent of the Federal Poverty Level. Healthy Families provides low-cost health insurance for a small monthly premium payment.

♦ **Managed Risk Medical Insurance Board (MRMIB):** The California agency that administers several health insurance programs, including the Healthy Families program.

♦ **Medi-Cal:** California's Title XIX (Medicaid) program. While people in many public aid categories qualify for Medi-Cal, the Health-e-App pilot project pertains most directly to children under age 19 and pregnant women.

♦ **Medi-Cal Policy Institute (MCPI or "the Institute"):** One of the initial sponsors of the Health-e-App project in conjunction with the California HealthCare Foundation. The Institute was established by a grant from the Foundation in 1997.

♦ **San Diego County Health and Human Services Agency:** The local service agency that has responsibility for determining Medi-Cal eligibility for applicants residing in the county.

♦ **Single Point of Entry (SPE):** the state's central clearinghouse for Healthy Families and Medi-Cal mail-in applications. Single Point of Entry performs an initial screen of all applications for Medi-Cal and Healthy Families and routes the applications to respective enrollment agencies.

♦ **Welfare Case Data System (WCDS):** One of four statewide automated welfare systems used in California. San Diego is one of 18 California counties in the WCDS consortium.

The next section of this report describes the approach Lewin took to complete the business case analysis. The analysis was based on the live pilot test of Health-e-App conducted during four weeks in January 2001. Subsequent sections of the report present a side-by-side comparison of the Health-e-App and paper application processes and describe the findings of the business case analysis. The report concludes with a discussion of implementation issues and other future considerations that The Lewin Group discovered while preparing the business case analysis.

II. COMPARATIVE APPLICATION FEATURES AND PROCESSES

Health-e-App asks for the same information sought in the paper application; however, the automation features capitalize on Web-based technologies and the layout allows for an interactive interview-style format to guide users to enter only the information relevant to the applicant. Also, the processing mechanism of the application differs from the paper process at a number of key steps.

Figure 1 gives an overview of the application's journey from the local enrollment site to the state's central application clearinghouse, Single Point of Entry, to the final stages of eligibility determination for both the paper and Health-e-App processes. Subsequent illustrations show specific stages of processing and provide a preliminary indication of where time would be saved with the automated application.

## A. Applicant Completes Application at Local Enrollment Site

As illustrated in Figure 2, both the paper application and Health-e-App processes begin at the local level. Applicants have the option to complete the paper application either on their own or with help from a Certified Application Assistant (CAA), a person trained by the state to assist families in completing the application. The community-based organizations that employ the CAAs are paid an application assistance fee of $50 for each application that actually results in an enrollment into either Healthy Families or Medi-Cal. Currently, 62 percent of all applications received by SPE are submitted with the assistance of CAAs. For the Health-e-App pilot project in San Diego, all applications were completed with CAA support.

1. Paper Process

Typically, a prospective applicant calls the state's toll-free hotline for a referral to the nearest enrollment site. He/she then schedules an appointment with a CAA at an enrollment site.[2] At this time, the CAA typically tells the applicant to bring necessary documentation (e.g., child's birth certificate, parent's pay stubs). During the appointment, the CAA works with the applicant to manually complete the four-page paper form (see Appendix A); additionally, the CAA uses separate worksheets that are not included in the application to manually calculate the applicant's program eligibility based on the family characteristics and income data provided. The applicant then leaves, makes copies of the documents, encloses the Healthy Families premium payment (if applicable), and mails the application packet to the Single Point of Entry.[3]

Once received via mail by SPE, the paper application is opened, paper forms and copies of documentation are separated, sorted and electronically scanned, and all information from the application is manually entered into a database. It then passes through an automated preliminary screening program after which SPE staff review family and income data on the application and either electronically route the application to Healthy Families or manually batch the screened, paper Medi-Cal applications and overnight mail them to the appropriate county Medi-Cal office for further processing. To minimize application processing time, the state requires SPE to route applications to the appropriate program (either Healthy Families or Medi-Cal) in no more than four business days.

Figure 1: Overview of Key Entities Involved with Paper and Health-e-App Processing[4]
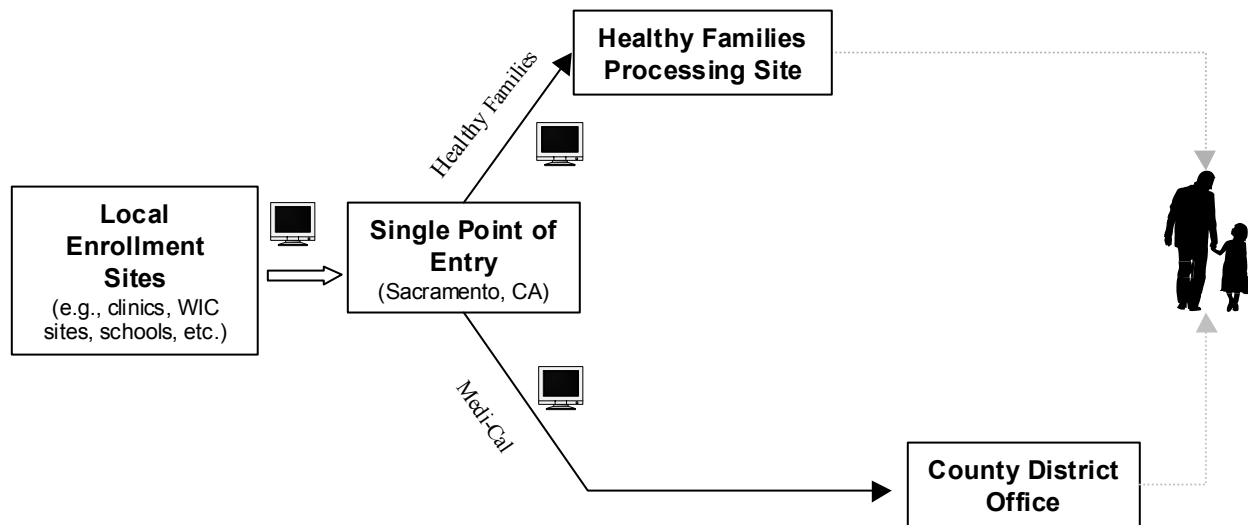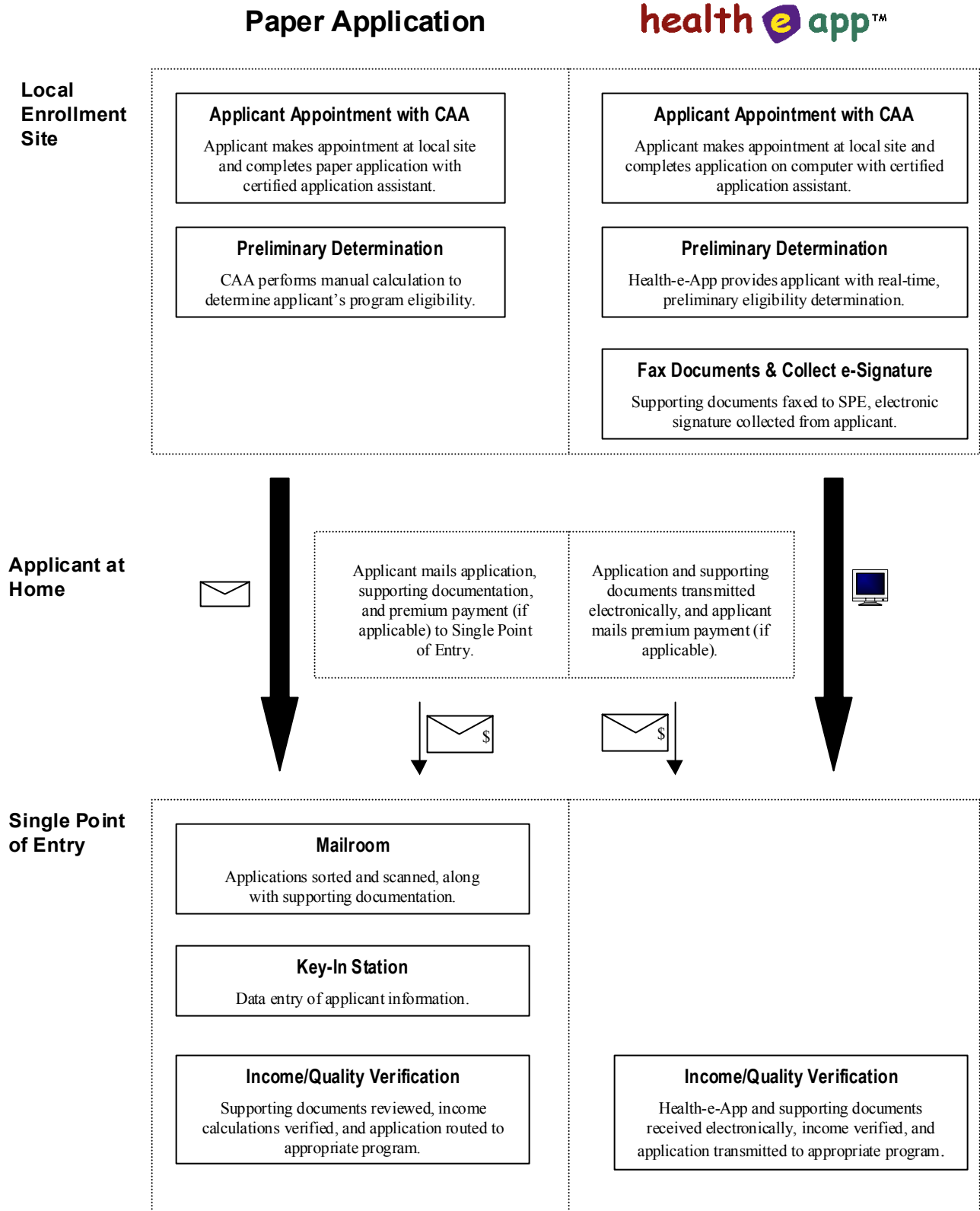

Paper Application Processing
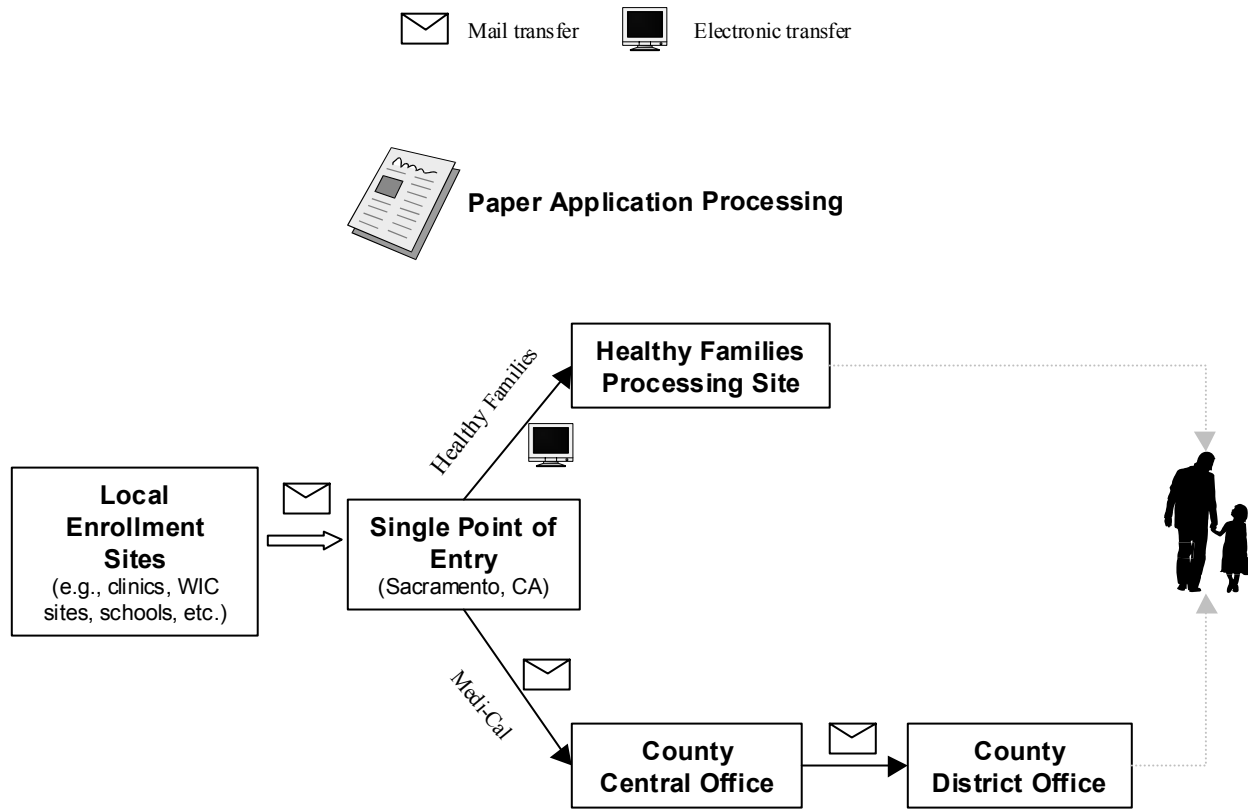
health e app™ Application Processing

Figure 2: First Stage of Paper Application and Health-e-App

Paper Application   health *e* app™

Local Enrollment Site

Applicant Appointment with CAA
Applicant makes appointment at local site and completes paper application with certified application assistant.

Preliminary Determination
CAA performs manual calculation to determine applicant's program eligibility.

Applicant Appointment with CAA
Applicant makes appointment at local site and completes application on computer with certified application assistant.

Preliminary Determination
Health-e-App provides applicant with real-time, preliminary eligibility determination.

Fax Documents & Collect e-Signature
Supporting documents faxed to SPE, electronic signature collected from applicant.

Applicant at Home

Applicant mails application, supporting documentation, and premium payment (if applicable) to Single Point of Entry.

Application and supporting documents transmitted electronically, and applicant mails premium payment (if applicable).

Single Point of Entry

Mailroom
Applications sorted and scanned, along with supporting documentation.

Key-In Station
Data entry of applicant information.

Income/Quality Verification
Supporting documents reviewed, income calculations verified, and application routed to appropriate program.

Income/Quality Verification
Health-e-App and supporting documents received electronically, income verified, and application transmitted to appropriate program.

2. Health-e-App Process

In contrast with the current paper process, Health-e-App is a near-paperless, online application that bypasses several steps from the point at which the CAA completes an application and eligibility determination begins. The Health-e-App process:

♦ Prompts and requires CAAs to complete all "critical information fields" (e.g., child's name, birth date, Social Security Number) before proceeding to the next section.

♦ Provides pull-down menus with response choices (e.g., county selection, income sources, family relationship options) designed to minimize typing and spelling errors, and to speed the data input process.

♦ Offers the CAA the ability to "suspend" the application for up to 30 days if the applicant does not have all of the necessary information or needs to leave prior to completion of Health-e-App. CAAs are then able to retrieve the application, with all of the information already entered still intact, at a later date or time for completion.

♦ Returns a real-time, preliminary eligibility and program determination.

♦ Allows an applicant with Healthy Families preliminary determination to select a health plan and a primary care provider for each eligible family member.[5]

♦ Enables fax transmission of supporting documentation to SPE, keeping the process nearly paperless. Faxes are received as image files at SPE. Image files are linked with the supporting application data through a bar coded unique identifier, the Document Control Number.

♦ Permits use of electronic signature. As shown in Exhibit A below, before electronically submitting the application, the applicant can provide an electronic signature using the electronic signature pad and receives a printed summary as well as a statement of rights and responsibilities in either English or Spanish (see Appendix B).

An electronic interface between Health-e-App and Single Point of Entry streamlines application processing of Healthy Families and Medi-Cal applications. As shown in Figure 2, Health-e-App sends application data directly to the "Income and Quality Verification" checkpoint at SPE where an eligibility technician reviews the application and supporting documents. SPE electronically sends applications pre-determined to qualify for Healthy Families to the enrollment contractor for Healthy Families (EDS/HF), and SPE electronically posts applications predetermined to qualify for Medi-Cal so that staff at the county district office can download the application on their schedule. Health-e-App allows applications predetermined for Medi-Cal to bypass processing at the county central office and eliminates mail time at two different steps.

Exhibit A: Screen Shot of Health-e-App e-Signature Field

Before   After
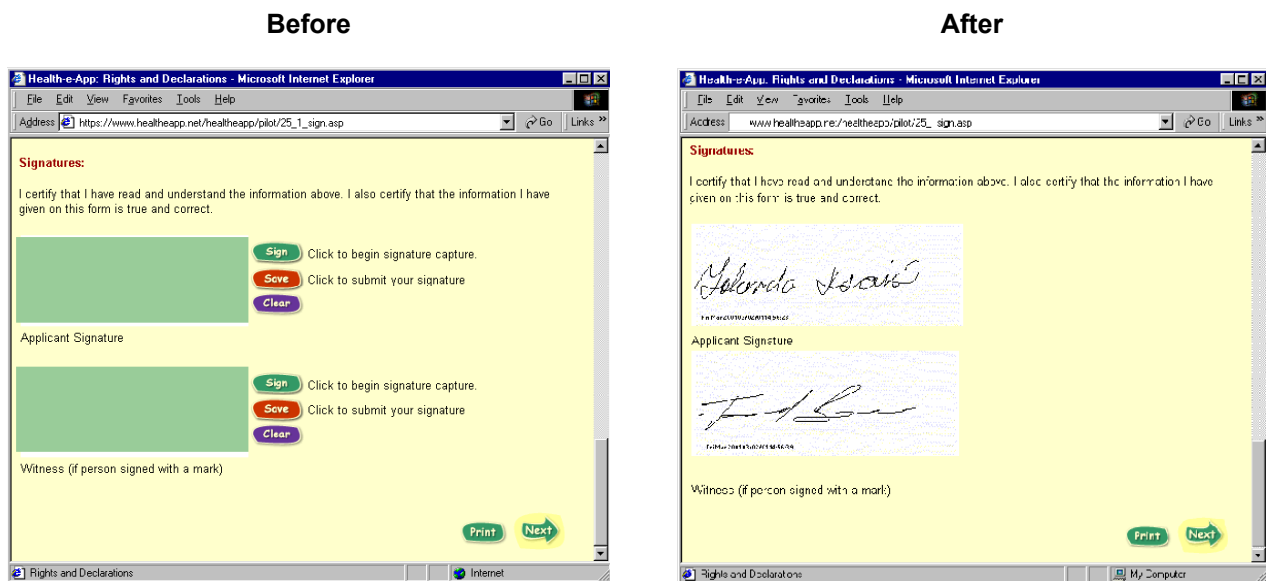
B. Applications for Healthy Families Sent from SPE to Healthy Families (EDS/HF)

As shown in Figure 3, prior to Health-e-App, the state had already automated the transmission of Healthy Families applications from SPE to Healthy Families. Once sent to Healthy Families, the steps associated with processing Health-e-App are identical to those of the paper application; staff perform additional eligibility verification and, if needed, conduct follow-up by phone and mail in order to complete the final stages of application processing.

According to EDS/Healthy Families staff, more than 60 percent of paper applications for Healthy Families (both CAA-assisted and unassisted) require some follow-up with the applicant. Follow-up regarding insufficient applicant information or missing supporting documentation is most common. These follow-up efforts affect processing time requirements; depending on the completeness of the application, EDS is required to process Healthy Families applications within 3 to 20 business days after receipt from SPE.[6]

C. Applications for Medi-Cal Sent from SPE to County Offices

1. Paper Process

In the current paper process, SPE screens the Medi-Cal applications and then sends them via overnight courier to the appropriate county central office. In many counties, the applications are batched and subsequently sent by inter-office mail to the appropriate district office for final processing.[7] As illustrated in Figure 4, the district offices receive the applicant's original paper application. County staff not only re-enter all data into the county data system, but also "clear" the case by (1) determining if the applicant has an existing case file, and (2) running background checks against other governmental information systems (e.g., Social Security database). After "clearing" a case, a county eligibility technician verifies that documentation has been received

and contacts the applicant to get any missing information. Depending on the complexity of the case and the completeness of the application, the eligibility worker may call the applicant in for a follow-up interview. For those cases on which follow-up is performed, the eligibility technician typically then issues a positive or negative notice of action. Federal regulations[8] require most Medi-Cal applications to be processed within 45 days following the date of application. According to California's DHS, the state uses the date of receipt by Single Point of Entry as the date of application.

2. Health-e-App Process

With Health-e-App, both the application data and a computerized image of the supporting documentation are sent electronically from SPE directly to the county district office,[9] bypassing handling at the county central office and eliminating both the county inter-office mail step and the re-entry of data into the county data system. The county data system generates a printed facsimile of the application, and clerical workers print the image files containing the applicant's supporting documentation. From this point forward, eligibility technicians process Health-e-Apps in the same manner as paper applications—clearing the case against other state systems, performing call-backs to verify information as needed, issuing notices of action, and so forth.

Figure 3: Healthy Families Application Processing—
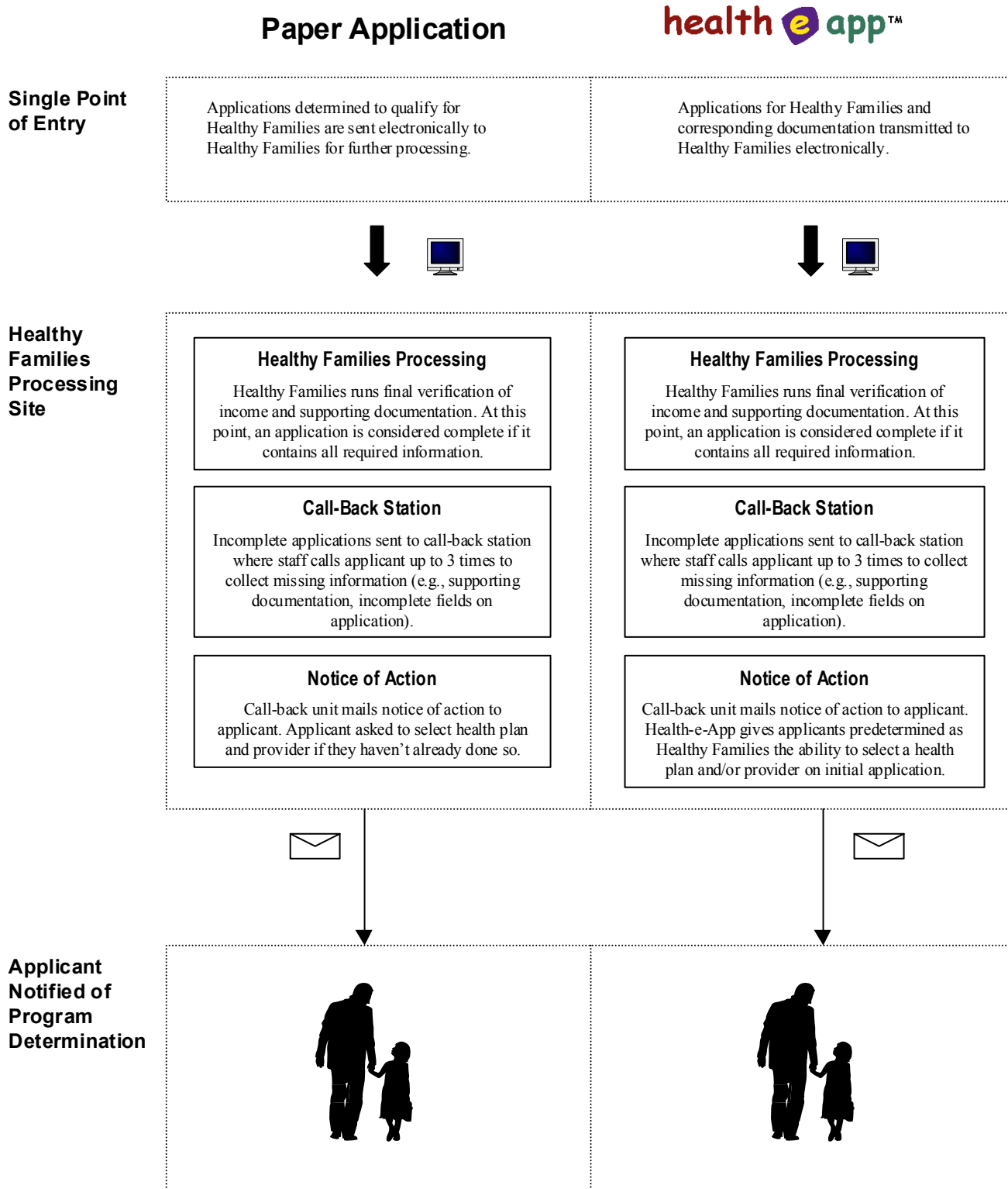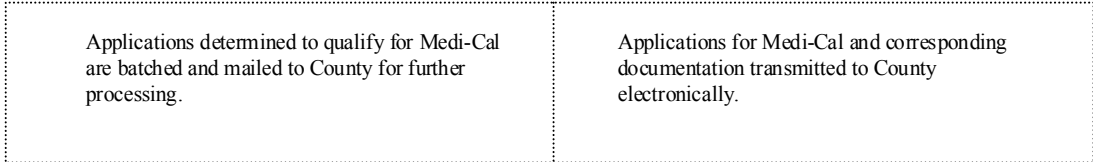## Single Point of Entry to Healthy Families

Paper Application

health e app™

Single Point of Entry

Applications determined to qualify for Healthy Families are sent electronically to Healthy Families for further processing.

Applications for Healthy Families and corresponding documentation transmitted to Healthy Families electronically.

Healthy Families Processing Site

Healthy Families Processing

Healthy Families runs final verification of income and supporting documentation. At this point, an application is considered complete if it contains all required information.

Healthy Families Processing

Healthy Families runs final verification of income and supporting documentation. At this point, an application is considered complete if it contains all required information.

Call-Back Station

Incomplete applications sent to call-back station where staff calls applicant up to 3 times to collect missing information (e.g., supporting documentation, incomplete fields on application).

Call-Back Station

Incomplete applications sent to call-back station where staff calls applicant up to 3 times to collect missing information (e.g., supporting documentation, incomplete fields on application).

Notice of Action

Call-back unit mails notice of action to applicant. Applicant asked to select health plan and provider if they haven't already done so.

Notice of Action

Call-back unit mails notice of action to applicant. Health-e-App gives applicants predetermined as Healthy Families the ability to select a health plan and/or provider on initial application.

Applicant Notified of Program Determination

Figure 4: Medi-Cal Application Processing—Single Point of Entry to County

Paper Application

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Single Point of Entry

Applications determined to qualify for Medi-Cal are batched and mailed to County for further processing.

Applications for Medi-Cal and corresponding documentation transmitted to County electronically.

County Offices (Medi-Cal)

County Central Office

Applications are sorted and sent to the appropriate district office for processing.

County District Office

• Clerks re-enter data from original paper application.

• Eligibility technicians "clear" application against other State verification systems.

• Income and supporting documentation reviewed; if the application is missing required information, eligibility technicians make follow-up calls and send letters to the applicant requesting missing information.

County District Office

• Eligibility technicians (ET) download and print Health-e-App from computer.

• ET retrieves corresponding image files containing supporting documentation and electronic signature and prints file.

• ET "clears" application against other State verification systems and county eligibility system.

• Income and supporting documentation reviewed; if the application is missing required information, eligibility technicians make follow-up calls and send letters to the applicant requesting missing information.

Applicant Notified of Determination

III. BUSINESS CASE APPROACH

Development of the business case required assessing the benefits of the automated application from the perspective of all key stakeholders, including applicants and several levels of program administrators.[10] 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 in comparison 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.

A. Pilot Test

The pilot test was conducted to test the application's functionality in the field, to resolve outstanding technical issues, and to enable measurements for the business case analysis. CHCF launched a two-week controlled pre-test of Health-e-App at one enrollment site, followed by a four-week expanded pilot test during which Health-e-App was used at a total of six enrollment sites. Measurements used for the business case analysis were taken only during the second phase to minimize any bias associated with the start-up technical problems in the first phase. The expanded pilot test began in San Diego on January 9, 2001, and continued through February 2, 2001.

1. San Diego Preparation

Based on several factors, including a willingness of the county government to host the pilot, San Diego was selected as the pilot test county. In partnership with the San Diego County Health and Human Services Agency, CHCF selected six locations in the Logan Heights area of San Diego to serve as pilot test sites. The sites, which were approved by DHS, included two community clinics, a private clinic conducting on-site enrollment as well as off-site enrollment at WIC centers, a community-based organization conducting outreach at a church, and a school-based outreach program (see Appendix C). Sites were chosen based on their geographic location within the county and their historical applicant volume.

Before the pilot began, the Foundation provided CAAs from each of the six pilot sites with training, and CAAs were given close technical support by contractors engaged by CHCF during the pilot. As part of the pre-pilot training, staff at each site received an on-site demonstration of the application and description of the interfaces and data flow. CAAs and site supervisors reviewed basic computer functions, walked through the electronic application to gain familiarity with its features, and simulated application completion episodes using fictitious data. In addition, an optional two-hour computer training course on basic computer skills, including use of a Web

browser, was offered. All CAAs were given a quick reference guide and a phone contact list for technical problems encountered during the pilot.

As illustrated in Figure 5, Health-e-App was gradually rolled out at the pilot test sites during the first week of the pilot. CAAs almost exclusively used Health-e-App[11] to submit applications on behalf of Healthy Families and Medi-Cal applicants during the four-week period. Additionally, all locations used notebook computers and wireless modems to facilitate off-site enrollment at WIC centers, schools or applicants' homes.

Finally, the San Diego county eligibility system (Welfare Case Data System, or WCDS) was modified to receive applications electronically after their initial screen at Single Point of Entry. The county contracted with the WCDS vendor, EDS, to build the county's interface to SPE. County funds were supplemented with state administrative dollars to finance interface construction. Two eligibility technicians in the district office were trained to handle processing of Medi-Cal applications submitted through Health-e-App (see Figure 5).

Figure 5: Health-e-App Project Roll-Out
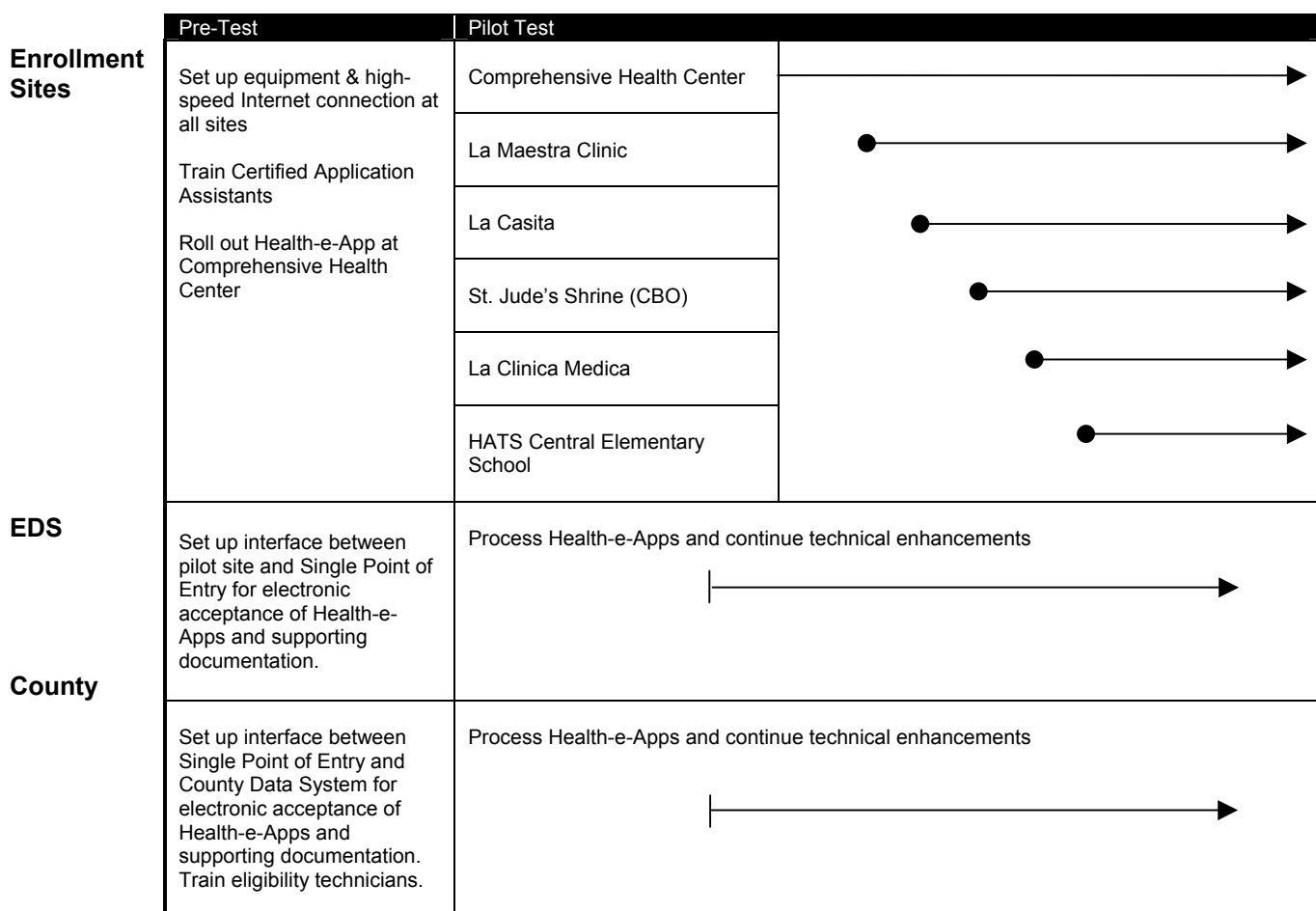
2. Single Point of Entry Preparation

As described earlier, all mail-in applications are processed at the state's Single Point of Entry, operated under contract by EDS. In preparation for Health-e-App use, SPE built electronic interfaces to receive Health-e-App applications and transmit them electronically to the county for Medi-Cal final determination. The interface between SPE and Healthy Families already existed before the advent of Health-e-App. At SPE, a small group of eligibility enrollment specialists processed all applications submitted via Health-e-App.

B. Assessment of the Pilot

During the pilot test, Lewin evaluated Health-e-App's performance to assess whether it produced the intended benefits for the Healthy Families and Medi-Cal programs. As part of the business case analysis, Lewin consultants:

♦ Documented the current paper enrollment process from an application's start at the local enrollment site to final program determination by Healthy Families and/or Medi-Cal;

♦ Devised a mail test proxy between San Diego County and Single Point of Entry to estimate approximate mail time for paper applications;

♦ Created a one-page applicant questionnaire in English and Spanish to document applicants' impressions of Health-e-App, and with the assistance of CAAs, distributed questionnaires to applicants following their appointments (see Appendix D);

♦ Interviewed all participating CAAs during the pilot test period and followed up with a brief questionnaire to document CAA impressions at the conclusion of the pilot test (see Appendix E);

♦ Observed several application completion episodes to better understand the Health-e-App process;[12] and

♦ Debriefed with agency staff and contractors during and after the pilot to capture their perceptions of the Health-e-App process.

Interviewing and surveying participants at different points in the process yielded a large volume of qualitative data regarding the pilot and the opportunities and challenges associated with broader implementation. To further assess Health-e-App's performance relative to the current paper process, Lewin consolidated and analyzed data reported by Single Point of Entry, Healthy Families, San Diego County and the CHCF contractors supporting the pilot. For comparative purposes, EDS and the county supplied data on paper applications submitted to SPE from San Diego County between January 2000 and March 2000.[13] 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.

IV. HEALTH-E-APP PERFORMANCE ASSESSMENT

Lewin measured Health-e-App's performance during the four-week pilot relative to the paper process and analyzed the findings in four major areas—user satisfaction, time and processing efficiencies, data quality, and cost. 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.

A. User Satisfaction

Throughout the Health-e-App pilot test and in the post-pilot period, applicants, CAAs, and agency staff gave feedback on specific application features and offered their impressions of the automated process. A total of 15 CAAs and 72 applicants responded to a brief, one-page questionnaire. Reponses from questionnaires and interviews with CAAs and agency staff at the start and end of the pilot revealed a favorable response toward the new automated application.

1. Applicant Satisfaction with Health-e-App

♦ **Applicant response to the automated process was favorable.** Some 93 percent of Health-e-App applicants surveyed noted that they liked applying on the computer. Applicants valued the immediate feedback on their preliminary program determination and felt assured that their information was being received by the proper governmental entity. Not surprisingly, 44 percent of applicants using Health-e-App had previously applied for Healthy Families or Medi-Cal. Of those who were familiar with the public health insurance system, 90 percent of applicants preferred using the computer to filling out the paper form because they found Health-e-App was "quick and easy," more convenient, and involved less paperwork.

♦ **The majority of applicants surveyed preferred having CAA assistance with the computer.** When asked if they would feel comfortable applying on the computer without the assistance of a CAA, 43 percent would not want to apply without help, 26 percent were not sure, and 31 percent would feel comfortable applying unassisted. Some applicants thought the application "might get confusing" or that they "might make a mistake" while using the computer. Others felt more comfortable completing the application with an experienced CAA, noting, for example, "It is better to have a specialist present when dealing with insurance matters." In contrast, those applicants who expressed some level of familiarity with computers noted that they would not mind completing the application on their own. Some of these individuals saw this as an opportunity to "teach" or "instruct" themselves about the process and spend more time learning about health and dental plan information, for example, rather than having the information presented to them by CAAs.

♦ **Applicants found the preliminary determination feature of Health-e-App to be beneficial.** The majority (99 percent) of applicants 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 automated response, citing that mail responses often take too long. While over 70 percent of applicants applying for Healthy Families also found it helpful to have information about doctors on the

computer, the remainder of Healthy Families applicants expressed mixed feelings about this feature because they already knew which doctor they wanted or could not locate their preferred doctor on the computerized provider list.

♦ **Applicants quickly returned to the enrollment site to deliver missing support documents when necessary.** CAAs noted that the applicants whose applications were suspended usually returned the same day or next day with the necessary papers—seemingly quicker than in the case of clients using the paper application. With the paper application, applicants have two options if they cannot complete the application during the first appointment: (1) they must remember to return with the partially completed application or (2) the CAA must repeat the intake process once again. Use of the "Suspend" feature of Health-e-App was helpful to the CAA in that the applicant's original application was readily retrievable from the point the application was suspended. Of the 59 Health-e-Apps that were suspended prior to submission, 75 percent were completed on the same day or next day following their start.[14]

♦ **Applicants expressed heightened confidence in the automated application process but became impatient when technical problems arose.** 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. According to CAAs, some applicants remarked that the process seemed "more professional" with the use of modern technology—computers, faxes, the electronic signature tablet, etc.

At times, CAAs encountered temporary technical problems, for example, "computer freezes" or temporary delays in advancing to the next application screen. Applicants often expressed frustration with the time delay in these instances, and consequently, CAAs suspended the application and either asked the applicant to return or offered to make a home visit with a notebook computer and a wireless modem to complete the application later that day or the following day.

2. CAA Satisfaction with Health-e-App

Certified Application Assistant satisfaction seemed to be linked to client satisfaction and vice versa. The CAAs reported that applicants believed the Health-e-App application was more credible than the paper application and made the process more efficient. The use of technology and the fact that the CAAs had direct access through Health-e-App to the application processing system led the CAAs to feel that Health-e-App made their jobs more meaningful.

All participating CAAs offered their impressions of the paper and Health-e-App processes at the start of the four-week pilot and then again at the conclusion of the pilot. CAAs noted several process improvements with Health-e-App and they also offered constructive feedback on how the automated application could be improved.

♦ **CAAs felt that Health-e-App enhances the application completion experience and made them feel more effective when serving clients.** While the length of appointments declines only slightly with the use of Health-e-App, the composition of the appointment changes for the better. Health-e-App appears to reduce the CAAs' manual work and mathematical calculations,[15] allowing them additional time to provide client education and explain the insurance programs in greater detail. While manual calculations to determine program eligibility are not required with the paper application, almost all CAAs interviewed perform them as a service to their clients and felt that the preliminary determination feature of Health-e-App empowered them with a tool to better serve client needs.

♦ **CAAs preferred to use Health-e-App over the paper application**. Based on their experience during the pilot, eleven out of twelve CAAs who responded preferred using Health-e-App over the paper application for enrollment purposes and indicated a strong preference to continue using Health-e-App beyond 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. Also, CAAs liked that they could provide applicants with take-home summary sheets for their records because the paper process generates no such "receipt" unless the applicant photocopies the application before mailing it. One CAA summarized, "I don't have to write. It looks neat, and it tells right away what program and how much the applicant has to pay [if Healthy Families]." Additional CAA comments on specific application features are detailed in Exhibit B.

♦ **Complexity of a case matters in the CAAs' reaction to Health-e-App.** CAAs indicated they had some difficulty in navigating Health-e-App when confronted with a complex case – for example, a case where a pregnant mother may be applying for herself and two children who qualify for Healthy Families and one child who qualifies for Medi-Cal. While one CAA commented, "Health-e-App has the same feel as the paper application," other CAAs felt the order of the questions in Health-e-App was not intuitive. The Health-e-App relationship field gave a number of CAAs difficulty because, unlike the paper application, CAAs cannot view information on all individuals on a single page, as shown in Exhibit C below. A number of CAAs suggested modifying the layout of the relationship screens and recommended they be consolidated to a one-screen summary.

♦ **Some CAAs would like better training.** Several CAAs expressed a desire for more training on basic computer skills and on Health-e-App specifically. For example, a Health-e-App demo program for practice purposes would be appreciated. Further, a few CAAs reported that they lacked good typing skills and/or were unfamiliar with the computer keyboard, making the Health-e-App process take longer than the paper application process, especially at the outset of their experience.

Two-thirds of all CAAs interviewed indicated that training on Healthy Families and Medi-Cal eligibility rules would be useful, and one-half of CAAs surveyed would like to be better informed about health plan and provider information. These desires applied for both the paper application and Health-e-App processes.

Exhibit B: Sample Screen Shots and CAA Impressions

Pull-down menus in certain fields:
- ♦ *save time*
- ♦ *eliminate searches for information*
- ♦ *enhance completeness and accuracy*

Workload feature would allow CAAs to:
- ♦ *track applications following submission*
- ♦ *track and confirm $50 app assistance fee (currently no system to do so for Medi-Cal applications)*
- ♦ *check the status of applications, especially when responding to anxious applicants*

CAAs comment that provider selection feature:
- ♦ *must be updated frequently to be useful*
- ♦ *eliminates errors related to provider assignment*

Exhibit C: Comparison of Paper and Health-e-App Relationship Field

Paper Application   Health-e-App

3. Agency Staff Impressions of Health-e-App

Staff at Single Point of Entry, Healthy Families, and San Diego County 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. Interestingly, despite the technical shortcomings during the pilot and in the post-pilot period, agency staff were confident that most technical problems were surmountable, and they were willing to dedicate labor time and resources to address these issues. For example:

♦ At Single Point of Entry and Healthy Families, staff noted that working with Health-e-App allowed them to identify process improvements that could be made to the current paper application process.

♦ At the county district office, eligibility workers experienced processing delays throughout the pilot due to an oversight in the Health-e-App/county interface that resulted in assignment of duplicate case numbers to Medi-Cal applicants with prior case history. At the writing of this report, technical modifications are underway to allow front-end clearance of Medi-Cal applications, which would likely prevent the duplication of entries in the county system.

In general, staff members at Single Point, Healthy Families, and the county supported use of the automated application beyond the pilot test period, and as best stated by one of several agency staff members interviewed by Lewin, "It [Health-e-App] is the right way to go."

B. Time and Processing Efficiencies

The quantitative analyses are based mainly on paper and Health-e-App data reported by EDS and the county. During the four-week pilot period, Single Point of Entry received and processed 246 applications and supporting documents for some 494 individuals, all submitted via Health-e-App. This volume compares to 250 paper applications for 477 individuals that SPE received from the same enrollment entities between December 1, 1999, and March 31, 2000. During this 12-week period, SPE sent about one-half of the 250 paper applications to the central office of San Diego Medi-Cal. For the purposes of the business case analysis, the county provided Lewin with 52 paper applications processed at the county district office (the district office participating in the Health-e-App pilot) along with the 128 Medi-Cal applications received via Health-e-App (through SPE during the pilot). A more detailed summary of the application data is presented in Appendix F.

Time savings were considered from several angles. First, application determination time for the users (applicants and CAAs), which begins at the start of the applicant's appointment with the CAA and ends with the final eligibility determination; and second, processing time, which starts at the point of receipt at SPE and continues from one processing point to the next until final eligibility determination is made at Healthy Families or the county. In some instances, Lewin observed time savings in processing; however, we are unable to fully attribute the specific reasons why time was saved at a particular step in the process. Time was measured in whole days. Any use of decimals in this report reflects the results of averaging.

1. Application Completion and Time to Eligibility Determination

♦ **The time spent by applicants and CAAs to complete and submit an application at the enrollment site decreased during the pilot period, reducing the total time for applicants and CAAs to below that required for the paper process.** More than half of CAAs surveyed by The Lewin Group reported that their average appointment time with clients decreased from 45 to 60 minutes using the paper application to 30 to 45 minutes during the pilot. Eighty percent of CAAs reported that Health-e-App took longer to complete than the paper application during the first week, but the majority of CAAs noted that applications took about the same or less time than the paper process during the second or third week. By the end of the pilot, CAAs experienced time efficiencies when using Health-e-App as compared with the paper application.

♦ **Health-e-App substantially reduced the total time between application submission and eligibility determinations for both the Healthy Families and Medi-Cal programs.** As shown in Figure 6, Health-e-App lowered the average time between submission and eligibility determination from 17 to 13.5 calendar days (21 percent)[16] for Healthy Families-determined applications and from 44 to 45 days to 35 calendar days (21 percent) for Medi-Cal-determined applications. Applications missing vital information, such as supporting documents, are allowed additional processing time beyond the 45-day federal regulation.[17]
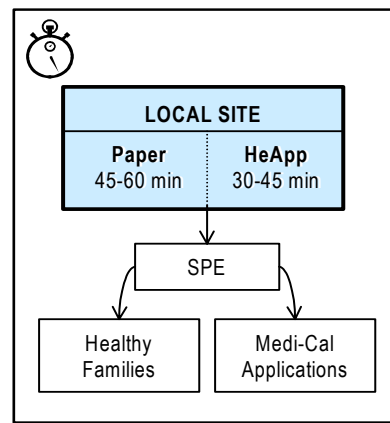
♦ **The elimination of mailing between the enrollment site and Single Point of Entry yielded substantial time savings.** The electronic transmission of Health-e-Apps saved approximately 6 calendar days in mail time as compared with the paper application. To quantify mail time, Lewin mailed a series of test letters from mailboxes in San Diego located near the enrollment sites to SPE in Sacramento. The six-day estimate represents the observed average of the differences between the mailing dates of these letters and the SPE date of receipt.[18]

2. Application Processing Time
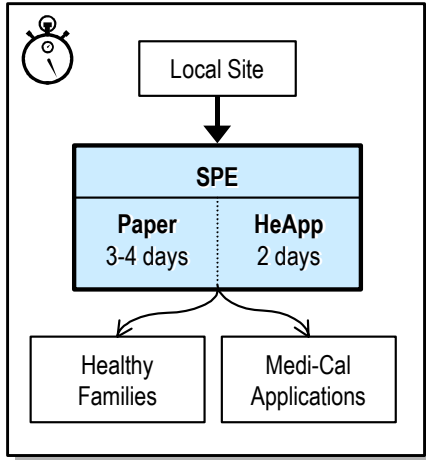
♦ **Health-e-App moved through SPE more quickly than the paper applications, decreasing the processing time at SPE by about one day.** Processing time for all Health-e-Apps decreased at SPE by 1 to 2 calendar days, regardless of whether the program was Healthy Families or Medi-Cal. On average, Health-e-Apps were processed in 1.6 to 2.3 calendar days at SPE, while paper applications took an average of 2.7 to 3.8 calendar days.

♦ **Processing time at EDS/Healthy Families was higher for the Health-e-App than for the paper applications; however, some of this difference is attributable to pilot learning curve and technical start-up issues.** For applications that were deemed eligible for Healthy Families, it took EDS/HF (on average) about 11.4 calendar days to process and determine eligibility, which compares to an average of 8.2 calendar days for the paper applications.[19] The "learning curve" during the pilot appears to have had a substantial impact on processing time: Healthy Families-determined applications that were received later in the pilot were processed more quickly than those received during the first two weeks of the pilot. In a week-by-week review of processing time across the pilot period, average processing time at EDS/HF dropped from 16 days in week two of the pilot, to 12 days in week three of the pilot, and to 9 days by the end of the four week pilot period.
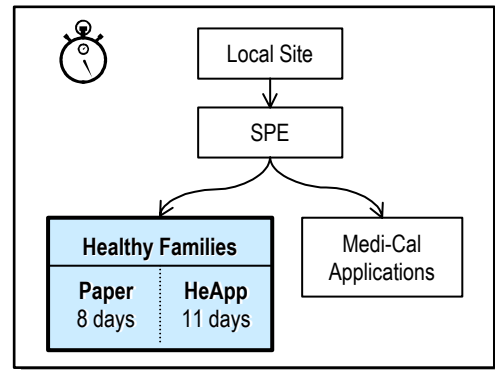
♦ **Health-e-App is projected to perform as well as, or better than, the paper process for Healthy Families applications if key modifications are completed.** Because the premium payment system for Health-e-App is not yet automated, every Health-e-App arrived at Healthy Families before the corresponding premium payment was received via mail. Health-e-Apps were pended until receipt of premium payment, which lengthened their processing time at Healthy Families.[20] If premium payment was automated (received electronically with the application data), the average processing time for Health-e-Apps determined for Healthy Families would likely fall to levels that are roughly comparable to or slightly less than the

Figure 6: Total Time to Application Determination for the Paper and Health-e-App, by Program
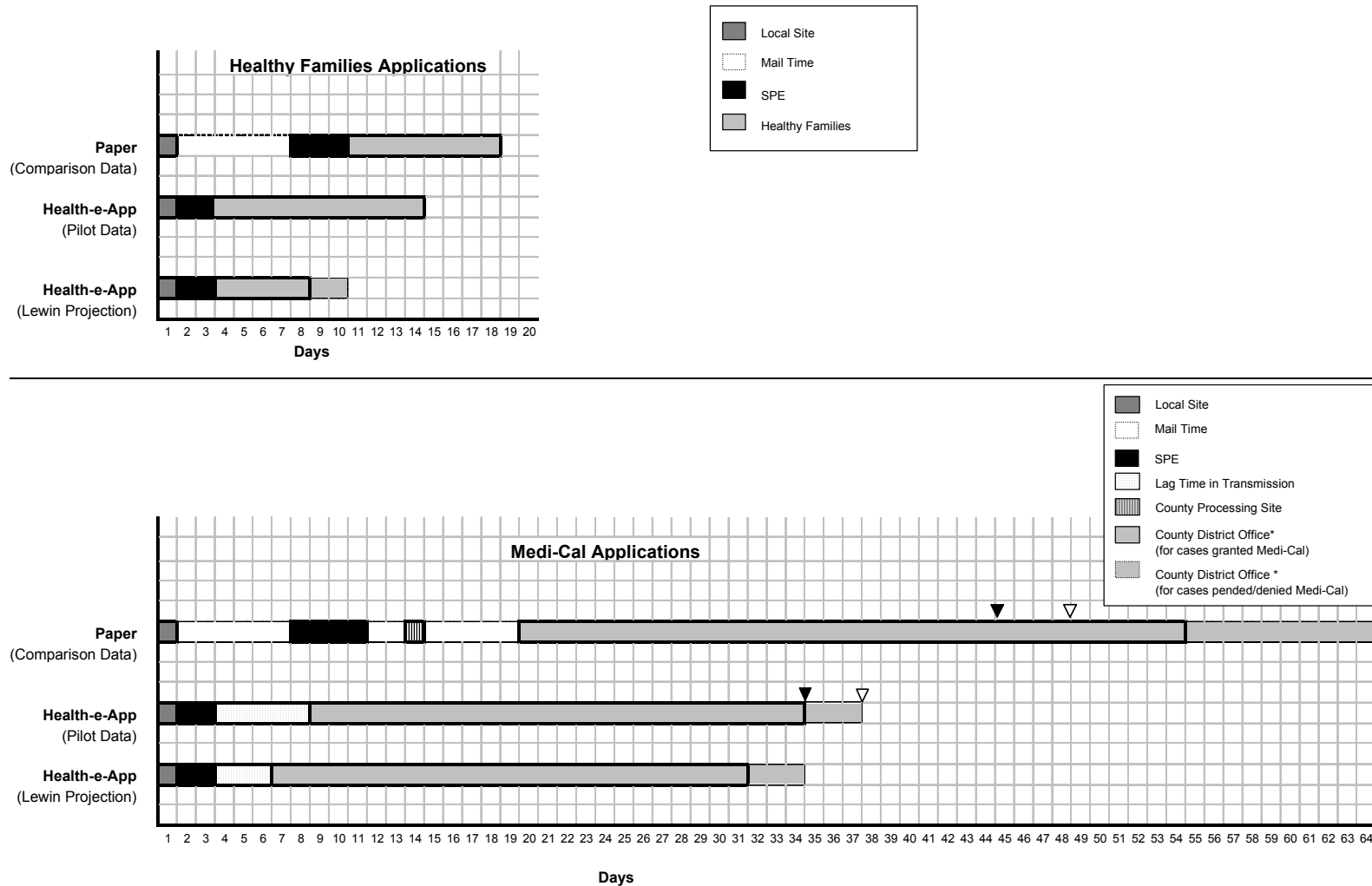
Legend (Healthy Families):
- Local Site
- Mail Time
- SPE
- Healthy Families

Healthy Families Applications

- **Paper** (Comparison Data)
- **Health-e-App** (Pilot Data)
- **Health-e-App** (Lewin Projection)

Days: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

Legend (Medi-Cal):
- Local Site
- Mail Time
- SPE
- Lag Time in Transmission
- County Processing Site
- County District Office* (for cases granted Medi-Cal)
- County District Office * (for cases pended/denied Medi-Cal)

Medi-Cal Applications

- **Paper** (Comparison Data)
- **Health-e-App** (Pilot Data)
- **Health-e-App** (Lewin Projection)

Days: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64

* The segment indicated by the dotted line represents the number of additional days used for processing Medi-Cal applications that were pended or eventually denied Medi-Cal coverage.
▼ This arrow indicates a comparative point in the processing time for approved paper applications and Health-e-Apps and does not include outliers in the data that fall beyond the assessment period.
▽ This arrow indicates a comparative point in the processing time for denied paper applications and Health-e-Apps and does not include outliers in the data that fall beyond the assessment period.

processing time for paper applications.[21] Thus, the time savings for Healthy Families-determined applications would be attributable to elimination of mail time and the savings of about one day in processing at SPE. Figure 7 illustrates Lewin projections of processing savings that could result with Health-e-App relative to the current paper process and relative to Health-e-App's pilot performance.

♦ **At the county, processing time for Health-e-App was slightly quicker than paper, which complemented the substantial savings in mail time.** With Health-e-Apps determined for Medi-Cal, the time savings associated with reduced mail and interim handling was approximately 10 calendar days (16 percent). During the pilot, Health-e-App also yielded a savings of 2 to 3 days in the average processing time at the county—a reduction of 10 percent.
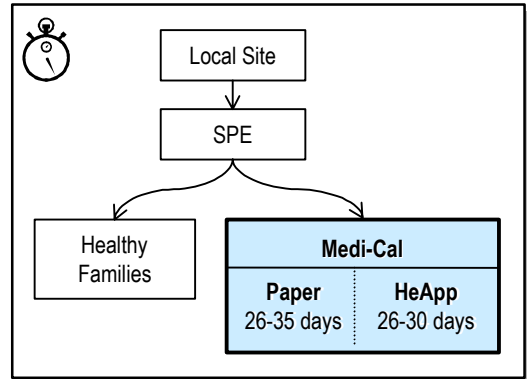
♦ **To sustain and build upon the efficiency gains in the Health-e-App/Medi-Cal enrollment processes, various technical issues must be resolved.** Several factors likely inflated the county's processing time for Health-e-App. First, technical difficulties with the county and SPE interface slowed initial transmission of applications and supporting documentation during the first half of the pilot. Second, new case numbers were automatically assigned by the county system for all Medi-Cal applicants without first cross-checking applications against the Medi-Cal eligibility files; county administrative and eligibility staff had to manually check whether each applicant had an existing (paper) case file. Third, computer image files containing supporting documents for an application were sent from SPE in several separate electronic image files and had to be collated and manually matched to existing (paper) case files upon arrival at the county.

Finally, for applications where documentation arrived at SPE after the application was forwarded to the county, the documentation was not forwarded or linked with the application once it went to the county. At the time of this writing, a plan to correct these issues has been designed and agreed to by SPE and the county. Correction of these issues would expedite county processing and Lewin projects that time to eligibility determinations could be reduced by at least three to four additional calendar days. However, if these modifications are not made, the substantial time savings observed during the pilot may not be realized.

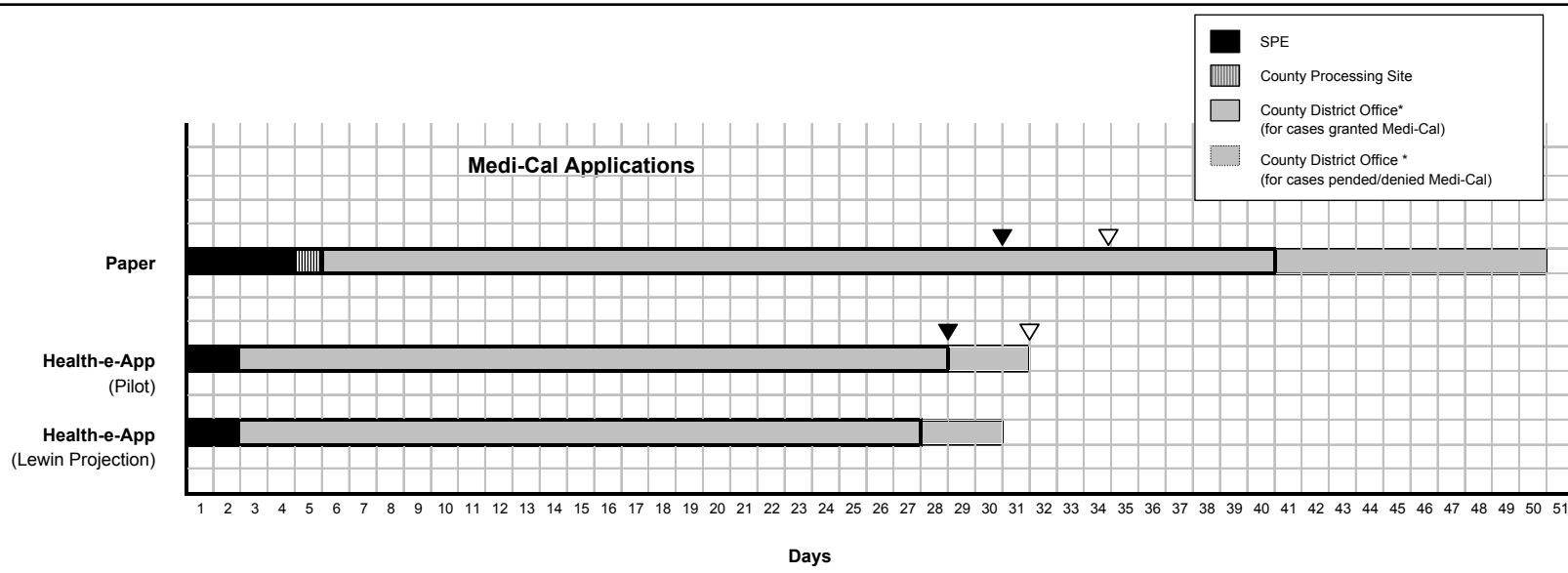**Figure 7: Total Processing Time, Excluding Mail Time, for the Paper and Health-e-App, by Program**
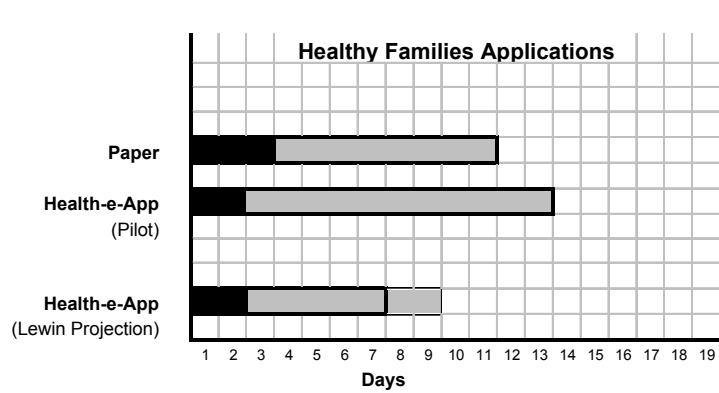
* The segment indicated by the dotted line represents the number of additional days used for processing Medi-Cal applications that were pended or eventually denied Medi-Cal coverage.

▼ This arrow indicates a comparative point in the processing time for approved paper applications and Health-e-Apps and does not include outliers in the data that fall beyond the assessment period.

▽ This arrow indicates a comparative point in the processing time for denied paper applications and Health-e-Apps and does not include outliers in the data that fall beyond the assessment period.

C. Data Quality and Related Improvements

Health-e-App offers several opportunities for improvements in data quality. As described earlier, Health-e-App guides the CAA and the applicant through the process. It asks the questions based on the applicant's family size, income, etc., and where possible it allows the applicant to choose the appropriate response using pre-defined pull down menus. Health-e-App also has built-in error-checking logic that requires valid responses for key fields and uses dialog boxes to warn of possible errors. For example, a CAA cannot enter a zip code that does not correspond to the appropriate county. Also, CAAs cannot enter impossible dates of birth or insert letters into numeric fields.

Generally, Health-e-App appeared to offer improvements in the area of data quality. It ensured that the inputs were logical and consistent and that invalid inputs were not accepted. However, Health-e-App cannot ensure the veracity of specific spellings and data entries; verification of some inputs still require manual review. It is important to note that while data quality in application fields is important, delays in application processing and eligibility determination were often due to missing or incomplete documentation, not necessarily data errors. During the paper comparison period, missing or incomplete documentation accounts for the majority of the cases delayed in processing and the bulk of the time lost between application receipt and determination for both Medi-Cal and Healthy Families. The reason for this delay is discussed in greater detail in Section V of this report.

♦ **A review of error codes collected during Healthy Families processing revealed that Health-e-App's features resulted in a substantial reduction in the number of errors in critical fields, such as date of birth.** 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. The reduction in errors suggests that Health-e-App improves data quality. In addition, the elimination of several redundant data entry steps reduces the potential for human error once the initial review of the application is completed by SPE.

♦ **Health-e-App provided a safeguard against losing applications at transfer points in the processing.** Beginning at the enrollment site, paper applications can disappear at any one of the junctures in application processing, all of which are eliminated by Health-e-App's electronic transmission from starting point to ending point. CAAs and other project staff indicated that Health-e-App reduced the risk that clients will misplace or forget to mail their applications.[22] The Lewin Group and San Diego County both audited the paper process and found that the proportion of paper applications that were lost or untraceable totaled just under two percent of total volume. During the pilot, every single Health-e-App could be identified and traced across the series of processing points.

♦ **Health-e-App proved advantageous in tracking applications through the system and provided a universal case identifier across all of the processing entities.** Health-e-App offers the ability to electronically date stamp receipt of applications at each point in the process and to track any one application through the process. During the pilot, the date stamping feature was used and appeared to be reliable when application data were collated from the various systems and entities into a longitudinal review of application lifecycles. Health-e-App also provided for more accurate case matching at the county level because both

the mother's and father's complete names were provided as part of the application package that the eligibility staff reviews. For example, with the paper application, county cases are often filed using only the mother's name and tracking an application at a later date in time can become difficult if (1) only one parent's name is available or (2) the mother and father have different last names.

Many of the application tracking benefits created by Health-e-App are not yet fully implemented, but hold high potential. At present, the ability to track any single application from start to finish across entities is somewhat limited and labor-intensive because each administrative entity (SPE and county) continues to use its own internal data collection and monitoring system. Mechanisms, such as real-time, two-way electronic interfaces between the enrollment sites, SPE, Healthy Families, and Medi-Cal would allow for full tracking and access to application data while in process and then once eligibility has been determined. For example, county staff might review applications transmitted from SPE against those received and in process to ensure that every application is being reviewed in a timely manner. Using the interface to confirm receipt and transmission of data and image files and to share relevant data, such as application disposition/status, would greatly improve interagency communication and application tracking. This issue is discussed in greater detail in Section V of this report.

♦ **Based on preliminary and final eligibility determination data, 97 percent of Health-e-Apps that were eventually granted Healthy Families or Medi-Cal coverage were routed to the right agency (either Healthy Families or Medi-Cal) for processing.[23]** While no paper comparison is available, this finding suggests that Health-e-App offers a reliable mechanism for identifying and routing the applications to the appropriate agency. Given the reliability of the preliminary determination, this feature provides several benefits, in that it: (1) reduces overall processing time; (2) requires less labor effort by people partially processing applications that don't belong in their agency; (3) lowers the chance of applications being lost in the system while being rerouted from agency to agency; and (4) may allow Health-e-Apps to be transmitted directly from the local site to Healthy Families or the county for eligibility determination without the need for the added manual review of income and verification by Single Point of Entry.

D. Costs

Lewin attempted to measure certain non-recurring front-end implementation costs and on-going operational costs associated with Health-e-App. For the most part, estimates include costs incurred per enrollment site and per county district office.[24] No measurement was done of labor cost differences between paper and Health-e-App because the state's costs of services are set by contractual agreements and do not vary according to labor effort expended in processing each application.

In practice, the Health-e-App system requirements may be less sophisticated than the equipment used during the pilot and it is unclear whether the application could perform as well on older computers. While we know from the two-week controlled pilot that dial-up access works, it makes enrollment appointment somewhat slower and, as such, provides less satisfaction to the CAA and applicant. For these reasons, it is difficult to accurately project the implementation costs of the online application.

1. CAA Site Costs

Prior to initiation of the pilot, CHCF equipped the enrollment entities with new computers and high-speed Internet access, and they also conducted basic computer training for all CAAs. Site costs varied and these variations were attributable to several factors, including number of CAAs at the site, physical space availability, and applicant volume per site. For example, one complete computer set-up would cost a site approximately $8,200. Sites incur incremental costs with the addition of more computer set-ups, so, for example, a larger volume site with five Health-e-App enrollment stations would incur start-up costs in the range of $23,000. Although all of the sites already had computers in use for other business purposes, for most sites, the enrollment function had previously been a paper process.

In addition to the start-up costs, each site incurred on-going operational costs, which included monthly Internet connectivity, equipment maintenance and supplies, and technical assistance. On-going operational costs are roughly $2,100 per year for a site with one to two enrollment stations (see Appendix G).

The costs of installing and maintaining computer equipment and Internet access need to be taken into consideration in any decision to implement Health-e-App across the state. These fixed costs, while not large, need to be considered in selecting sites for Health-e-App implementation— higher volume sites will be better able to absorb the costs.

2. County Costs

In preparation for roll-out of the electronic application, San Diego County made an investment of $50,800 into the development of an electronic interface between Single Point of Entry and the county Welfare Case Data System. Although interface development may appear costly, it is a one-time cost and the 17 other counties in the WCDS consortium that also operate on this system will not need to duplicate San Diego's efforts in the event of Health-e-App expansion to these counties.

Apart from interface development, the county's start-up costs involved addition of a computer-printer set-up at the district office to download and print image files containing applicants' supporting documents; installation support from the county's IT contractor; and training for eligibility workers. The county incurred approximately $31,000 in direct start-up related costs. The county's on-going operational expenses primarily involve systems support and additional technical fixes outsourced to a local vendor that total approximately $13,700 in direct costs for one district office (see Appendix G). Costs incurred at the county level depend on the degree to which processing of automated applications is centralized to one district office versus distributed among several county offices.

3. Document Transmission Costs

Lewin estimated the potential cost savings associated with document transmission. The state currently provides applicants with a postage-paid envelope for submission of the completed application, supporting documents, and, if applicable, the Healthy Families premium payment. In contrast, with Health-e-App, once the premium payment system is implemented, the need for

postage-paid envelopes is eliminated since applicants electronically submit the application and fax their documentation. Lewin estimates that the bulk cost of mailing a complete application is essentially comparable to the costs associated with faxing of the documents, if the state were to implement a 1-800 fax service.

E. Limitations of Pilot Analysis

The pilot had multiple goals, including: testing Health-e-App's technical functionality (e.g., real-time preliminary determination) in a real world setting, gauging user satisfaction/ease of use, employing new technologies to submit applications, and simultaneously enhancing the online application and implementing fixes to problems identified in testing. Lewin's objective in assessing Health-e-App's performance 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.

♦ **An increase in application volume during the pilot period may have slowed the processing time of Health-e-Apps.** The two- to three-fold increase in applications at the pilot sites relative to the previous year was accompanied by a comparatively higher proportion of cancelled applications at EDS/HF (cancelled applications include duplicate, withdrawn, ineligible, or insufficiently documented applications). Further, Health-e-Apps were routed to and processed by specifically designated eligibility workers at Healthy Families and at the county, who acknowledged that the volume exceeded their normal workload. While the net effect of these factors is unknown,[25] they may have resulted in somewhat longer queuing times and therefore slowed the eligibility determination process.

♦ **Measurement limitations may also have affected the analysis.** First, the paper and Health-e-App comparisons are necessarily limited by the differences between the two data collection periods. This is particularly true for time comparisons, as processing time in any one month is partially a function of volume during that period.[26] Second, The Lewin Group was only able to partially validate the consistency and accuracy of coding in the SPE data due to confidentiality and proprietary concerns. Finally, the heightened scrutiny of the Health-e-App process may also have affected behavior—and thus processing time and other factors—at every stage of the process. That is, there may have been a form of experimental bias.

♦ **Several aspects of the pilot may make this experience unique.** The CAAs working with Health-e-App relied on (1) new computers and high-speed Internet connections and (2) ongoing technical assistance provided throughout the pilot. It is unclear whether Health-e-App would perform in the same way in a less advanced technological environment. Further, Lewin's observations while on-site suggest that the enthusiasm of the CAAs affected the applicants' impressions of Health-e-App.

V. 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 of which were 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 are underway which have the potential for improving Health-e-App processing at the local sites, Single Point of Entry, and the county. Should full implementation be pursued, The Lewin Group has a number of suggestions for developmental action in addition to the operational modifications being pursued.

♦ **Supporting documentation must be less fragmented and more readily accessible to county workers.** During the pilot, the electronic files containing digital images of faxed supporting documents did not make their way smoothly to the county eligibility technicians. The two causes of fragmentation—multiple faxes sent by CAAs for the same applicant, and technical problems in the transmission of electronic image files from SPE to the county—need to be eliminated or overcome so that the county workers receive one complete packet of supporting documentation for each applicant. To address county concerns about accessibility of image files, especially as volume increases, EDS plans to implement a Web-based storage and retrieval system for managing image files containing documentation and signatures.

In addition, for applications that SPE routed to the county, documents received following the application's departure from Single Point could not be linked to the original application for transmission to the county. In these cases, county eligibility workers had to contact applicants and request that they resubmit the missing documentation. EDS staff are working to resolve this issue.

♦ **Sufficient documentation must be faxed with each Health-e-App submission.** Beyond some of the technical issues associated with integrating documentation that was submitted, applications were delayed because documentation was insufficient for eligibility determination. Extra steps need to be taken to ensure that CAAs are fully aware of the documentation requirements and that faxed documentation received at SPE or Healthy Families is matched with the appropriate application as quickly as possible. The fax cover sheet used to transmit Health-e-App supporting documents might also be revised to provide clearer and more specific instructions about the pieces of information required for a given application based on its characteristics (e.g., include an explanation of the "citizenship-birth certificate" check-off box). In addition, if an applicant returns to the enrollment site with supporting documentation, for example later in the day or several days later, a mechanism should be in place to allow CAAs to electronically retrieve the fax cover sheet which in turn, would accompany the supporting documents.

♦ **The state and each county should reconcile differences in information/documentation required on the mail-in application (and consequently for Health-e-App) and what is required by the counties to process Medi-Cal applications.** Regardless of the completeness of an application, eligibility technicians at the county currently call a number of applicants in order to collect additional information before determining Medi-Cal eligibility. CAAs have come to learn that families are contacted by the county and will often

supply the additional information in the margin of the paper application to expedite the determination process for their clients. Recognizing the difficulty in changing the current structure of the application, Lewin would suggest that either (1) the applications include voluntary questions for applications pre-screened for Medi-Cal to supply the county with information they currently seek through follow up, or (2) the county reduce its data requirements to coincide with those elements collected on the joint application.

♦ **CAA training should be enhanced, not just for the application process itself but also for programmatic issues.** The survey of CAAs and discussions with them combined with the observed shortcomings in documentation all point to a need for more training for CAAs on basic computer usage, Health-e-App and paper application documentation requirements, and the overall application process itself. Because CAAs function as the door to eligibility for a majority of applicants, it is essential that the CAAs fully understand the eligibility determination process and requirements for approval. Two-thirds of all interviewed CAAs indicated that regardless of how an application is submitted, training on Healthy Families and Medi-Cal eligibility rules would be useful; one-half of CAAs surveyed would like to be better informed about health plan and provider information.

♦ **An automated, real-time method for making premium payments for Healthy Families would reduce delays in application processing.** During the pilot, Healthy Families applicants still had to mail their premium payments, thereby offsetting the time gained by the electronic transmission of the application. The Foundation and its collaborators are implementing a way to allow for online credit/debit card payments and/or payment by cash at local Rite-Aid pharmacies for the first month's premium payment. The state could also change its policy with regard to the initial payment and opt to either (1) forgo the initial premium or (2) enroll beneficiaries without requiring prepayment and subsequently bill them for the first month's premium amount.

♦ **The workload monitoring feature and the payment tracking system that accompanies Health-e-App should be made operational.** CAAs expressed great pleasure over the potential for the automated system to allow them to track applications submitted electronically. With the paper process, CAAs are not able to track application disposition or application assistance payments due to their organizations. The CAAs believe that this tracking mechanism will allow them to help their clients and that their agencies will be better able to determine if appropriate payment had been made for successful applications. While the workload feature was operational during the pre-pilot period, it was not fully functional during the pilot period. Fixes to the workload feature and application tracking system are underway to display final eligibility determination for Healthy Families and Medi-Cal.

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. An additional benefit of the development and testing process was improved understanding of the entire application process at different levels among all stakeholders. This enhanced knowledge 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.

ENDNOTES

[1] 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.

[2] According to the MRMIB Web site, about 62 percent of paper applications statewide received by SPE in March 2001 were prepared with CAA help.

[3] Under contract to MRMIB and DHS, EDS manages the current mail-in process for Medi-Cal/Healthy Families applications submitted via the common four-page form, and under a second contract, serves as the enrollment broker for the Healthy Families program.

[4] Some California counties may not have a county central office so applications from SPE are sent directly to the county district office for processing.

[5] Medi-Cal applicants choose their health plans later, after their program eligibility has been confirmed by the county agency. A separate enrollment broker assists with plan and provider selection.

[6] By contract, EDS must process applications between 3 and 20 business days. This requirement did not change for applications submitted via Health-e-App.

[7] In San Diego County, the district office participating in the Health-e-App pilot is known as the Family Resource Center (FRC). The applications mentioned here are referring to applications for Medi-Cal completed using the four-page, joint Healthy Families/Medi-Cal form rather than the standard San Diego County Medi-Cal form.

[8] 42 CFR 435.911. Also see endnote 1 for details.

[9] The electronic interface is designed so that all applications—Healthy Families and Medi-Cal—pass through the Single Point of Entry server. Thus, some lag time exists from the time an application leaves the local site to the time it is received by the county district office (FRC).

[10] Specifically, administrative stakeholders include CAAs, SPE and Healthy Families contractors, MRMIB staff, County staff, and various state health agency representatives.

[11] All applicants were given the option of completing paper applications if they were more comfortable; no applicant opted for the paper rather than the online application. During the pilot period, Health-e-App was not used for enrolling certain applicants with complex cases. These individuals include: (1) people wishing to pre-enroll their children in Healthy Families; (2) caretaker relatives; (3) people applying for non-relative children; (4) absent parents; and (5) married couples with no children in common.

[12] Client consent was obtained in all cases prior to interview.

[13] EDS/SPE provided data on the 250 applications received between December 1999 and March 2000 from the five enrollment entities included in the pilot, of which 120 were routed to the County. The County provided data on the 52 known cases in the Centre City region received from EDS between January and March 2000.

[14] In the pilot, 59 applications were suspended and later submitted; 32 were submitted on the same day as a suspension, and 12 were submitted the next day. In addition, 54 applications were started during the pilot and never completed; 25 of these were formally suspended with no further action. It is possible that some of the 29 "abandoned and unsuspended" applications were restarted entirely and subsequently submitted (e.g., after power blackouts).

[15] Some CAAs verified each of the mathematical calculations, which added to the length of the interview. We suspect this practice will end as the CAAs become more confident with the accuracy of the preliminary determinations.

[16] These estimates are case-mix adjusted in that they hold constant the proportion of cancelled applications (i.e., 25 percent) in the paper and Health-e-App processing time averages. Note that the paper estimate is the case-mix adjusted estimate for processing time (10.5 days) plus six days of mail time.

[17] 42 CFR 435.911. See endnote 1 for details.

[18] The calendar-days estimate may overstate delivery times; mail was not processed on Sunday and only business days were counted as receiving days at SPE.

[19] These estimates are case-mix adjusted, holding the proportion of cancelled applications constant between the paper and Health-e-App processes.

[20] While the premium issue may have slowed Healthy Families determination, it did not substantially lower enrollment: at least 25 of the 31 cancelled applications that were missing premiums were also missing other documents.

[21] Resolving the premium issues may bring Health-e-App processing time for Healthy Families-determined applications down to between 7 and 11 calendar days. However, any estimate of the time delays resulting from the missing premiums is complicated by substantial data limitations; we therefore present a range in lieu of a point estimate.

[22] CAAs also suggested that applications were lost by the U.S. Postal Service. While the examination of paper applications did not suggest that this is the case, Health-e-App would alleviate some of these concerns.

[23] This estimate is based on preliminary and final determination data provided by Deloitte Consulting, EDS, and the County at the writing of this report. Applications that were cancelled by Healthy Families or pended by the County were not included in the measurement.

[24] Due to proprietary concerns, EDS cost information, as it related to activities performed at SPE and Healthy Families, was not available.

[25] As with any observational study or program evaluation, certain measurement limitations make some conclusions relatively tentative.

[26] The alternative of current time comparisons did not prove feasible and was similarly marred by limited comparability.

APPENDICES

Appendix B: Take-home Materials for Health-e-App Applicants

Acrobat Reader - [sample.pdf]

File   Edit   Document   View   Window   Help

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Application Summary

Applicant Information   **DCN: 20010524006**

Name: Span Test		**Birthdate:** 9/18/1972
Mailing Address: 2453 donnor way		**Home Address:** 2453 donnor way apt. 341
sacramento 95818 Sacramento	**Medi-Cal:** Y	sacramento 95818 Sacramento
Work Phone:	**Message Phone:**	**Home Phone:** 916-777-8888
Language Written Best: Cambodian	**Healthy Families:** N	**Language Spoken Best:** Korean

Application Members

Name: child one		**Home Address:** 2453 donnor way apt. 341
Name on Birth Certificate:		sacramento 95818
Place of Birth:	**Sex:** M **Birthdate:** 10/14/1997	Sacramento
Applicant's Relation: Mother	**Mother's Name:** Span Test	**Mother Living in Home:** Y
Social Security Number:	**Father's Name:** dad dad	**Father Living in Home:** Y
Ethnicity: Cambodian	**Spouse:**	
US Citizen: Y	**Date of Entry into US:**	**Receiving Other Insurance:** N
Insured by employer in last 90 days: N	**Reason Coverage Stopped:**	**Healthy Families:** N
		Medi-Cal: Y
Date Coverage Stopped:	**Receiving Medi-Cal:** N **Date Medi-Cal Ends:**	
Name: dad dad		**Home Address:**
Name on Birth Certificate:		
Place of Birth:	**Sex:** **Birthdate:**	Sacramento
Applicant's Relation:	**Mother's Name:**	**Mother Living in Home:**

159%   1 of 2   8.58 x 11 in

Healtheapp: Rights and Declarations - Microsoft Internet Explorer

File   Edit   View   Favorites   Tools   Help

health e app
Insuring Your Family's Health

Step 6 Application Submission

• Help   • Suspend   • Cancel

Jump Back to Step:

Rights and Declarations

Medi-Cal Confidentiality Notice

The information given in this application is private and confidential under Welfare and Institutions Code Sections 10850 and 14100.2. The information will be disclosed only in accordance with those laws.

Medi-Cal Privacy Notice

The Information Practices Act of 1977 and the Federal Privacy Act require the Healthy Families Program to provide the following notice to individuals who asked by Healthy Families to supply information:
Personal and medical information requested is for subscriber identification and program administration purposes only. Program regulations under Title 10, CCR, Section 2699.6600 require that every individual furnish certain information when applying to the Healthy Families Program. Subscriber's information may be shared with State and local agencies involved in the administration of health programs. Information (including immigration status) about persons who do not become subscribers, will be used only for purpose of eligibility determination and program administration. Failure to furnish this information may result in the return of the application as incomplete.
The following information on the application is not mandatory: social security number, ethnicity information (unless the subscriber is a Native American Indian) and any other item marked voluntary or optional. An individual has a right to access records containing his/her personal information that are maintained by the Managed Risk Medical Insurance Board. The official responsible for maintaining the information is the Deputy Director of Eligibility and Enrollment, Managed Risk Medical Insurance Board, 1000 G Street, Room 450, Sacramento, California 95814, (916)324-4695.

Medi-Cal Rights, Responsibilities and Declarations

I have the right to:

* be treated fairly and equally regardless of my race, color, religion, national origin, sex, age, or political beliefs.

Rights and Declarations   My Computer

Appendix B: Take-home Materials for Health-e-App Applicants

Top of Form 1

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Documentation Fax Cover Sheet

** Your documentation must be submitted within four days! **

Date:	February 07, 2001
To:	Healthy Families/Medi-Cal
Fax Number:	1-800-777-1234
From:	Susan Miller
Address:	321 Geary St.
	San Francisco, 94105
Phone Number:	415-447-0877
Document Control Number:	**20003114010**
Document Checklist:	Please check the appropriate box to indicate which documents you are attaching:

⌐ Signed Rights and Responsibilities Page

⌐ Proof of Income - pay stub, last year's federal income tax filing, etc. (If you know that your family's income will go up or down in the next few months due to overtime, promotion, raises in pay, expected increases in child support, alimony, layoffs, furloughs, etc., please explain on a separate piece if paper and fax it along with your supporting documents.)

⌐ Proof of Residency (if not using in-State pay stub) - recent bills sent to your current address

⌐ Citizenship - birth certificate

Premium: $8.00 per month.   Pay for 3 months (total of $24.00), get the 4th month free.
The first month's premium must be paid in order to get coverage. Please check the appropriate box to indicate how you will submit payment:

⌐ Sending a personal check, money order or cashier's check to address below. Please make sure that your Document Control Number is written on the check and make it payable to: Healthy Families Program

Mailing Address: Healthy Families / Medi-Cal for Children and Pregnant Women
P.O. Box 138005
Sacramento, CA 95813-9984

Appendix C: Pilot Site Information

Test Site	Address	Health-e-App Representative
Comprehensive Health Center (community clinic)	3177 Oceanview Blvd. *San Diego, CA 92113*	Gloria Sardina
La Maestra (community clinic)	4185 Fairmount Avenue San Diego, CA 92105	Liz David
La Casita (community-based organization)	655 22nd Street San Diego, CA 92102	Sindy Bettencourt
St. Judes Shrine of the West (community-based organization)	1129 S. 38th Street San Diego, CA 92113	Sindy Bettencourt
Clinica Medica Central (private clinic)	3802 National Avenue San Diego, CA 92113	Fernando Becerra
Central Elementary School (Health Insurance Access Through Schools)	4063 Polk Avenue San Diego, CA	Jennifer Ambacher

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Questionnaire for Applicants

We want to hear what you think about applying for health care using the Health-e-App on the computer. Please answer these questions. We will use your answers to make the Health-e-App better. Your answers will be kept secret. Your answers will not change your application or what programs you can get. Thank you for your help.

1. Did you like applying on the computer?
   ❑ Yes
   ❑ No
   ❑ Not sure

   Why? Is there anything you liked best?

2. Did it help you to have information about doctors on the computer?
   ❑ Yes
   ❑ No
   ❑ Not sure

   Why?

3. Did you like being told right away which program your children might get?
   ❑ Yes
   ❑ No
   ❑ Not sure

   Why?

4. Which programs did it say your children might get?
   ❑ Medi-Cal and Healthy Families
   ❑ Just Healthy Families
   ❑ Just Medi-Cal
   ❑ Neither

5. Would you want to apply on the computer without any help?
   ❑ Yes
   ❑ No
   ❑ Not sure

   Why?

6. If your children can get Healthy Families, what is the best way to pay the premium every month?
   ❑ Mail a check to Healthy Families
   ❑ Pay in person at a store like Rite Aid
   ❑ Use a debit/ATM or credit card when you apply
   ❑ Not sure

   Why?

7. Have you ever applied for Medi-Cal or Healthy Families before?
   ❑ Yes
   ❑ No

8. If you applied before, which do you like better—using the computer or filling in a form?
   ❑ Computer is better
   ❑ Paper form is better
   ❑ Not sure

   Why is it better?

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Weekly CAA Questionnaire
San Diego County Pilot Test
Time period: January 29-February 2, 2000

Thank you for taking a few minutes to answer the following questions. Your responses will assist us in capturing CAAs' experiences with Health-e-App. Please give this completed form to your site's pilot test contact by Monday, February 12th.

Pilot Site (please circle):   Central Elementary School-HATS   Comprehensive Medical Center   La Casita
                                   Clinica Medica Central   La Maestra   St. Judes Shrine of the West

I have been a CAA for _____ months.

I have done _____ applications on the computer.

---

1. This week, my average appointment time with clients was approximately:
   - ❑ 15-30 minutes
   - ❑ 30-45 minutes
   - ❑ 45 minutes-1 hour
   - ❑ greater than 1hour

2. During the <u>first week</u> you used Health-e-App, did you find that it took:
   - ❑ less time than the paper process
   - ❑ more time
   - ❑ about the same time, and nothing was different from the paper process
   - ❑ about the same time, but I had more time to counsel the applicant

3. During the <u>second or third week</u> you used Health-e-App, did you find that it took:
   - ❑ less time than the paper process
   - ❑ more time
   - ❑ about the same time, and nothing was different from the paper process
   - ❑ about the same time, but I had more time to counsel the applicant

4. Other than Health-e-App, how often did you use a computer?
   - ❑ every week at work or home
   - ❑ once in a while at work or home
   - ❑ rarely or never

5. Do you believe that the applicants using Health-e-App were:
   - ❑ more satisfied than with the paper process
   - ❑ less satisfied
   - ❑ indifferent (no change)

6. After how many applications on the computer visits did you feel comfortable using Health-e-App?
   - ❑ 1-2 apps using Health-e-App
   - ❑ 3-4 apps using Health-e-App
   - ❑ 5 or more apps using Health-e-App
   - ❑ I continue to be uncomfortable with Health-e-App
   - ❑ don't know

7. If given the choice, would you prefer to use the paper application or Health-e-App for enrollment purposes?
   - ❑ I prefer the paper application.
   - ❑ I prefer Health-e-App.

   Why?

   _____
   _____
   _____
   _____
   _____

- Please see other side-

Appendix E: Sample Certified Application Assistant Questionnaire

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Weekly CAA Questionnaire
San Diego County Pilot Test
Time period: January 29-February 2, 2000

8. Please tell us how helpful the following Health-e-App features were for you:

Feature	Not helpful Very useful		Comments
Automatic calculations (computer did all math)	1 2 3 4 5		
Pull-down boxes with possible responses	1 2 3 4 5		
Computer identification of PCPs and their codes	1 2 3 4 5		
Mapping of doctor's offices	1 2 3 4 5		
Immediate eligibility feedback (HF & Medi-Cal)	1 2 3 4 5		
Screen to check status of apps after submission	1 2 3 4 5		

9. What problems with the application process did Health-e-App solve or make better?

_____
_____
_____
_____
_____

10. What problems with the application process did Health-e-App cause or make worse?

_____
_____
_____
_____
_____

11. What additional types of CAA training might be helpful for Health-e-App?
- ❑ basic computer skills
- ❑ typing skills
- ❑ Healthy Families and Medi-Cal eligibility rules
- ❑ health plan and provider information
- ❑ other _____

Thank you for your help!
Please return this form to your pilot site contact by Monday, Feb. 12th.

Appendix F: Summary of Data Collected for Assessment

During the pilot period, Single Point of Entry received and processed 246 applications and supporting documents submitted via Health-e-App. This volume compares to 250 paper applications that SPE received from the same enrollment entities between December 1, 1999 and March 31, 2000. During this period, SPE sent about one-half of the 250 paper applications to the central office of San Diego Medi-Cal. For the purposes of the business case analysis, the County provided Lewin with 52 paper applications processed at the county district office (the district office participating in the Health-e-App pilot). Health-e-App enrollment data is detailed below in Table 1.

Table 1: Summary of Paper and Electronic Applications

| | Total # of Individuals | |
	HeApp	% of Total
All	494	--
HF Granted	125	25%
HF Cancelled/Denied	84	17%
MC Granted	150	30%
MC Denied	121	24%
MC Pended	14	3%

HF: Healthy Families
MC: Medi-Cal

* Figures based on final eligibility determination data provided by Single Point of Entry, Healthy Families, and Medi-Cal at the writing of this report and are subject to change pending decisions made by Healthy Families or Medi-Cal at a later date in time.

** On the Medi-Cal paper side, data was only available at the case level for purposes of this analysis.

Appendix G: Site-Specific Cost Information

| | | ONE-TIME INITIAL READINESS COSTS | | |

Entity	Description	Details*		Value	
CAA Sites	**Equipment**	Computer, Additional misc hardware & software	$	3,000	per/computer
	Installation	Installation Services & Misc Accessories	$	2,200	per/site
	Training	8-hour training/Professional Services	$	3,000	per/site
			$	**8,200**	**per/site**
County	**Equipment**	Computer, Additional misc hardware & software	$	3,000	per/computer
	Installation	Installation Services & Misc Accessories	$	31,000	per/office
	Training	8-hour training/Professional Services	$	3,000	per/office
			$	**37,000**	**per/office**
	Interface	Interface development with Single Point of Entry	$	50,800	per/consortium
			$	**50,800**	**per/consortium**

| | | ON-GOING OPERATIONAL COSTS | | |

Entity	Description	Details**		Value	
CAA Sites	**Internet Service**	12-month service	$	1,300	per/site
	Maintanence & Supplies	Software updates, computer supplies	$	300	per/site
	Technical Assistance	Professional Services	$	500	per/site
			$	**2,100**	**per/site**
County	**IT Subcontractor**	Systems support, Additional technical fixes	$	13,700	per/office
	Maintance & Supplies	Software updates, computer supplies	$	300	per/office
			$	**14,000**	**per/office**

* Average cost of equipment assuming 2/3 desktop computers and 1/3 laptop.

   Average cost of installation for medium-size enrollment entity with three computer set-ups.

   Assume contractor hired for training for medium-size site.

** Average cost of internet service based on connection with three computers.