SUMMARY

The Undergraduate Student Health Insurance Program Waiver Web Application allows approximately 8000 undergraduate students per quarter to electronically present their private health insurance information to Student Health Center staff for evaluation. The information is used to determine whether a student may opt out of UCI’s mandatory undergraduate health insurance plan. Using this system a student can apply for a waiver upon receiving the insurance package in the mail and have it approved and posted to his/her student fee account the same day.

PROJECT DESCRIPTION

When health insurance became a mandatory part of registration fees for undergraduates at UC Irvine in Fall 2001, the Student Health Center was faced with evaluating thousands of waiver applications from students in a short time, with limited staffing and facilities.

To qualify for the health insurance waiver, i.e., to avoid paying the student health insurance fee, UC policy requires a student to demonstrate equal or better private health insurance coverage.

SHC staff had handled this process for Foreign Undergraduates’ Health Insurance (FSHI) and for Graduate Students’ Health Insurance (GSHIP) whose waivers never totaled more than about 600-700 per quarter. Foreign undergraduates and graduate students applied in person or by mail, and waivers were processed with a slow, labor-intensive, manual routine.

As Fall 2001 approached, the undergraduate population was nearing 18,000, and it was estimated that 50% could waive out of the program, resulting in at least a 1000% increase in the number of waiver applications to be processed. (Note: in actuality the average for last 6 quarters has been 41%. See Appendix A)

Student Health Center staff knew from their experience with FSHI and GSHIP that evaluating private insurance involved reviewing a specific set of data, submitted to them on paper application forms, and then creating individual waivers in the Student Billing System (SBS)—a process that would collapse under a 1000% increase in volume. The solution was an efficient, user-friendly (to both students and staff) Web application directly connected to SBS that would automatically create and post the waivers and email students about their waiver status, freeing SHC resources for the delivery of health care.
The Old, Manual Process: GSHIP and FSHI Waivers

1. SHC used the US Postal Service to notify students of insurance the plan and waiver process, mailing a packet containing an insurance brochure, a paper waiver form, and a return envelope.

2. Students applying for a waiver completed both sides of the waiver form, included a photocopy of both sides of their insurance card and a copy of their student ID, and returned the application package to the Student Health Insurance Office via the US Postal Service, campus mail, or in person.

3. SHC staff opened application envelopes, removed the forms, stapled, date stamped, and alphabetized applications each day.

4. SHC staff checked applications for completeness and mailed back to students incomplete, illegible, or unsigned forms.

5. SHC staff compared a student’s coverage to the USHIP standards, and approximately 80% of the waiver applications required a phone call to the insurance carrier to verify benefits.

6. SHC staff entered each approved waiver individually by accessing first the student account and then the waiver issuance module in the SBS Rich Client system.

7. SHC staff produced labels from a separate program, applied them to a pre-printed form letter, folded, stuffed, metered, and mailed letters to notify students that waivers had been approved.

8. SHC staff typed individualized letters, addressed, stuffed, metered, and mailed the letters to notify students that waivers had been denied.

9. SHC staff hand wrote the waiver decision on each application form, with their signature and the date. Waiver application forms were filed with other waivers from each quarter and stored for at least two years.

The New, Online Process: USHIP Waivers (See B: Business Processes)

1. SHC notifies students of the insurance plan and waiver application process using the US Postal Service to mail the insurance brochure and waiver instructions to each student’s permanent address. In addition, insurance program information, the waiver process, and deadlines are described in the Schedule of Classes and listed in the New Student Checklist, and a message is printed on each undergraduate student’s ZOTBill (registration fee bill) stating that an insurance premium is included in the registration fee, and referring students to the insurance waiver Web site. An SHC staff member attends every student/parent
orientation, resource fair, and Freshman Move-In Day at the dorms.

2. Students apply for waivers once a year (usually in summer) by visiting SHC’s insurance waiver Web site <http://www.shs.uci.edu/optout_frame.html> and completing an online form that details the specific terms and conditions of their private insurance programs.

3. Waiver applications cannot be submitted until all required fields are completed.

4. The completed waiver application is transmitted in real time, includes the exact date and time of transmission, and is immediately available for processing by SHC staff. (See Appendix E: User Guide)

5. A successfully transmitted waiver application generates a confirmation number in an email message to the student.

6. The SHC Insurance Coordinator receives an email message every morning at 6:57, indicating the number of pending waiver applications.

7. The SHC staff check for waiver applications periodically throughout the day during peak waiver periods and processes them immediately.

8. SHC staff process a waiver by logging into the system on the Web and selecting either individual or groups of waiver applications to be viewed. Applications can be selected individually by student ID or name or they can be grouped and viewed by international status, employer, age, or portions of the alphabet. Each application appears on a single screen, condensed from the 3-screen form the student completed. (See Appendix E: User Guide, p.10)

9. SHC staff review every waiver, checking to assure that the student’s plan meets systemwide waiver guidelines, and checking for student age to ensure the student will have coverage throughout the academic year. Only 10% of electronic waivers require a phone call to confirm coverage because the electronic waiver process forces applicants to provide all the necessary information.

10. SHC staff choose from a drop-down box and click to approve, deny or “pend” the waiver. If the application is approved, the information is transmitted immediately to SBS and a waiver is posted to the student’s account. Students may view their accounts online 21 hours per day, 7 days a week at Zot Account Online <https://sbs.adcom.uci.edu/ZA/index.html>.

11. Students receive automatically-generated email advising them of the results of their waiver applications. The emails are sent out in batches every night.
Technical Solution (See Appendix C: System Architecture for USHIP)

A Sybase ASE server running on Sun Solaris 2.8 hosts the Web-based Undergraduate Student Health Insurance Program (USHIP) Waiver Application. Web pages are generated using HTML, JSP, JavaScript, and Apache Web server with a Secure Socket Layer certificate for data encryption/decryption. JDBC is the database connectivity tool for Java. The development team chose the Web platform and Java programming language because Java codes are portable across the numerous and varied machines required to support substantial enrollment growth at University of California, Irvine.

ADVANTAGES OF NEW SYSTEM OVER OLD (See Appendix D: Cycle Time)

There are many advantages to having an electronic waiver system rather than a manual process. The manual system required one full time employee to process 500–600 waivers. This was in addition to regular duties, but the task took the entire summer. The turnaround time, from mailing the waiver until a reply was received, averaged three weeks. Using the electronic waiver system, the waiver can be submitted, processed, and a response received the same day, or the following day. Currently, 79% percent of all waiver applications are processed within one day of receipt.

Three full time employees process over 8,000 waivers in a six-week period. This is in addition to their regular administrative duties that include billing and reconciliation of claims for USHIP, GSHIP, workers’ compensation, and pharmacy. They obtain pre-authorizations, make referral appointments, submit claims, and arrange follow-up care, in addition to serving as the insurance information resource for 19,000+ students and their parents.

Because the waiver application process is electronic, there are no printed paper forms to file or store. No paper letters are sent and, therefore, no cost for printing or postage. The electronic system has improved the convenience, cost, and efficiency of the waiver process.

CUSTOMER SATISFACTION

Electronic waiver processing provides many customer service benefits:

Students: Students can apply for a waiver from any computer with Internet access. The program is available 21 hours per day, 7 days a week. Students receive a prompt and accurate email response with confirmation of the transaction, most within one day of submitting their application.

Student Health Staff: Student Health staff have instant access to waiver applications. They are able to quickly process waivers, provide accurate response to student questions, and supply current data to the campus community and the insurance carrier. The electronic system reduces the number of employees needed for waiver processing to 3 from the 15 that would have been needed had we continued using the manual system.
CONCLUSION

The UC Regents determined that the University was losing students when those not covered by
insurance dropped out because of health problems. Group health insurance could be offered to
students at a reasonable price as part of their registration fees. The UCI Chancellor approved the
program for mandatory health insurance for undergraduates at the end of March 2001. The
program was to begin the following Fall, leaving barely 3 months to design, program, test, and
implement a solution to quickly and conveniently process the waiver applications of those
thousands of students already covered by private insurance.

The USHIP Waiver Web Application was a collaborative effort of Student Health, Accounting
and Fiscal Services, and Administrative Computing Services and was put together using existing
systems: SBS, the Web, and email.

Web-based information technology provides a database of application information that can be
conveniently reviewed, manipulated, and transmitted to a student billing system to create waivers
that offset fee amounts. The process can be used by any UC campus that collects insurance data
manually. The process is entirely electronic for the student and has cut processing time for staff
from 3 weeks to 1 day, in addition to saving postage, paper, and printing costs. Because it is
written in Java, the system can easily interface with other applications and machines and can be
modified to accommodate local requirements. This one-time investment in programming (640
hours) has created a measurable savings in labor and materials.

PROJECT TEAM MEMBERS

Claudia Mauerhan, Student Health Services, Insurance Coordinator; Project Team Leader
University of California, Irvine
Student Health
Irvine, CA 92697-5200
cmauerh@uci.edu
Phone: (949) 824-7748
Fax: (949) 824-3033

Sukie Cooper-Franco, Accounting, Co-Chair, Student Billing System
I-Rong Lin, Administrative Computing Services, Technical Group Leader
Modesto Sevilla, Administrative Computing Services, Senior Programmer Analyst
Linda Sizemore, Financial Services, Co-Chair, Student Billing System,
John Tang, Administrative Computing Services, Database Administrator
Andy Wang, Administrative Computing Services, Program Analyst
APPENDIX A: USHIP STATISTICS

Undergraduate Student Health Insurance Statistics
For Academic Years 2001-2002 and 2002-2003

- **Spring 2003**: USHIP Insured = 10203, USHIP Waxes = 9036
- **Winter 2003**: USHIP Insured = 10787, USHIP Waxes = 8175
- **Fall 2002**: USHIP Insured = 11185, USHIP Waxes = 7991
- **Spring 2002**: USHIP Insured = 10396, USHIP Waxes = 6601
- **Winter 2002**: USHIP Insured = 10721, USHIP Waxes = 6798
- **Fall 2001**: USHIP Insured = 11111, USHIP Waxes = 6595

Number of Students
Business Processes for Undergraduate Students Health Insurance Program

University of California, Irvine
Administrative Computing Services

UC Irvine Students

On-Line Waiver Application via Web Browser

E-mail Notification to Students

Student Health

Review & Approve Student Application

Automatic Generation of USHIP Waivers

Clinic Staff

Query Students' Insurance Status

Electronic Transmission of Insured Students

Insurance Carrier
APPENDIX C: SYSTEM ARCHITECTURE FOR USHIP

System Architecture for Undergraduate Student Health Insurance Program

University of California, Irvine
Administrative Computing Services

[Diagram of system architecture showing Client Tier, Application Tier, and Data Server Tier with various components such as Sybase, JDBC Driver, JSP, Servlets, HTML, NACS Authentication Server, and Kerberos for authentication.]
APPENDIX D: CYCLE TIME FOR USHIP WAIVER APPLICATION APPROVAL

Cycle Time For Undergraduate Student Health Insurance Waiver Application Approval
For Academic Year 2002 - 2003

- Same Day: 50%
- 1 Day After: 30%
- 2 Days After: 11%
- 3 Days After: 6%
- More Than 3 Days: 4%
SBS: USHIP Module

All UCI undergraduate students are automatically enrolled in the Undergraduate Student Health Insurance Plan (USHIP) and charged a health insurance fee as part of registration. Students who are covered by major medical health insurance that is comparable to UC USHIP guidelines and has a US claims processing office, have the option of waiving out of the plan and not paying this fee.

Students apply for a waiver using an on-line waiver form in Zot Account Online.

Authorized users in Student Health use Zot Account Online to access, review, and approve or deny waiver applications. In addition, authorized users may complete the on-line waiver form for students, or they may print a blank form to mail to a student.

USHIP Approval

Using your Web browser, not the SBS system, log into Zot Account Online at <https://sbs.adcom.uci.edu/ZA/index.html>

Enter your UCINetID and Password, and click LOGIN and you will enter Zot Account Online. You are responsible for ensuring the confidentiality of all the student information you see, so be sure to read and understand the privacy statement.
Click on **USHIP Approval** to begin.

Welcome to Zot Account Online

Privacy Statement

IMPORTANT INFORMATION FOR STAFF MEMBERS! You are responsible for ensuring the confidentiality of the student information provided by the Student Billing System (SBS) for ZOT Account Online. Further disclosure is governed by Federal and State law and University policy, and is prohibited without written consent of the student(s). For more information, see What You Should Know About Privacy of and Access to Information - Student Records. If you have questions, please contact the Registrar's Office at (949) 824-6124.

Please click on the options to the left to see his/her information.

Your session will expire in 5 minutes.
There are several ways to access student waiver applications. You may use one option, then choose an application status from the drop-down list, then choose how many student records you want to see. Note that two people cannot access the same data at the same time. If more than one person is reviewing/approving applications, each must select a different groups of students.

Choose one option, Application status, and Number of students.

You may use only one option at a time:

- ID
- Last Name
- Insurance Provider
- Age older than 22
- International Only
- Non-International and less than 23 years old.

To view waiver application information for a specific student, enter the student’s ID, then click on Submit. If you wish to change the ID number or use another search option, click Reset to clear your previous entry, don’t try to delete the entry.
To view applications for a range of surnames, enter one or more letters of a last name in the first box, then press the Tab key on your keyboard to move to the second box and enter one or more letters for the ending range, then click on Submit.

To view applications submitted for a specific insurance provider, use your cursor to click on one of the insurance providers in the drop-down list. If you don’t see the provider you are looking for click on the ▲ or ▼ to move through the list.

To view applications from students older than 22, use your cursor to click in the box.

To view only applications from international students, use your cursor to click in the box.

To view applications from non-international students who are less than 23 years old, use your cursor to click in the box.

4
After selecting the desired option, use your cursor to choose the application status you wish to view.

- **Pending**: Any pending application. This is the default.
- **Denied**: Shows applications that have been reviewed and denied.
- **Approved-Year**: Shows applications that have been reviewed and approved for the full academic year.
- **Approved-Fall**: Shows applications that have been reviewed and approved for fall quarter only.
- **Approved-FAL/WI**: Shows applications that have been reviewed and approved for fall and winter quarters only.
- **All**: Shows all applications that have been submitted.

After selecting application status, select the number of student applications you want to review in this session.

After completing your selections, click on **Submit** or, if you wish to change your selection, click on **Reset** and make your new selections.

Note that two people cannot access the same data at the same time. If more than one person is reviewing/approving applications, each must select a different groups of students.
You will see a list of students that matches the selections you made, in order of application submission date, with the oldest records first. To change your selections, return to the selection page by, clicking **USHIP Approval**.

1. **The name of the student who filed the waiver application.**
   Under the student’s name is a memo box for comments.

2. **The student’s UCI Student ID number.**
   You may click on a student’s ID number to view detailed information from the student’s waiver application. You may also approve or deny the application from the detail screen.

3. **The student’s Social Security Number.**

4. **The date the waiver application was submitted.**
5. The status of the waiver application.

**Application**

<table>
<thead>
<tr>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pending</td>
</tr>
<tr>
<td>Approved-Year</td>
</tr>
<tr>
<td>Approved-Fall</td>
</tr>
<tr>
<td>Approved-FAWI</td>
</tr>
<tr>
<td>Denied</td>
</tr>
<tr>
<td>Deleted</td>
</tr>
<tr>
<td>Reversed</td>
</tr>
</tbody>
</table>

Any pending application. This is the default.

Approved-Year

Indicates that the waiver application has been reviewed and approved for the full academic year.

Approved-Fall

Indicates that the waiver application has been reviewed and approved for fall quarter only.

Approved-FAWI

Indicates that the waiver application has been reviewed and approved for fall and winter quarters only.

Denied

Indicates that the waiver application has been reviewed and denied.

Deleted

Indicates that an approved waiver has been deleted. This can occur if a student has been issued a waiver, but *before paying registration fees*, the student decides to use USHIP. The waiver is deleted and the student is assessed the USHIP fee.

Reversed

Indicates that a waiver has been reversed. This can occur if a student has been issued a waiver, and *after paying registration fees*, the student decides to use USHIP. The waiver is reversed and the student owes the USHIP fee.
6. The reason the waiver application was denied.

<table>
<thead>
<tr>
<th>Application Status</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denied</td>
<td>Indicates no action has been taken on the waiver.</td>
</tr>
<tr>
<td>&gt; 80%</td>
<td>Indicates the application was denied because the in network benefit is less than 80%.</td>
</tr>
<tr>
<td>&gt; Maximum</td>
<td>Denied because the maximum lifetime benefit is less than the Benefits Guidelines.</td>
</tr>
<tr>
<td>Hideduct</td>
<td>Denied because the annual deductible is too high.</td>
</tr>
<tr>
<td>Hosp &gt; 80%</td>
<td>Denied because the in network hospitalization / professional benefit is less than the 80% called for in the guidelines.</td>
</tr>
<tr>
<td>Hosp Only</td>
<td>Denied because the policy offers hospitalization only benefits.</td>
</tr>
<tr>
<td>Nomental</td>
<td>Denied because no mental health benefits are offered.</td>
</tr>
<tr>
<td>Nopharmacy</td>
<td>Denied because no pharmacy benefits are offered.</td>
</tr>
<tr>
<td>Notineng</td>
<td>Denied because application was not submitted in English.</td>
</tr>
<tr>
<td>Notinlax</td>
<td>Denied because health plan originates outside Southern California and offers no out of area provision.</td>
</tr>
<tr>
<td>Notinusa</td>
<td>Denied because insurance company has no claims processing office in the United States.</td>
</tr>
<tr>
<td>Nousmony</td>
<td>Denied because information was not submitted using U.S. currency.</td>
</tr>
<tr>
<td>Noverify</td>
<td>Denied because information on application could not be verified.</td>
</tr>
</tbody>
</table>
Denied because the in network hospitalization / professional benefit is less than the 80% called for in the guidelines.

7. The date the waiver application was last reviewed.

The last date [Update] was pressed for the individual’s application. This information is automatically entered by the system.

8. The operator ID of the person who last reviewed the waiver application.

Processing a waiver application from the student listing view

You may approve pending applications from this screen by selecting one of the following from the Status drop-down box:

- Approved-Year
- Approved-Fall
- Approved-FA\WI

You may deny pending applications from this screen by selecting Denied from the Status drop-down box.

If you select Denied, the Denial Reason drop-down box will open and you must select a reason from the choices listed.

At any time, you may enter comments in the memo box under the student’s name.

If you change your mind about the changes you made on the page, click on Reset and ALL the changes you made on the page will be reset to what they were at the beginning of the session.

To save all the changes you made to this page and have waiver approvals and denials applied, click on Update.
Processing a waiver application from the student detail view

The detail view displays all the information from the student’s waiver application, as well as submission and approval/denial information.
After reviewing the information submitted on the application waiver, you may approve or deny the student’s pending waiver application by selecting one of the following from the Status drop-down box:

- Approved-Year
- Approved-Fall
- Approved-FA\WI

You may **deny** the student’s pending waiver application by selecting **Denied** from the Status drop-down box.

If you select **Denied**, the Denial Reason drop-down box will open and you must select a reason from the choices listed.

At any time, you may enter comments in the memo box under the student’s name. Comments may include any information that might help document a decision to approve or deny an application, or show the progress of an application that is still pending. For example:

- Called student and verified submission date.
- Called insurance company; waiting for call back.
- Do not deny, per Claudia.

The memo box expands as comments are added, so you may add as much information as necessary.

If you change your mind about the changes you made on the page, click on **Reset** and the changes you made on the page will be reset to what they were at the beginning of the session.

To save all the changes you made to this page and have the student’s waiver approval or denial applied, click on **Update**. You will be automatically taken to the next student in your selected list of students.

To return to the list of students at any time, click **BACK** from the top or bottom of the screen.
Completing an on-line waiver application form.

Authorized users in Student Health can access and complete on-line waiver application forms. They might need to do this for students who cannot complete the forms themselves (disability, no Web access, etc.), or they might complete the data in the form after a student’s waiver has been manually applied from SBS.

To complete an on-line waiver application form for a student, in Zot Account Online, enter the Student ID, then click on **Forms**.
Then select **USHIP Waiver Application**.

You will see an online USHIP Waiver Application with student information completed:

- ID
- Name
- Student status
- Date of birth
- Address
- Daytime phone
- E-mail address
Use the Tab key on your keyboard to move from field to field, and be sure to complete the required fields, which are marked with *. 

When you have completed all the information, including Section C, you may Reset, Save, or Submit the form.

Reset resets all fields to blanks.

Save saves the information you entered but does not submit the waiver application. You should use this button if you are completing the information in the waiver form after a waiver has been applied in SBS.

Submit submits the waiver form to be queued for approval. After clicking this button, you will receive a confirmation message showing the date and time the application was submitted and showing a confirmation number.
Section C

I am requesting an exemption from the mandatory UCI Undergraduate Student Health Insurance Plan (USHIP) because I have health insurance coverage that is comparable or better. I understand that my insurance coverage will be compared to UCI USHIP and an exemption will be granted or denied based on that comparison. I understand and agree that if I am exempted from USHIP, I will maintain comparable health insurance at all times during the exemption period (2001-2002 academic year), and if my insurance coverage changes at any time during 2001-2002, I will immediately notify the USHIP Office. I understand that if my personal insurance lapses, I will not be able to join USHIP until the beginning of the next academic quarter. I further understand, that, if I am granted an exemption, neither the UC Regents nor USHIP is responsible for payment of my medical bills.

I have read and agreed to the terms of this document, and verify that all information submitted is accurate to the best of my understanding. In addition, I agree that selecting "YES" below replaces my signature of agreement.

Accept to replace signature: [SELECT ONE - ]

- The Reset button will reset the form to the default values.
- The Save button will save your information without submitting, giving you the ability to come back at a later time to finish the application.
- The Submit button will submit your application for review.

- Before submitting the form, use your browser's "print" function to print a copy for your records.
- Be sure you have completed the entire form and have accepted the terms of the document by selecting "YES" above before you click on the "Submit" button below.
- Your waiver submission is not complete until you click the "Submit" button.
- You will receive a confirmation message.

[Reset] [Save] [Submit]
Mailing an on-line waiver application form.

If you want to print a waiver application form to mail to a student, in Zot Account Online, enter the Student ID, then click on **Forms**.

Then select **Blank USHIP Waiver Application**

You will get a blank form than can be printed and mailed to the student.