VBA Final Project, MBA 614 Dr. Gove N. Allen

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In brief

Who: The adult alcohol and other drug addiction (AODA) unit of Milwaukee County What: A program to assist an individual client or intake worker to select the amount and type of treatment or other services, keeping the total under the client's government spending-per-client cap, from funding selections based on a client's eligibility and coordination needs.

Why: The adult alcohol and other drug addiction unit of Milwaukee County has decided to allow each AODA client a set amount of money, depending on their maximum eligibility for specific funding sources.

Executive summary

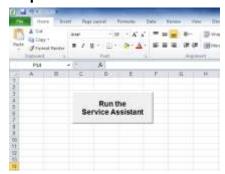
Milwaukee County is changing how alcohol and other drug addiction (AODA) clients receive services. Previously, clients received treatment for almost as long as they desired it. This caused long waits for new clients since only so many clients could be funded at time. In the near future, however, clients will be limited by dollar amount. When the money runs out, their treatment and services stop. Limiting the cost per client...

- removes wait time. Since the cost per client is limited, new clients don't need to wait for old clients to leave treatment before they begin.
- Gives the clients greater flexibility in their choices
- Allows the county to serve more clients for less money. (A drawback to this system is that
 severe clients will have as much money to spend on treatment and services as clients with lesser
 problems, and they may not get all the assistance that they need.)

The WIser Choice program (Wisconsin (WI) Supports Everyone's Recovery Choice) receives funding from many sources. Clients may be eligible for different funding sources depending on their personal and familial situations. Since some funds provide more treatment dollars than others, one client may be eligible for several thousand more dollars than another client.

This VBA project allows users to select options based on his/her knowledge of the client. The first options are the funding sources the client is eligible for, and are entered by a central intake worker. The VBA project will select the highest monetary value of the selected eligibilities and use that as the max cost of treatment. The second selection the intake worker makes is the level of recovery support coordination or case management the client needs or wants. At this point, a central intake worker may share the screen with the interviewee to select the treatment and services he or she needs or wants. The user selects a service by entering the number of units they'd like to purchase for the services they choose. To make the service worthwhile to the provider and client, each service has a minimum number of units. User entries that don't meet that minimum number of units are not included in the cost and not included in the final list of selected services. If the total dollar amount goes over the specified client limit, the number turns red, and the user cannot reach the final screen until the numbers are adjusted to fit within the limit. Once the user has finished under the limit, the final screen shows the central intake worker the service code, service name, number of units, and the number of days the authorization should span.

Implementation Documentation



This is the button the staff will use to start the service selection assistant!

This is the initial form. →
The space between the questions is filled with hidden cells, ready in case more funding sources need to be added to the project. Each time

the project runs the code sorts and pulls the information from an Excel worksheet.

Funding. Through grant requests, Milwaukee County has been the recipient of local, state, and federal money to assist people with alcohol or other drug addictions. Depending on their situation, clients are eligible for different funding sources.



Fund source / money

TANF (Temporary Assistance for Needy Families – state) = 3357

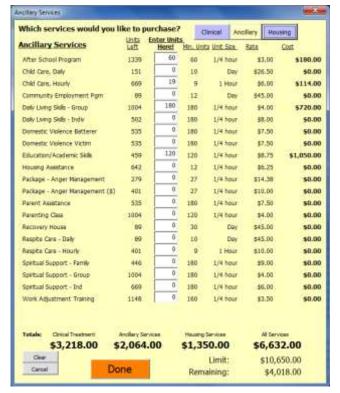
IV drug (Intravenous Drug users – state) = 2105

ATR 3/CATL (Access To Recovery – federal) CATL (Community Aids, Tax Levy – county) = 2447 Mi-WISH (Milwaukee Welcome to Income, Sobriety and Housing – federal) = 2770 IDP (Intoxicated Driver Program – state) = 658

RSC/CM. A recovery support coordinator (RSC) is a person who contacts the client weekly, assists with living arrangements, and holds monthly meetings with the client where friends, family, treatment or service providers, bureau of Child Welfare workers, parole officers, or other formal or informal supports may be present. Clients who do not have RSCs have case managers (CM) who keep monthly contact and collect information from the client at required intervals for program outcome reports.



After checking that the user selected at least one box from each area, the Let's Go button prompts a message box with the amount of money a client has available. If the number is negative (which is possible, depending on the selections), the user cannot leave this screen until the number is positive or the client clicks Cancel (as indicated in the message box).

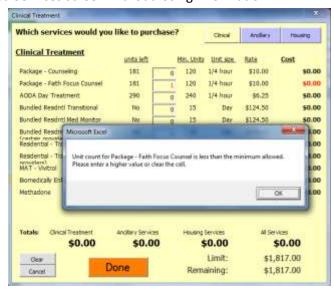


This is one of the three service entry userforms. Some services have "(\$)" after the name, this indicates that it's a more expensive version of the same service since sometimes prices differ by service provider. (This is done manually on the spreadsheet and is not part of my program.) The second column shows how many units could be purchased if the user spent all the remaining money on that service. The user enters the number of units he/she would like to purchase into the textboxes. If this number is less than the next column (Min. Units), the client receives an error (stating that the service needs to meet the minimum unit requirement), and the unit number he/she entered turns red, and the cost is not calculated. The next column, called Unit Size, stores the length of each unit. Rates measure the cost per unit, and the cost column updates as the user enters the units.

There are currently 21 ancillary services to choose from, but this form has a capacity for 23 services, depending on the number of rows in the excel worksheet. If the number exceeds 23, the user will see a message box stating that not all the services will be visible! The clinical userform has 11 services with space for 13, and the housing userform has 3 services, with space for 13. There is space for 12 services on the final page, though I do not expect users to select nearly so many services!

The buttons on the top of each userform link to the other userforms, allowing the user to go back and forth between the services and the final Selected Services screen without losing information.

→ Here the user has not entered enough units to meet the minimum requirement. The numbers remain red until the number is removed or until it has been changed to meet the minimum requirement. Until then ,the cost of this service is <u>not</u> included in the total. If the DONE button were pressed now, these units would be erased.



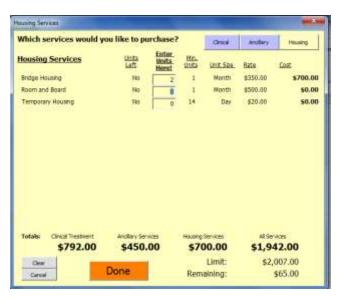
The buttons on the bottom are Clear and Cancel. Clear will erase the user-entries on the currently visible userform and will make the cost column zeros, too. Each userform must be cleared independently. The cancel button will unload all the windows and close the project. The Done button checks the Remaining value, and, if it's not negative, will bring the user to a final screen.

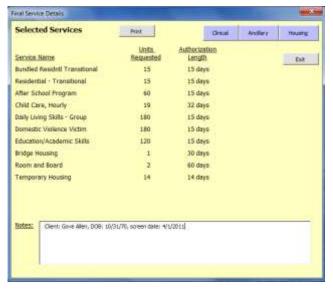
Here the user has entered too many units, and has overspent his/her money. The "remaining" number (at the bottom of the screen) is red to show the problem. If the DONE button were pressed now, the user would receive a warning (as shown below). He/she cannot progress until the services costs are under the limit. ->



Here the user has entered units in each of the three categories, and the program has summed them at the bottom of the userform. A client may enter units onto any of the three screens and click Done when he/she is satisfied. This client has money remaining (not a negative number), so he/she will be able to move to the final screen. >







← This is the final screen. The user may still make changes by selecting the buttons corresponding to the three service userforms, and return to this final userform with the information updated with any changes.

At this stage the service provider(s) have not been selected or contacted yet. Since the intake worker doesn't know the exact service start date, the program specifies how long the authorization should last, but doesn't state what the exact start and end dates are.

The print button pops up a print dialogue box to allow the screener to make a lasting copy of the

information entered. A screener may use the "notes" area for the client name and date, or other information which might be useful for the employee file. The notes area does not refresh with the rest of the page, so the notes will be available no matter how many times the changes are made in the selected services.

This project will allow the client greater freedom in selecting services and a fuller understanding of the cost of the services they will receive. I have adjusted the numbers to give a practicing user greater flexibility in selection, but in a real situation, the client cannot have more than \$2728.00, which goes very quickly.

Problems I encountered, things I learned

Navigating to new userforms. In our previous userform assignment, I had a terrible time trying to navigate between two userforms, and eventually failed. This project has five userforms and was further complicated by the need to transmit information between the forms. Much information was shared by global variables. Fortunately I was able to discover that global variables must be declared in a module, and not in the userform itself. (After I found the answer, I remembered that had been mentioned in class!)

Switching between userforms. Another problem was that I couldn't switch between userforms. The order of userforms goes like this (with some back- and forward navigating possible): Service Assistant > Clinical Treatment > Ancillary Services. When I tried to get back to clinical treatment, I'd get a "run-time error '400'; Form already displayed; can't show modally." Eventually I discovered that this was because I was calling a new userform before I was hiding the previous userform, so the program never got to the instruction to hide the old userform! Another problem between userforms was that when I showed an old userform, it wasn't updating with the new information, I found the "activate" event, which helped considerably! I used it to re-run the initialize screen, which updated the totals on the bottom of the screen.

Private Sub UserForm Activate()

UserForm_Initialize End Sub

Making space for all the services on the userform. There are many ancillary services, more than could fit comfortably on the userform under my initial format. I knew in the future that Milwaukee County might gain or lose services, and that I had to make the userform capable of adapting to these changes. It could not be infinitely flexible though, so I needed to warn the user that if too many services were added, that there wouldn't be room. I wrote the following code for the clinical services userform, where clinCt is the number of rows on the spreadsheet. I made 13 rows on the clinical services userform and there are currently 11 clinical services.

'if the count is greater than the number of rows on the form, msgbox a warning to the user If clinCt > 13 Then

MsgBox "WARNING: There aren't enough rows to show all the clinical treatment options. " _ & clinCt - 13 & " options won't show."

End If

Comparing strings. To save myself from having to read the excel file over and over, I read the file once, then stored most of the service information on the userform. That was helpful since that information was useful to the user. The difficulty came when I needed to compare strings. I spent hours trying to fix this simple string:

```
If Ancill_Svc.txt_Clin17.Value < Ancill_Svc.lbl_CMin17.Caption Then _ 
Ancill_Svc.txt_Clin17.Value = 0
```

The code means: if the number of units entered by the users is less than the minimum amount of units required for the service, make the value in the textbox zero.

Most of the time it worked perfectly, but for some unknown reason, on a few of the rows (#3 and #17 on the Ancillary page, for example) would not consistently compare correctly! I would go line by line and watch as it said, "if 12 < 9 then set the value to zero." And it would set it to zero! I was dumbfounded. It also didn't like numbers that were prefaced with zeros. These would be set to zero, too! Finally I put in string variables, which seemed to work at first, but which didn't really work. I didn't want to use integers because I didn't know how they would deal with errors in entry, like decimals. Finally I gave up and used integer variables, and it worked perfectly! They just rounded the decimal, which was perfectly acceptable to me. And, since it's made an integer before the "is it less than the minimum?" double-check, then if the decimal makes the difference, it's taken care of there. (The user data is checked upon update to be sure it's numeric and that it's equal to or greater than the minimum required, but if it's less than the minimum required, it doesn't zero it out, it makes it red, and doesn't calculate it in the total. The final page checks the userform for any client data, so this code is important to clear out unacceptable information before it affects the final services.) Using an integer variable did require me to check for blanks, because integers can be set to zero, but not set to null. This was the resulting code:

Dim clinvalue As Integer Dim minvalue As Integer

If Ancill_Svc.lbl_CMin17.Caption <> "" Then minvalue = Ancill_Svc.lbl_CMin17.Caption Else

minvalue = 0
End If
clinvalue = Ancill_Svc.txt_Clin17.Value
If clinvalue < minvalue Then Ancill_Svc.txt_Clin17.Value = 0

Learning about Procedures. I created a procedure to handle the information coming into the Selected Services page. I came to really value the ability to pass variables without having them named identically to the subprocedure. It was wonderful not to have to copy and paste dozens of lines of identical code. I am hooked!

This was a wonderful experience. My former boss and co-workers will love it! Thank you for giving me the opportunity to serve them!