



VOICE LEADERSHIP FORUM  
2010





**VLF – ahm 3 years on**  
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2<sup>nd</sup> June 2010

# Company background

- ✔ Private Health Insurer
- ✔ Established in 1971 – ‘there has to be a better way’ <http://www.ahm.com.au/4345/Corporate-Overview#c>
- ✔ A history of innovation
- ✔ No branch network
- ✔ Fully owned by Medibank Private

# Verification

- ✔ **Verification comes in two flavours at ahm**
  - ✔ Biometrics
  - ✔ Knowledge Based Questions
- ✔ **Biometrics uses the unique characteristics of a callers voice to identify them**
- ✔ **Knowledge Based Questions uses speech recognition to automate your standard id check process e.g. name, address, date of birth**

# How does it work at ahm

- ✔ If the member has a voiceprint registered the biometric system assesses the utterance versus the enrolment on file and gives it a score which is then used to determine pass or failure
- ✔ If the voiceprint doesn't match it goes straight to an agent
- ✔ If the membership has no voiceprint registered we take them to the automated Knowledge Based Questions (KBQ)
- ✔ Knowledge based questions automates the standard ID check that our agents use on the phone.

# Biometrics

- ✔ In automated verification Biometrics is king
- ✔ It is the quickest and most secure form of verification
- ✔ Requires the user to register their voiceprint – we call this enrolment

# First you Enrol

- ✔ **Biometrics only works if you've registered the callers voiceprint**
- ✔ **Enrolment is the key to success with Biometrics**
- ✔ **ahm staff are responsible for registrations identifying good candidates then taking them through the process**



# The Next Time You Call...

- ✔ We welcome the caller and request that they have their membership number ready
- ✔ The call is transferred to the Verification system
- ✔ The verification system asks for the callers number
- ✔ It either passes or fails the caller discreetly and passes the call back with verification data to the CTI platform which routes the call to our agents



# Not all callers will pass Biometrics

❑ **The caller doesn't have their account number**

❑ **False Rejects**

❑ The caller is in a noisy environment

❑ The caller is on a bad mobile phone connection

❑ The system scores the callers biometric match lower than the acceptable threshold

❑ **The caller is not registered for Biometrics**

# Knowledge Based Questions (KBQ)

- ✔ KBQ uses speech recognition to automate your standard id check process e.g. name, address, date of birth
- ✔ We only invoke KBQ if the policy has no Biometric voice print for security



# Security

- ✔ At no time do we give the caller any indication on whether they have passed or failed
- ✔ If the caller fails Biometrics don't put them through knowledge based questions.
- ✔ Your security is only as good as your enrolment security is

# Stat Attack! (get your pens ready)

✔ ahm have registered 94,705 people = 36% of eligible customers

✔ Of those we offer enrolment to

✔ 93% register on the spot

✔ 3% are unable to

✔ 4% don't want to (respect their right to say no)

# Stat Attack!

✔ **Note: We do not cleanse callers in our IVR as we once did which impacts the following stats**

✔ **On a typical day last week**

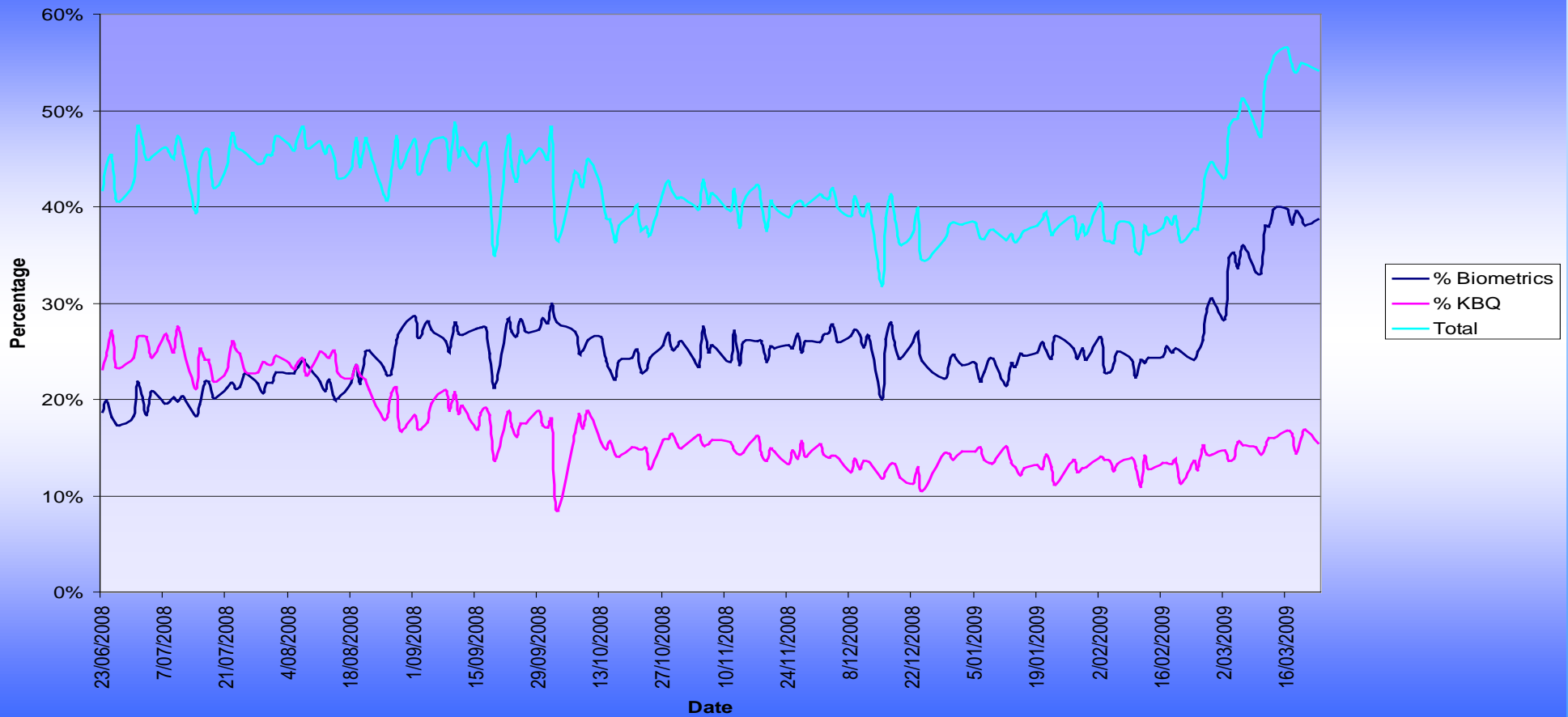
|  |                    |
|--|--------------------|
| ✔ Biometrics verification                        | 41%                |
| ✔ Full KBQ verification                          | 11%                |
| ✔ Partial KBQ                                    | 12% (64% Verified) |
| ✔ Fail Biometrics                                | 8%                 |
| ✔ Failed KBQ                                     | 1%                 |
| ✔ Failed to provide their number                 | 17%                |
| ✔ Not Repeating questions                        | 7%                 |
| ✔ Not identified (number doesn't pass check sum) | 7%                 |
| ✔ System error                                   | 0% (5 out of 2343) |

# Impact of Verification

- ✔ **Biometrics takes time to gain traction as you need customers registered for the system to work**
- ✔ **KBQ plugs this gap beautifully as it delivers the time savings while you build up your registrations**
- ✔ **Automatically verified call verses a manually verified call**
  - ✔ **2007 - 55 seconds, 2010 – 41 seconds**
- ✔ **Impact on ASA**
  - ✔ **2007 – 30 seconds, 2010 – 26 seconds**

# Biometrics will take over from KBQ

Percentage of Verified Callers by Date - June 08 to March 09



# Golden Rules

- ✔ **LESS PROCESS MORE SERVICE!!!**
- ✔ **Too many bad examples of poorly implemented speech systems**
- ✔ **Think of the customer experience first then the business outcomes**
- ✔ **If you can, only verify callers who are likely to need verification**
- ✔ **Don't annoy the caller with repeated questions**
- ✔ **Value security**
- ✔ **Trust the system**

# Some Good ideas...

- ✔ **Rules based security.** For simple, safe transactions then a biometric check may suffice. For more complex, higher risk transactions then second factor authentication makes sense
- ✔ **Build a biometric print of your caller as they navigate your speech recognition IVR and use that for enrolment**

# Types of Enrolment

✓ There are many options available

| <b>Enrolment Type</b>  | <b>Uptake Rate</b> | <b>Security</b>   |
|--|--------------------|-------------------|
| Agents offering enrolment  | <b>Slow</b>        | <b>Secure</b>     |
| Members enrolling themselves   | <b>Fast</b>        | <b>Not Secure</b> |
| Collecting Biometric profiles in the IVR and offering the caller enrolment | <b>Fast</b>        | <b>Secure</b>     |

# Who is implementing Biometrics

- ✔ **Banking/Finance/Insurance Sector**
- ✔ **Government Agencies**
- ✔ **Loyalty Programs – frequent flyers**
- ✔ **Law Enforcement/Border Protection agencies**

# What Went Well

- ✔ **Member enrolment at the end of the call**
- ✔ **Sending a letter to anyone who registers for biometrics confirming this – good security measure**
- ✔ **The data the agent receives for each call, and the data that management receives**
- ✔ **Acceptance of the systems by our customers and staff**
- ✔ **The project delivered its benefits – expected and unexpected**

# What Didn't Go Well

- ❌ **Biometrics does create some issues, given manual verification keeps your data current**
- ❌ **Keeping enrolment rates up takes effort, re-energising and focusing your agents**
- ❌ **We had to increase our speech ports to cope with the volumes going through the system**

# If We Had Our Time Again....

- ✔ Implement knowledge based questions sooner
- ✔ Implement screen pop at the same time
- ✔ Set targets for enrolment
- ✔ Create a permanent test system
- ✔ Re-calibrate the system earlier

# Future Plans

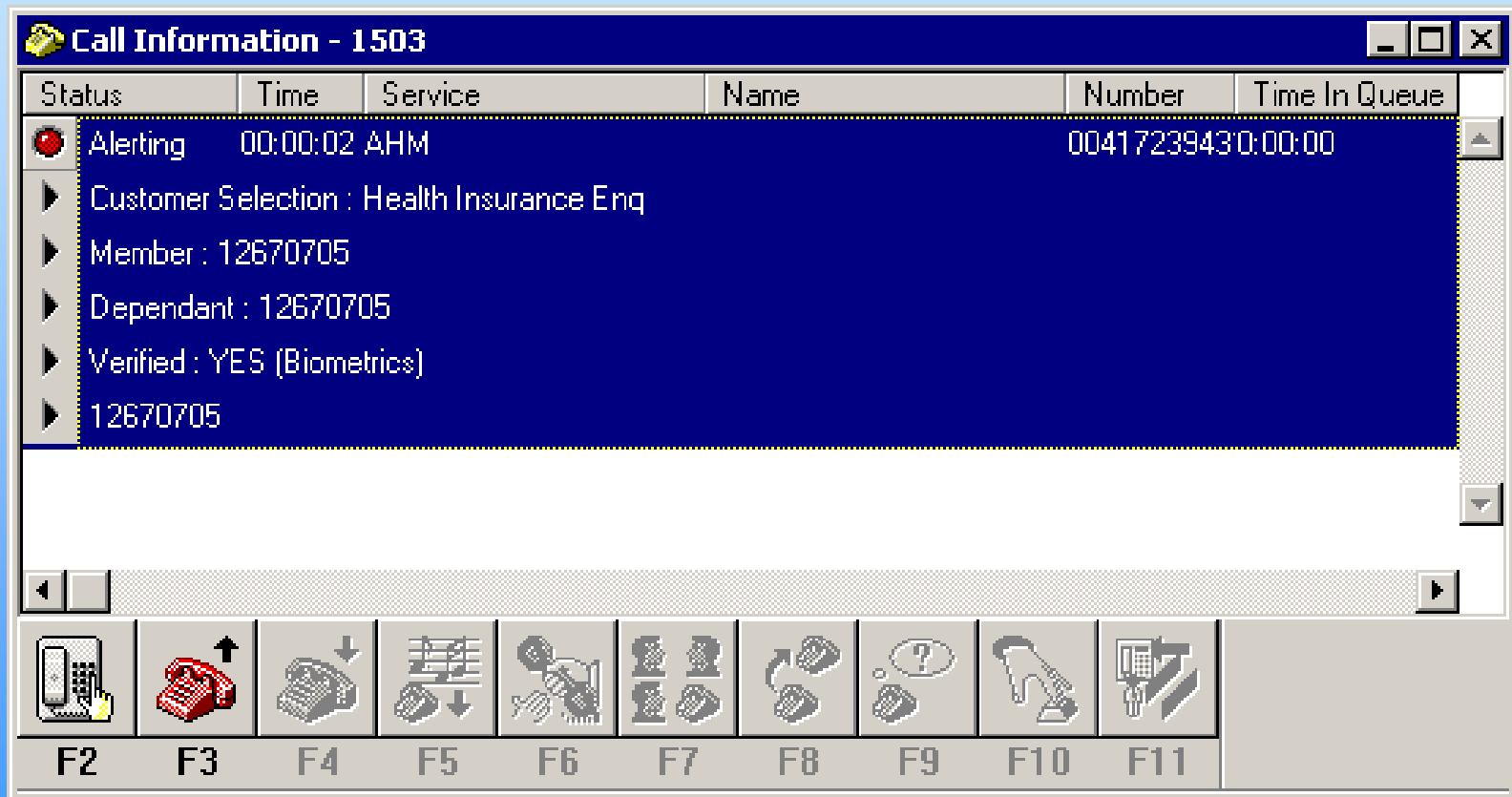
 **Open Menu**


 **Payments**

 **Screen Pop**

# Screen Shots

## Verified by Biometrics



| Status   | Time     | Service | Name | Number     | Time In Queue |
|--|----------|---------|------|------------|---------------|
|  Alerting | 00:00:02 | AHM     |      | 0041723943 | 0:00:00       |

▶ Customer Selection : Health Insurance Eng

▶ Member : 12670705

▶ Dependant : 12670705

▶ Verified : YES (Biometrics)

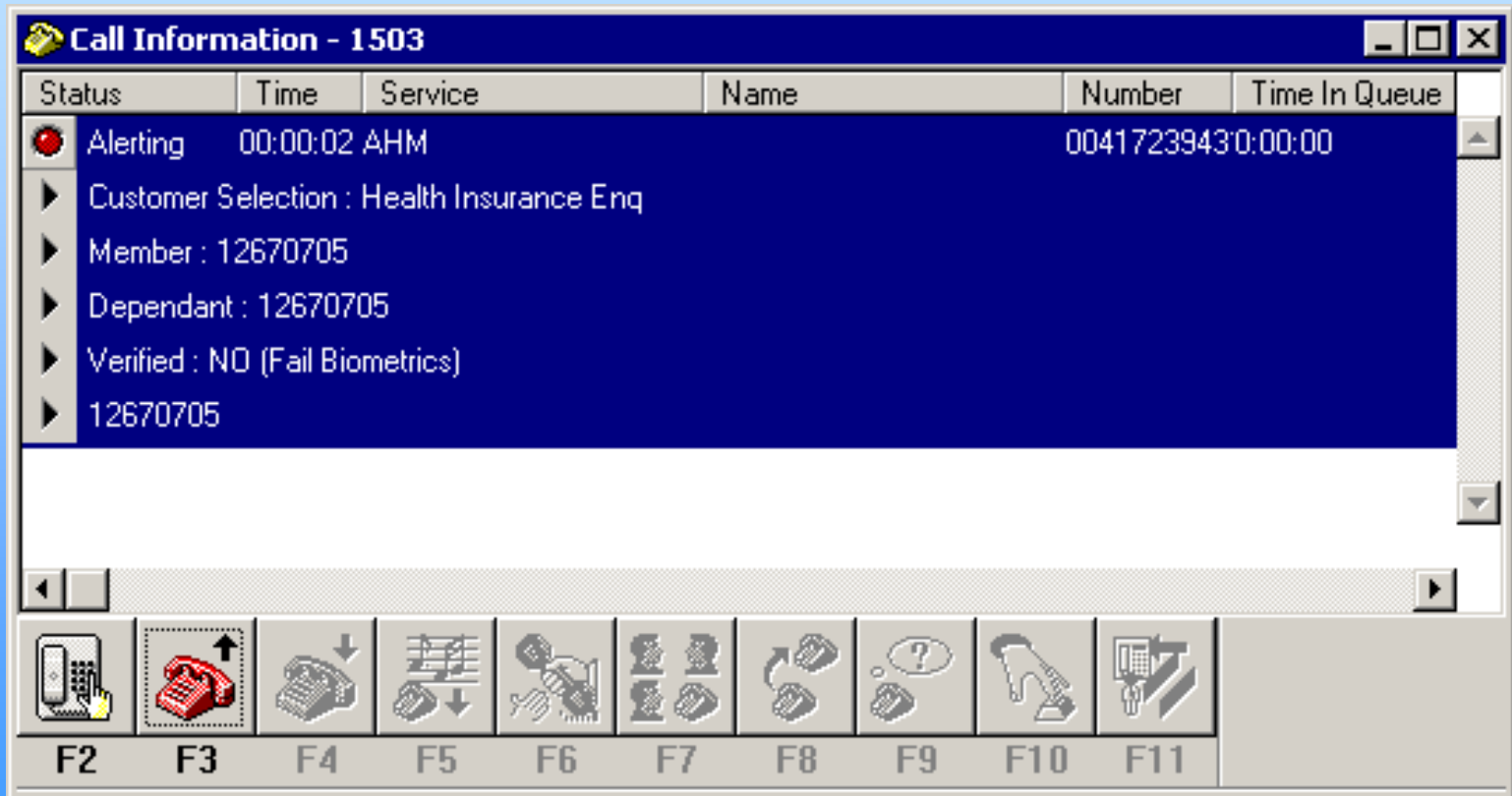
▶ 12670705

F2 F3 F4 F5 F6 F7 F8 F9 F10 F11

# Screen Shots

## No Biometric Voiceprint

(EG. Only the husband is registered and the wife is the caller)




The screenshot shows a window titled "Call Information - 1503" with a table of call details and a list of call events. The table has columns for Status, Time, Service, Name, Number, and Time In Queue. The first row shows the call is in an "Alerting" state, with a time of 00:00:02, service "AHM", and number "00417239430:00:00". Below the table, a list of call events shows a "Verified : NO (Fail Biometrics)" event, indicating that the caller's voiceprint did not match the registered profile.

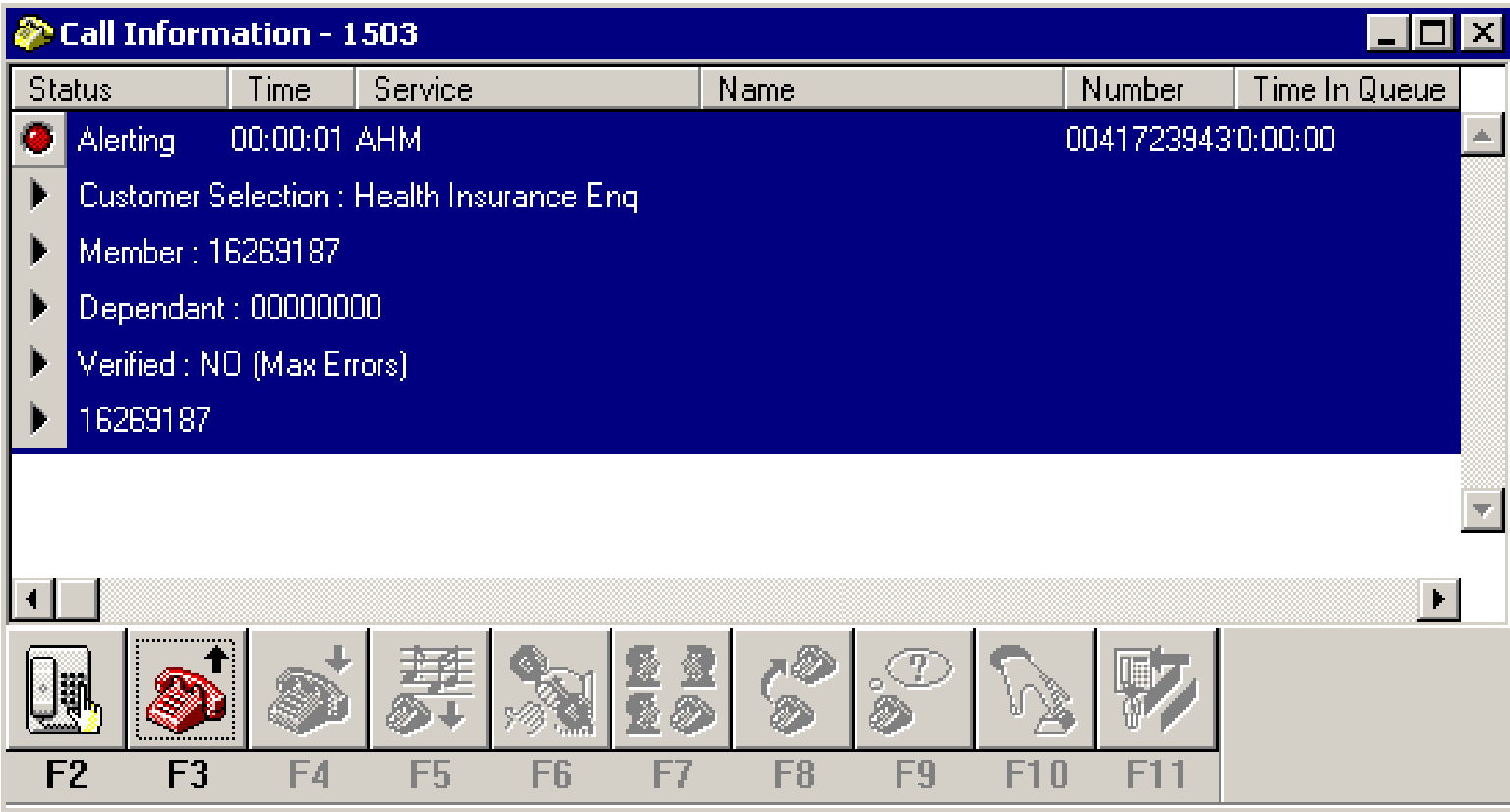
| Status   | Time     | Service | Name | Number            | Time In Queue |
|----------|----------|---------|------|-------------------|---------------|
| Alerting | 00:00:02 | AHM     |      | 00417239430:00:00 |               |

- ▶ Customer Selection : Health Insurance Enq
- ▶ Member : 12670705
- ▶ Dependant : 12670705
- ▶ Verified : NO (Fail Biometrics)
- ▶ 12670705


At the bottom of the window, there is a toolbar with function keys F2 through F11, each with a corresponding icon representing various call management actions.

# Screen Shots

 The system could not understand what the member was saying.



The screenshot shows a software window titled "Call Information - 1503". The window contains a table with the following data:

| Status   | Time     | Service | Name | Number     | Time In Queue |
|--|----------|---------|------|------------|---------------|
|  Alerting | 00:00:01 | AHM     |      | 0041723943 | 0:00:00       |


Below the table, there are several expandable sections:

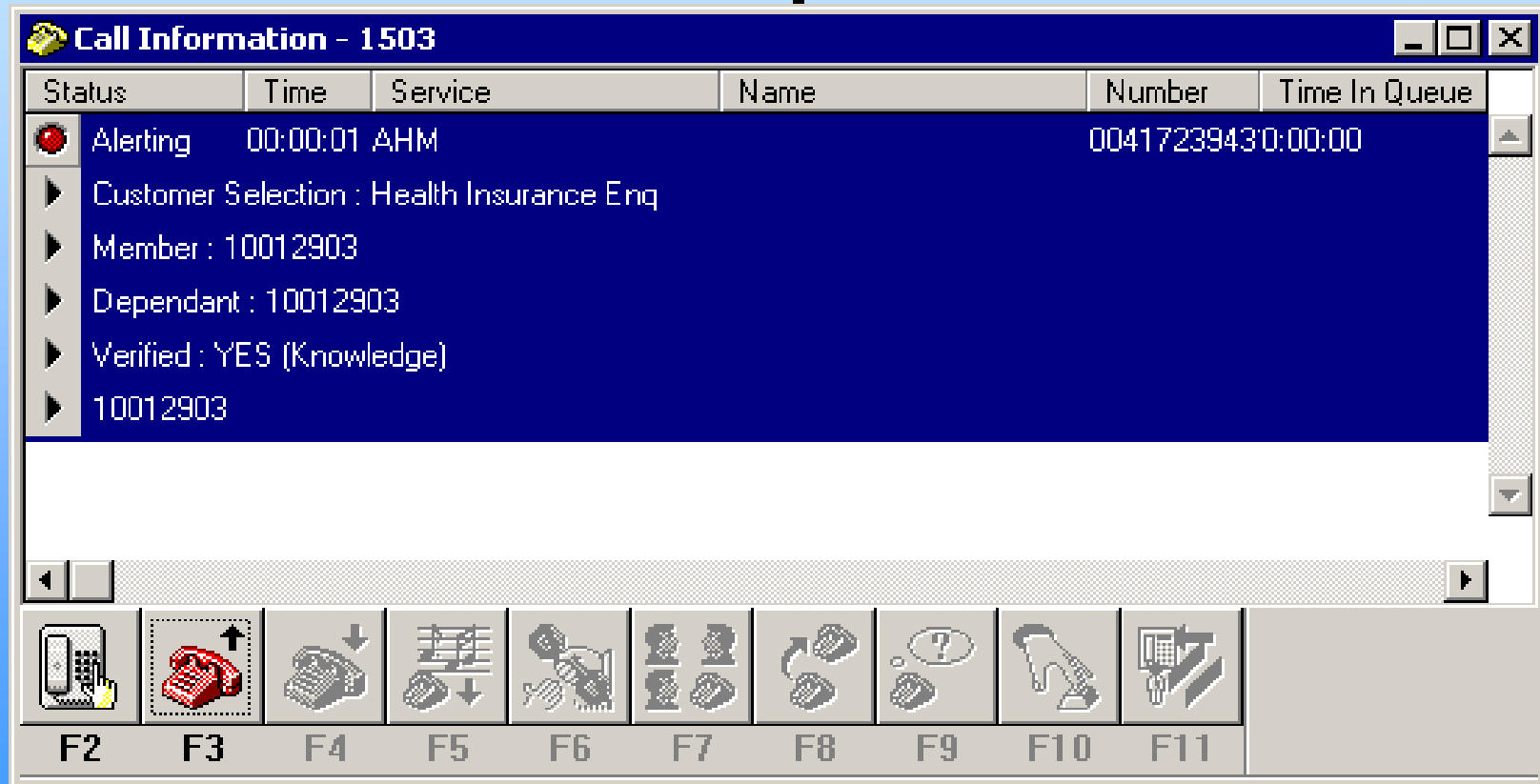
- ▶ Customer Selection : Health Insurance Eng
- ▶ Member : 16269187
- ▶ Dependant : 00000000
- ▶ Verified : NO (Max Errors)
- ▶ 16269187


At the bottom of the window is a toolbar with icons for various functions, labeled F2 through F11:

- F2: Phone handset icon
- F3: Red telephone icon with an upward arrow
- F4: Telephone icon with a downward arrow
- F5: Telephone icon with a downward arrow and a list icon
- F6: Telephone icon with a downward arrow and a gear icon
- F7: Telephone icon with a downward arrow and a person icon
- F8: Telephone icon with a downward arrow and a circular arrow icon
- F9: Telephone icon with a downward arrow and a question mark icon
- F10: Telephone icon with a downward arrow and a hand icon
- F11: Telephone icon with a downward arrow and a document icon

# Knowledge Verified

 The caller has been verified using knowledge based questions.



| Status   | Time     | Service | Name | Number      | Time In Queue |
|--|----------|---------|------|-------------|---------------|
|  Alerting | 00:00:01 | AHM     |      | 00417239430 | 00:00:00      |

- ▶ Customer Selection : Health Insurance Enq
- ▶ Member : 10012903
- ▶ Dependant : 10012903
- ▶ Verified : YES (Knowledge)
- ▶ 10012903

Function keys: F2, F3, F4, F5, F6, F7, F8, F9, F10, F11

# Incorrect Name and DOB

✔ The Verified Status is NO and this time the reason is Name and Date of Birth.

The screenshot shows a software window titled "Call Information - 1503". The window contains a table with the following data:

| Status   | Time     | Service | Name | Number     | Time In Queue |
|----------|----------|---------|------|------------|---------------|
| Alerting | 00:00:01 | AHM     |      | 0041723943 | 0:00:00       |

Below the table, there are several expandable fields:

- Customer Selection : Claims and Payments
- Member : 10012903
- Dependant : 00000000
- Verified : NO (Name, DOB)
- 10012903

At the bottom of the window is a toolbar with function keys F2 through F11, each with a corresponding icon:

- F2: Mobile phone icon
- F3: Red telephone handset icon
- F4: Telephone handset icon
- F5: Queue icon
- F6: Hand holding a telephone handset icon
- F7: Telephone handset icon
- F8: Telephone handset icon
- F9: Question mark icon
- F10: Hand holding a telephone handset icon
- F11: Telephone handset icon

**Less Process – More Service!**



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