CHAPTER SIX: COZAAR e-PILOT RESULTS & INTERPRETATIONS

This chapter provides a comprehensive statistical and graphical analysis of the COZAAR e-Pilot’s research results. The chapter also provides an interpretation of these results.

6.1 SAMPLE SIZE AND DISTRIBUTION

Out of 450 physicians that were invited to participate, 144 (32%) started the COZAAR e-Pilot (did the entry survey); 117 (81.25% out of the 144) completed the e-Pilot (did the exit survey). The sample distribution was as follows:

![Sample Distribution Diagram](Source: Brian Burgess, 2005)
Entry Surveys:

- Of those 144 physicians that started (did the entry survey): 81 (56.25%) were from the Group 1+2 invites (received e-detailing modules) and 63 (43.75%) were from the Group 3 invites (not given e-Detailing modules - control group).
- Of the 81 physicians who started from Groups 1+2 (received the e-Detailing): 44 (54.32% of e-detailing group, 30.56% global group) were in Group 1 (received e-Detail modules only) and were assessed to be difficult-to-see; and 37 (45.68% of e-workshop, 25.69% global) were in Group 2 (received e-Detail modules and were also visited by a sales rep once during the project run-period).

Exit Surveys:

- Of the 63 physicians from the control group who were only given entry/exit surveys: 47 (40.17%) completed the exit survey (completed the pilot & received flash-drive)
- Of the 81 physicians who started in groups 1+2 and who also received e-Detailing modules: 70 (59.83%) completed the exit survey (completed the pilot & received flash-drive). Of these 70 physicians:
  - 36 (51.43% of e-Detailed groups, 30.77% global) were from Group 1 (received e-Detailing modules only)
  - 34 (48.57% of e-Detailed groups, 29.06% global) were from Group 2 (received e-Detailing modules + rep visit)

Telephonic Interviews:

- A total of 24 physicians were telephonically interviewed

6.2 e-PROFILING RESEARCH RESULTS

"Did the e-Pilot allow us to profile physicians in terms of their use of the internet and their ability to use internet enabled technologies?"
6.1.1 Response rate

Of the 450 physicians invited, only 144 responded, which equates to a 32% response rate.

6.1.2 Internet Usage

Of the 117 physicians who took part, 141 (97.92%) of them confirmed that they routinely use the internet and 134 (93.06%) confirmed that they would use it to conduct medical research. In the groups that received e-Detailing modules (groups 1&2): 98.77% confirmed that they routinely use the internet and 90.12% confirmed that they would use it to conduct medical research. In the control group, 96.83% confirmed that they routinely use the internet and 96.83% confirmed that they would use it to conduct medical research. The difference between these groups was not significant (chi square test), and thus at baseline e-Detailed groups 1+2 and the control group 3 were overall comparable at an internet usage level. See ADDENDUM C for list of physicians who responded.

6.2.3 Ability to use internet enabled technologies

Within the groups that received links to the e-Detailing modules (groups 1+2), 81 physicians started and 70 of them finished - 86% persistence rate. These physicians effectively completed all four e-Detailing modules which took them on average just over 2.5 hours to complete. Minimum duration was 88 minutes, mean 161 minutes and maximum 301 minutes, with a SD of 50.96.

<table>
<thead>
<tr>
<th>Table 6.1: Time to complete e-Pilot – Distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>e-Detailing</td>
</tr>
<tr>
<td>Less than 90 mins</td>
</tr>
<tr>
<td>90-120 mins</td>
</tr>
<tr>
<td>120-150 mins</td>
</tr>
<tr>
<td>150-180 mins</td>
</tr>
<tr>
<td>180-210 mins</td>
</tr>
<tr>
<td>210-240 mins</td>
</tr>
<tr>
<td>240-270 mins</td>
</tr>
<tr>
<td>More than 240 mins</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

(Source: COZAAR e-Pilot, SAS Output, October 2005)
Of the 81 physicians in groups 1&2, who started and received the e-Detailing modules, 76 of them used the available useful resources. Most physicians used between 5 and 10 useful resources throughout the pilot with a minimum of 1, maximum of 12, a mean of 6.14 and a SD of 3.34.

Table 6.2: Use of Interesting Resources – Distribution

<table>
<thead>
<tr>
<th>e-Detailing</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 5 useful links + downloads used</td>
<td>25</td>
<td>32.89</td>
</tr>
<tr>
<td>5-10</td>
<td>34</td>
<td>44.73</td>
</tr>
<tr>
<td>10-15</td>
<td>12</td>
<td>15.78</td>
</tr>
<tr>
<td>Total</td>
<td>76</td>
<td>100</td>
</tr>
</tbody>
</table>

(Source: COZAAR e-Pilot, SAS Output, October 2005)

6.2.4 Physician’s Patient Base

Most of the doctors involved in the pilot see up to 30 hypertensive patients in a week. The distribution difference between the e-Detailed groups (groups 1&2) and the control group was not significant (chi square; p=0.2932)

Table 6.3: Size of Hypertensive Practice – Distribution

<table>
<thead>
<tr>
<th>Overall</th>
<th>e-workshop</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>Less than 10 patients</td>
<td>35</td>
<td>25.00</td>
</tr>
<tr>
<td>10-19 patients</td>
<td>46</td>
<td>32.86</td>
</tr>
<tr>
<td>20-29 patients</td>
<td>30</td>
<td>21.43</td>
</tr>
<tr>
<td>30-39 patients</td>
<td>8</td>
<td>5.71</td>
</tr>
<tr>
<td>40-49 patients</td>
<td>6</td>
<td>4.29</td>
</tr>
<tr>
<td>50-59 patients</td>
<td>8</td>
<td>5.71</td>
</tr>
<tr>
<td>60-69 patients</td>
<td>2</td>
<td>1.43</td>
</tr>
<tr>
<td>More than 100 patients</td>
<td>5</td>
<td>3.57</td>
</tr>
<tr>
<td>Total</td>
<td>149</td>
<td>100.00</td>
</tr>
</tbody>
</table>

(Source: COZAAR e-Pilot, SAS Output, October 2005)
6.2.5 Perceptions & Scripting Preferences

The following results relate to the doctor’s most current perceptions and scripting preferences – as stated at the exit survey and online activity.

6.2.5.1 Anti-hypertensive Class Preferences (Scripting Habit)

Diuretics and ACEIs are the most commonly used anti-hypertensive therapies amongst the physicians that participated.

<table>
<thead>
<tr>
<th>Table 6.4: Hypertension Scripting - Distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of hypertensive patients currently using:</td>
</tr>
<tr>
<td>Diuretics</td>
</tr>
<tr>
<td>Beta-Blockers</td>
</tr>
<tr>
<td>Calcium Channel Blockers</td>
</tr>
<tr>
<td>ACE Inhibitors</td>
</tr>
<tr>
<td>Angiotensin Receptor Blockers</td>
</tr>
</tbody>
</table>

(Source: COZAAR e-Pilot, SAS Output, October 2005)

NB. Angiotensin II Receptor blockers (AllAs) are used in 21.35% of the hypertensive patients and by cross reference physicians will most often use combination therapies to treat hypertension (sum of Mean Values > 100%)

6.2.5.2 When treating hypertension, what is the physician’s primary objective?

115 (98.29%) of all the physicians that participated in the COZAAR e-Pilot believe that the primary objective of treating hypertension is to reduce arterial BP, reduce/modify CV risk factors and prevent target organ damage. Only two physicians disagreed – one felt that the primary objective is to reduce arterial BP and the other felt that the primary objective of treating hypertension was to prevent target organ damage (0.85% each). This result suggests that physicians will consider the potential “benefits beyond blood pressure” that newer more innovative products like COZAAR can offer.
6.2.5.3 Do physicians perceive Stroke to be the most common consequence of hypertension?

Of 117 physicians 92 of them (78.63%) believe that stroke is the most common complication/consequence of hypertension. 20 Physicians (17.09%) felt that Myocardial infarction is the biggest threat and 5 physicians (4.57%) felt that renal failure was the most common consequence. E-Profiling has essentially confirmed that the message regarding stroke has "sunk in". This physician perception will offer COZAAR a tremendous opportunity, considering the LIFE Trial results.

6.2.5.4 Do physicians perceive LVH to be a strong predictor for Stroke?

While only 72 out of 117 physicians (61.54%) suggested that they will routinely screen for LVH, 103 (88.03%) of them consider it to be a strong predictor for stroke. This response was, however, not surprising when one considers that many physicians have not trained on ECGs and therefore refer patients to specialist physicians or technologists. Their inability to use the ECG must not be confused with the relative importance they may place on this diagnostic tool, in their practice.

6.2.5.5 Do physicians perceive the AllA class as having the most compelling evidence for use in hypertensive patients with LVH?

Responses to the exit survey suggest that the majority of physicians - 89 (76.07%), believe that the AllA class has the most compelling evidence for use in patients with hypertension and LVH. 21 Physicians (18.80%) felt that ACE Inhibitors still had the most compelling evidence, while 4 (3.42%) and 3 (1.71%) opted for beta blockers and calcium channel blockers, respectively. E-Profiling has essentially confirmed that physicians have finally realized that ACE Inhibitors are no longer the class of choice in LVH. They have essentially shifted their paradigms, and an opportunity now exists for AllAs like COZAAR.
6.2.5.6 Do physicians believe that Losartan (COZAAR) has molecular specific advantages in the prevention of stroke?

Out of 117 physicians, 99 (84.62%) felt that Losartan had molecular specific advantages over traditional therapies in the prevention of stroke. However, 7 physicians (5.9%) still believe that it is Candersartan, another 7 (5.9%) still believe that it is Captopril and only 4 (3.42%) believe it to be Nifedipine; that has molecular specific advantages in stroke prevention. E-Profiling has therefore confirmed that physicians have adopted the MSD view that COZAAR is the agent of choice in the prevention of stroke.

6.2.5.7 Have physicians accepted the SA Hypertension Society’s Recommendations on Compelling Indications?

Most of the doctors (85, 72.65%) identified both LVH (confirmed by ECG) and Diabetes Type 1 or 2 with/without Micro/macro Albuminuria as compelling indications for the first line use of an Angiotensin II Receptor blocker – as identified in the SA Hypertension Guidelines. 4 Physicians (3.41%), however, thought that “heart failure” and “Prior MI” were compelling indications for an AI/A, and 1 physician (0.85%) thought that “Coronary Artery Stenosis” also qualified as a compelling indication. Based on this result we can deduce that most physicians now perceive that compelling indications exist for AIIAs in patients with hypertension and LVH, and hypertension and Type 1 or 2 Diabetes with/out Micro/macro Albuminuria.

6.2.5.8 Can e-Profiling be used to identify which physicians want to see an MSD sales rep?

81.08% of the “difficult-to-see” doctors who received e-detailing only (group 1), were willing to be visited by an MSD representative for further information on advances in the management of Hypertension and Stroke Prevention.
6.3 e-DETAILING RESEARCH RESULTS

6.3.1 Perceptions & Behaviour

“Did e-Detailing have the power to influence the physician’s perceptions and scripting preferences?”

6.3.1.1 Did e-Detailing significantly influence the physician’s perceptions in regard to the objective of treating hypertension?

E-Detailed Groups (1&2): Initially there were 111 physicians who concurred with the MSD view that the objective of treating hypertension was to reduce arterial BP, reduce target organ damage (TOD) and reduce/modify CV risk factors – the “all of the above” option on the survey. After completing the e-Detailing modules, however, this number increased to 116 (97.87%). 1 Physician (2.13%), however, still believes that the objective of treating hypertension is to reduce Target Organ Damage. See figure 6.2a below.

Figure 6.2a: e-Detailed Groups (1&2)

“When treating Hypertension, what is your objective?”

(Source: COZAAR e-Pilot, SAS Output, October 2005)
Control Group 3: In the control group, none of the doctors changed their opinion from entry to exit survey. At entry and exit, 46 out of the 47 physicians (97.87%) chose the option - “all of the above”. The 1 physician (2.13%) that has not yet changed their view believes that the objective of treating hypertension is to reduce arterial BP. Because there was little change in the responses, kappa statistics for in-group change assessment could not be calculated. As there had been no changes at all in the control group, the inter-group change difference statistic Cochran-Mantel-Haenszel (CMH) could not be calculated either. See figure 6.2b below.

![Figure 6.2b: After Exit Survey](image)

“When treating Hypertension, what is your objective?”

(Source: COZAAR e-Pilot, SAS Output, October 2005)

6.3.1.2 Did e-Detailing significantly increase the physician's perceptions that Stroke is the most Complication of Hypertension?

E-Detailed (groups 1&2): Physicians who received the e-Detailing modules dramatically changed their opinion about the most common
complication/consequence of hypertension. In line with MSD views and strategy the stroke option increased from 60.00% to 94.29%. All of the 19 physicians who initially thought it was myocardial infarction (MI) changed their opinion to stroke after receiving e-Detailing. There were 9 who initially though it was renal failure, and 7 of them eventually changed their opinion to stroke. The opinion change trend within this group was considered to be statistically significant (Kappa test; p<.0001). See figure 6.3a below.

Figure 6.3a: E-Detailed Groups (1&2)

“What is the most common complication of HT?”

(Source: COZAAR e-Pilot, SAS Output, October 2005)

**Control (group 3):** Although stroke opinion changed from 59.57% on entry survey to 55.32% after the exit survey, the Control group experienced no significant opinion trend changes (Kappa test; p=0.1979).

**E-Detailing (groups 1&2) vs. Control (group 3):** There were a significantly higher number of physicians who adopted the opinion that stroke was the most common complication of hypertension in the groups that received e-Detailing.
(groups 1&2) vs. the control (group 3). This difference was determined to be statistically significant (CMH; p=0.0053). See figure 6.3b below.

**Figure 6.3b: After COZAAR e-Pilot**

“What is the most common complication of HT?”

(Source: COZAAR e-Pilot, SAS Output, October 2005)

**E-Detailing only (group 1) vs. Control (group 3):** There were a significantly higher number of physicians who adopted the MSD view in the group that received e-Detailing only (group 1) vs. the control (group 3). This difference was determined to be statistically significant (CMH; p=0.0115);

**E-Detailing + Rep visit (group 2) vs. Control (group 3):** There were a significantly higher number of physicians who adopted the MSD view in the group that received e-Detailing + rep visit (group 2) vs. the control (group 3). This difference was determined to be statistically significant (CMH; p=0.0029).
E-Detailing only (group 1) vs. e-Detailing + rep visit (group 2): Here there was no statistically significant differences (CMH; p=0.1699).

6.3.1.3 Did e-Detailing have the power to significantly increase the physician's perception that LVH is a strong predictor for stroke?

E-Detailed (groups 1&2): Physicians who had received e-Detailing showed a significant trend (McNemar test; p<.0001) toward the MSD view – that left ventricular hypertrophy (LVH) is a strong predictor for stroke. The percentage of physicians who adopted this view increased from 71.43% before to 97.14% after e-Detailing. Of the 18 who initially disagreed, 16 eventually changed their view. See figure 6.4a below.

![Figure 6.4a: E-Detailed Groups (1&2)](image)

(Source: COZAAR e-Pilot, SAS Output, October 2005)

Control (group 3): In the control group the change trend was not significant (McNemar test; p=0.5637).
E-Detailing (groups 1&2) vs. Control (group 3): There were a significantly higher number of physicians who adopted the opinion that LVH is a strong predictor for stroke in the groups that received e-Detailing (groups 1&2) vs. the control (group 3). This change trend was determined to be statistically significant (CMH; p=0.0014). See figure 6.4b below.

Figure 6.4b: After COZAAR e-Pilot

"Is LVH a strong predictor for stroke?"

(Source: COZAAR e-Pilot, SAS Output, October 2005)

E-Detailing only (group 1) vs. Control (group 3): There were a significantly higher number of physicians who adopted the MSD view in the group that received e-Detailing only (group 1) vs. the control (group 3). This difference was determined to be statistically significant (CMH; p=0.0039).

E-Detailing + Rep visit (group 2) vs. Control (group 3): There were a significantly higher number of physicians who adopted the opinion that LVH is a strong predictor for stroke in the group that received e-Detailing + rep visit (group 2) vs. the control (group 3). This difference was determined to be statistically significant (CMH; p=0.0049).
E-Detailing only (group 1) vs. e-Detailing + rep visit (group 2): There was also a higher number of physicians who adopted the opinion that LVH is a strong predictor for stroke in the group that received e-Detailing + rep visit (group 2) vs. the e-Detailing only (group 1). The difference was determined to be statistically significant (CMH; p=0.0252) i.e. the hybrid model was more effective than e-Detailing alone.

6.3.1.4 Did e-Detailing have the power to significantly influence more physicians to screen for LVH using ECG criteria?

E-Detailed (groups 1&2): After having participated in the e-Detailing pilot, the percentage of doctors who routinely screen for LVH using ECG criteria rose from 47.14% to 75.71%. 12 out of 16 changed their opinion from "No" to "Yes" and only one who said they had done ECGs before indicated in the exit survey that they do not do ECGs now. The change trend in favour of screening for LVH, was determined to be significant (McNemar test; p<.0001). See figure 6.5a below.

Figure 6.5a: E-Detailed Groups (1&2)

"Do you routinely screen for LVH?"

(Source: COZAAR e-Pilot, SAS Output, October 2005)
Control (group 3): In control group, LVH screening rose from 31.91% to 40.43%. However this change was not considered statistically significant (McNemar test; p=0.1573).

E-Detailing (groups 1&2) vs. Control (group 3): There were a significantly higher number of physicians who have started screening for LVH in the group that received e-Detailing (groups 1&2) vs. the control (group 3). This change trend was determined to be statistically significant (CMH; p<.0001). See figure 6.5b below.

![Figure 6.5b: After COZAAR e-Pilot](image)

"Do you routinely screen for LVH?"

(Source: COZAAR e-Pilot, SAS Output, October 2005)

E-Detailing only (group 1) vs. Control (group 3): There were significantly higher number of physicians who have started screening for LVH in the group that received e-Detailing only (group 1) vs. the control (group 3). This change trend was determined to be statistically significant (CMH; p<.0001).
E-Detailing + Rep visit (group 2) vs. Control (group 3): There were a significantly higher number of physicians who have started screening for LVH in the group that received e-Detailing + rep visit (group 2) vs. the control (group 3). This difference was determined to be statistically significant (CMH; \( p < .0001 \)).

E-Detailing only (group 1) vs. e-Detailing + rep visit (group 2): There was also a higher number of physicians who have started screening for LVH in the group that received e-Detailing + rep visit (group 2) vs. the group that received e-Detailing only (group 1). This difference was determined to be statistically significant (CMH; \( p = 0.0001 \)). From those who had received e-Detailing + rep visit – there were 11 out of 19 who changed their opinion from "No" to "Yes"; and from those who received e-Detailing only – 10 out of 18 did the same i.e. the hybrid model was more effective than e-Detailing alone.

6.3.1.5 Did e-Detailing significantly increase the physician's perception that the AliA class have the most compelling evidence in hypertensive patients with LVH?

E-Detailed (groups 1&2): Physicians who received e-Detailing modules dramatically changed their opinion about which antihypertensive class has the most compelling evidence in the treatment of hypertensive patients with LVH. The change trend was determined to be statistically significant (Kappa test; \( p < .0001 \)). In line with MSD views and strategy - the AliA option increased from 25.43% before to 90.00% after e-Detailing. Interestingly, the number of physicians who felt that ACEIs had the most compelling evidence dropped from 58.57% before to 5.71% after receiving e-Detailing. None of the physicians who previously opted for ARB, changed their opinion. However, 6 physicians who had initially opted for calcium channel blockers (CCBs), changed their opinion to AliAs, in line with MSD views and strategy. See figure 6.6a below.

Control (group 3): Although the AliA option in the control group increased from 34.04% to 55.32%, the change trend was not significant (Kappa test; \( p = 0.1501 \)).
E-Detailing (groups 1&2) vs. Control (group 3): There was a significantly higher number of physicians who adopted the opinion that AllAs have the most compelling evidence in the groups that received e-Detailing (groups 1&2) vs. the control (group 3). This change trend was determined to be statistically significant (CMH; p<.0001). See figure 6.6b below.

Figure 6.6a: E-Detailed Groups (1&2)

"Which class of anti-hypertensive class has the most compelling evidence in patients with hypertension and LVH?"

(Source: COZAAR e-Pilot, SAS Output, October 2005)

E-Detailing only (group 1) vs. Control (group 3): There were significantly higher number of physicians who adopted the MSD view that AllAs have the most compelling evidence, in the group that received e-Detailing only (group 1) vs. the control (group 3). This change trend was determined to be statistically significant (CMH; p<.0001).
**E-Detailing + Rep visit (group 2) vs. Control (group 3):** There were a significantly higher number of physicians who had adopted the MSD view in the group that received e-Detailing + rep visit (group 2) vs. the control (group 3). This change trend was determined to be statistically significant (CMH; p<.0001).

**E-Detailing only (group 1) vs. e-Detailing + rep visit (group 2):** There was also a higher number of physicians who had adopted the MSD view in the group that received e-Detailing + rep visit (group 2) vs. the group that received e-Detailing only (group 1). This difference was determined to be statistically significant (CMH; p=0.0001). From those who had received e-Detailing +rep visit – the AllA option rose from 17.65% to 94.12%, those who received e-Detailing alone – the AllA option rose from 25.00% to 86.11% i.e. the hybrid model was more effective than e-Detailing alone.

(Source: COZAAR e-Pilot, SAS Output, October 2005)
6.3.1.6 Did e-Detailing significantly increase the physician's perception that Losartan has molecular specific advantages in the prevention of stroke?

E-Detailed (groups 1&2): In line with MSD views and strategy, all but one of the doctors who took part in the e-Detailing pilot (69, 98.57%) adopted the opinion that Losartan is the molecule which offers more advantages over traditional therapy in the prevention of stroke. The Losartan (COZAAR) option rose from 58.57% before to 98.57% after e-Detailing. This was very significant considering that initially 22.86% of physicians were in favour of Captopril, 10% were in favour of Nifedipine and 8.57% were in favour of Candesartan. See figure 6.7a below.

![Figure 6.7a: E-Detailed Groups (1&2)](image)

"Which agent has molecular specific advantages over traditional anti-hypertensive therapies in the prevention of stroke?"

(Source: COZAAR e-Pilot, SAS Output, October 2005)

The Kappa change trend p-value, however, could not be calculated because the number of physicians who changed their opinion to Losartan (COZAAR) was too large.
Control (group 3): Although the Losartan (COZAAR) option in the control group decreased from 65.96% to 63.83%, the change trend was not significant (Kappa test; p=0.9477).

E-Detailing (groups 1&2) vs. Control (group 3): There was a significant change trend toward the opinion that Losartan (COZAAR) has molecular specific advantages in the prevention of stroke in the groups that received e-Detailing (groups 1&2) vs. changes in the control (group 3). This change trend was determined to be statistically significant (CMH; p<.0001). See figure 6.7b below.

Figure 6.7b: After COZAAR e-Pilot

“Which agent has molecular specific advantages over traditional anti-hypertensive therapies in the prevention of stroke?”

(Source: COZAAR e-Pilot, SAS Output, October 2005)

E-Detailing only (group 1) vs. Control (group 3): There were significantly higher number of physicians who adopted the MSD view that Losartan (COZAAR) has molecular specific advantages in the prevention of stroke in the
groups that received e-Detailing only (group 1) vs. the control (group 3). This change trend was determined to be statistically significant (CMH; p<.0001).

**E-Detailing + Rep visit (group 2) vs. Control (group 3):** There were a significantly higher number of physicians who had adopted the MSD opinion that Losartan (COZAAR) has molecular specific advantages over traditional therapies in the prevention of stroke, in the group that received e-Detailing + rep visit (group 2) vs. the control (group 3). This change trend was determined to be statistically significant (CMH; p<.0001).

**E-Detailing only (group 1) vs. e-Detailing + rep visit (group 2):** Here there was no statistically significant differences (CMH; p=0.8520).

### 6.3.2 Interpretation of the Research Results

**6.3.2.1 E-Profiling**

"Did the e-Pilot allow us to profile our customers in terms of their level of internet usage, interest in internet enabled technologies and techno competence?"

In this pilot, e-Profiling proved to be a powerful tool for improving our understanding of our customers; especially in regard to their level of readiness for e-Marketing initiatives like e-Detailing.

The 32% responder rate would indicate that in general the SA physician population has a relatively low interest in internet-based learning and virtual detailing. However, when we compare this response rate to the response rate that has been achieved in other MSD Pilots around Europe, we compare favourably. For example, in Spain they achieved a 24% response rate. In any event, the level of persistence - 86% is suggestive of the fact that once engaged e-Detailing has the power to lock-in participants. Based on the physician level
feedback we received from those that participated, we now also know that of this group 97% of them routinely use the internet and 93% would use it to conduct medical research.

The COZAAR e-Detailing platform was designed to be highly integrated and highly interactive; and yet participating physicians managed to complete the process in good time - mean duration of 2.6 hours. Judging from their level of persistence, the time it took them to complete the pilot and their level of interaction - use of available e-Tools, useful-links and their general click-through patterns; it would seem that our participants also have the technical ability, interest and hardware / software required for internet-based learning and virtual detailing.

"Did the e-Pilot allow us to profile our customers in terms of their patient base, their perceptions and most current scripting habits?"

E-profiling enabled us to access and gather critical information about our physicians whilst they were online growing their knowledge base (a win-win situation). Now we have a better understanding of their individual perceptions in regard to hypertension, LVH, stroke, their acceptance of the Compelling Indications and of their scripting habit. Most importantly we now know what they think of COZAAR.

Based on the responses to the entry and exit surveys we now can confirm that:

- Most of these physicians see up to 30 hypertensive patients per week and treat mostly with ACE inhibitors and Diuretics; and in 21% of cases will use an AllA. And for this reason ...
- Their classification of High Potential Low Prescribing (HL) as it appears on Genesys is correct.
- Most of these physicians will screen for LVH and understand that it is an important predictor for stroke.
- In line with the SA Hypertension guidelines, most physicians now believe that the AllA class and moreover COZAAR has the overwhelming evidence
for use in patients with hypertension and LVH to reduce the incidence of strokes

- 81% of the "difficult-to-see" doctors who received e-detailing only, are now willing to be visited by an MSD representative – for further information on advances in the management of Hypertension and Stroke Prevention.

NB. This e-profiling exercise also establishes a baseline for future e-Marketing research.

In summary: The general level of interest in internet enabled marketing channels is relatively low. However, there are a percentage of physicians who are interested and competent enough to communicate with the industry using internet enabled technologies. And for this reason strategies for e-Profiling and e-Detailing will need to be considered by MSD. E-profiling, in particular, proved to be an exceptionally useful tool for classifying our physicians, in terms of their business potential, their perceptions and scripting behaviour.

6.3.2.2 E-Detailing

"Was e-Detailing powerful enough to sensitize physicians, shape their perceptions and drive desired behaviour?"

Using various statistical tests, we were able to qualitatively and quantitatively determine in 5 out of 6 research questions, that e-Detailing alone, or in combination with rep activity, had the power to significantly influence the physician’s perceptions and drive desired behaviour.

E-Detailing alone or in combination with rep activity, was able to significantly increase the physician’s perceptions that:

- Q2 - Stroke is more common than MI.
- Q4 - LVH is a strong predictor for stroke.
- Q5 - The AIIA class has the most compelling evidence to support their use in patients with hypertension and LVH
- Q6 - Losartan (COZAAR) is a molecule with specific advantages over other antihypertensive therapies in the treatment of hypertension and LVH and to reduce the incidence of stroke.

E-Detailing alone or in combination with rep activity, also had a significant influence over physician behaviour. This was proven by the fact that:
- Q3 - More physicians are now screening for LVH using ECG criteria, since being e-Detailed vs. the control group.

“So can we use e-Detailing alone: to sensitize the market, shape perceptions and drive desired behavior as effectively as we have done with traditional sales representative activity?”

In this pilot, e-Detailing alone, was able to significantly influence physicians and drive desired behaviour. If one compares the impact e-Detailing had in groups 1&2 versus the impact of reps alone in the control group, one is able to deduce that e-Detailing may be more effective than sales reps, especially with the difficult-to-see physicians.

“Should an e-Detailing strategy be integrated with the sales force?”

The fact that e-Detailing had a significant impact on physicians – whether delivered alone or in combination with rep activity – is significant. However, it must be noted that on all but two research questions, change trends were most significant in group 2, where e-Detailing was leveraged with concurrent rep detailing. This finding suggests that a hybrid “push-pull” detailing model that integrates both electronic and traditional methods is most effective. This finding also supports international research and opinion.

“Or should e-Detailing, as an e-Marketing Tool, simply be ignored?”

In summary: E-Detailing effectively enabled MSD to deliver four details (four modules) over the period of just four weeks. Using traditional methods this would
have been impossible to achieve. The increased quality, reach and frequency of
the promotional messages in this case, related to a significant impact on the
physician's perceptions and behaviour. E-Detailing has, therefore, proven to be a
highly effective marketing tool, one which should not be ignored by MSD.

6.4 THE E-PROFILING / E-DETAILING STRATEGY PROPOSITIONS
REVISITED

Based on the results of the COZAAR e-Pilot and the interpretations thereof, one
would accept the strategy hypothesis proposed in chapter 5. Branded, online e-
Profiling and e-Detailing activities do indeed correlate to:

- More accurate targeting strategies
- Increased reach and frequency of the promotional message
- Changes in attitudes and beliefs on pharmacotherapy and brand choice

6.5 FEEDBACK FROM THE TELEPHONE SURVEY

The 3 most common complaints in regard to the COZAAR e-Pilot were:

- The modules were too long.
- The modules took too long to work through.
- Lines were too slow and too much time was wasted waiting for downloads.

The 3 most common positive comments

- Information was comprehensive and unbiased (was well backed up with
  references).
- Information was meaningful and useful.
- Modules were very interactive and exciting.

Most physicians (20/24) suggested that they would do another MSD e-Workshop
like this, if they were invited to.
6.6 AREAS FOR FURTHER RESEARCH

One very important measure of e-Detailing success is sales. One would ideally want to prove that e-Detailing had a significant impact on the physician's scripting behaviour. It is therefore suggested that follow-up script research be conducted on all three groups, over the period – 9 months post exit survey. Similar statistical tests can be used to analyse inter and intra-group change trends. Medikredit who classified the physicians initially for the COZAAR e-Pilot will have this database of physicians and have the capabilities to conduct such an analysis. These results would be contextualised and recommendations made in a COZAAR e-Pilot Follow-up Report, which will be submitted to the MSD board by no later than July 2006.

6.7 CHAPTER SUMMARY

- Using e-Profiling we were able to improve our understanding of our customers. We were able to profile 117 physicians according to their level of interest, current usage and techno competence in internet enabled technologies. We were also able to profile these physicians in terms of their current scripting habit, their perceptions and behaviour relating to hypertension, LVH, the AIIA class and more specifically COZAAR.
- Using e-Detailing we were able to deliver 4 high quality details in just 4 weeks, Thereby, drastically increasing the reach and frequency of the current promotional message.
- Using e-Detailing we were also able to effectively change our physicians' attitudes and beliefs on pharmacotherapy and brand choice. Based on our statistical analysis we can also determine that this influence was significant.
- More research needs however to be done over the remaining 6-12 months to determine whether prescribing of MSD brands (behavioural) and sustained efficiencies in conventional product detailing by the sales force has been achieved.
The results of the COZAAR e-Pilot, therefore, tend to support the Strategy Hypothesis so far as the following are concerned: Branded online e-Profiling and e-Detailing activities correlate to:

- A better understanding of customers
- Increased reach and frequency of the promotional message
- Changes in attitudes and beliefs on pharmacotherapy and brand choice