CHAPTER FIVE: THE COZAAR e-PILOT – OBJECTIVES & DESIGN

This chapter focuses on the overall design, research methodology and statistical analyses employed in the COZAAR e-Pilot to determine the effectiveness of e-Profiling and e-Detailing as marketing tools for use in pharmaceutical marketing.

5.1 THE COZAAR e-PILOT DESCRIPTION

See ADDENDUM B for comprehensive descriptions of the pilot – with print screen visuals

The COZAAR e-Pilot was developed to quantitatively and qualitatively determine the following:

• Whether or not SA physicians are ready for e-Marketing
• Whether e-Profiling has the potential to improve our understanding of our customers
• Whether e-Detailing has the power to sensitize physicians, shape their perceptions and drive desired prescribing behavior.
• Whether e-Profiling and e-Detailing should be integrated with field force activities in the near future, and to determine whether these initiatives could provide MSD with 'first mover' competitive advantage over competitors.

Whilst at the same time, the COZAAR e-Pilot would also provide the COZAAR marketing and sales force with an opportunity to increase the reach and frequency of product detailing on no less than 60 high potential participating doctors, during this pilot run-period.

5.2 TARGET AUDIENCE

A total of 450 Family physicians (GPs) in private practice in SA, who have been classified as high potential prescribers of Angiotensin Receptor Blockers but are currently low prescribers of COZAAR, were targeted. These physicians had to have e-Mail, Internet access and be on the GeneSys data base used at MSD.
5.3 RESEARCH OBJECTIVES

To quantitatively and qualitatively analyse the effectiveness of e-Profiling and e-Detailing as a marketing tool for shaping customer perceptions and behaviour; using e-Modules posted on an independent website together with Entry and Exit Surveys.

5.3.1 e-Profiling Research Questions

Please see ADDENDUM B for Entry/Exit Survey - print screen visuals

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

- Based on the physician level feedback we received from the e-Pilot, do we now know whether our participating physicians (and perhaps SA physicians in general) are adequately equipped with the necessary PC / INTERNET know-how and hardware/software, for this marketing method?
- Did most of the GPs who were invited to enroll on the program actually enroll?
- Did most GPs who enrolled complete the program?
- Did the entry survey responses reveal that a majority of GPs frequently use e-mail and the internet?
- Did the entry survey responses reveal that a majority of GPs would use the internet for continued medical education update?

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

- Based on the physician-level feedback we received during the e-Pilot, do we now have a better understanding of what our participating physicians believe to be true – in regard to the treatment of Hypertension, LVH and Stroke; and compelling indications.
Can we determine using e-Profling whether or not the physicians have accepted the SA Hypertension Societies Recommendations on Compelling Indications for AllAs.

Would difficult-to-see physicians accept MSD's electronic offer to send a sales rep to their practice to provide them with more supporting information?

5.3.2 e-Detailing Research Questions

Please see ADDENDUM B for Entry/Exit Survey - print screens

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

Did the exit survey responses show that e-Detailing was able to significantly...

- Increase the physicians perception that the goal of treating hypertension is to reduce the incidence of CV morbidity and mortality due to stroke, MI and renal impairment
- Increase the perception that Stroke is more common than MI
- Increase the perception that LVH is a strong predictor for stroke
- To influence more doctors to routinely screen for LVH using ECG criteria
- To increase the perception that the AllA class has the most compelling evidence to support their use in patients with hypertension and LVH
- To increase the perception that 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.

Other research questions that will be answered include:

- Using e-Detailing alone, can we sensitize the market, shape perceptions and drive prescribing behaviour as effectively as we have done with traditional sales representative activity?
- Should an e-Detailing strategy be integrated with a more traditional marketing approach – representative activity + journal articles and advertisements?
- Or should e-Detailing, as an e-Marketing Tool, simply be ignored?
5.3.3 e-Profiling and e-Detailing Business Objectives

- To profile at least 100 high potential physicians out of a 450 invited – in terms of their aptitude and interest in e-tools.
- To profile at least 100 high potential physicians – in terms of their perspectives on LVH, Stroke and the use of COZAAR.
- To increase the reach and frequency of COZAAR “detailing” on at least 100 participating physicians.
- To assist the sales effort in terms of changing the participating physician’s prescribing habits in favour of COZAAR.

5.4 RESEARCH METHODOLOGY

5.4.1 Literature

In order to learn more about the concept of e-Detailing, its relative success in other markets around the world and to develop a better understanding of the Key Success Factors (KSFs) that apply, a complete literature review was conducted and included in this management report in chapter 4. This literature study was also used to support recommendations made in chapter 7.

5.4.2 Modules

Please use the following URL to access the Softmed COZAAR e-Pilot Site – and view modules:

http://sda.msd.es/acceso/access_validator.php?msdid=EEESOFTMEDEEE7&producto=CZRI&referer_control=univadis

Professor J Ker of the University of Pretoria – Medical School developed the e-Modules on Left Ventricular Hypertrophy and Stroke – “The Treatable Silent Killers” in corroboration with the COZAAR marketing department.
5.4.3 Empirical Research

See ADDENDUM B for comprehensive descriptions of the pilot – with print screen visuals

- Research was done on a target of ≥100 South African family physicians – but 450 would be invited to ensure numbers for statistical analysis
- Research was conducted over a 4-week period
- Medikredit assisted in identifying high potential – low prescribing physicians, for the project. Reps identified which were difficult-to-see physicians – targeted for Group 1
- e-Mails to promote and give access (by individual URL) to the e-Detailing Workshop were sent out on 26 August 2005
- The target was to have a maximum of 450 physicians divided into 3 groups:
  - Test Group 1 (exposed to entry/exit surveys and e-learning material but not visited by MSD sales people – Difficult to see physicians = 175
  - Test Group 2 (exposed to entry/exit surveys and e-learning material and also visited by MSD sales people) = 175
  - Control Group (exposed to entry/exit surveys only and also visited by MSD sales people) = 100
- Incentives: Physicians who participated would receive in return for their effort a 256MB flash-drive
- e-Detailing workshops were posted on the e-SOFT medical web-site (independent site)
- On enrolment the physicians were asked to complete an entry survey
- Test Groups 1&2, were then prompted to use the modules
- Physicians were prompted to complete 1 x e-Module per week
- The following modules were made available in accordance with the current COZAAR marketing strategy:
  1. Stroke the most feared consequence of hypertension
  2. The role of LVH
  3. Reduction of CV morbidity and mortality
  4. Benefits beyond BP – and the Treatment Guidelines
• Key product messages and the corresponding clinical evidences to support them were integrated into the e-Modules (e-Details)
• For difficult to see physicians, permission for a rep visit was requested at the end of the program
• All physicians, including the control group, were then re-invited / prompted to complete the exit survey. Surveys were then statistically analysed using SAS programming (SAS® 9.1) – see ADDENDUM B and C
• We also implemented a telephonic survey amongst 24 physicians
  ➢ 6 who had started but not completed the pilot
  ➢ 6 who had not started the pilot
  ➢ 12 who had started and finished
  To find out what they thought of the e-Pilot, what improvements could be made and for those who did not finish – what stopped them from doing so.

5.5 COZAAR e-PILOT RELATED INFORMATION
See ADDENDUM B for all technology related information and web-visuals

The e-Workshop made use of:
• Rich text editor, GUI (Graphic user interface)
• Web browsers, online communication avail tremendous amounts of information at the click of a mouse
• Audio-visual description and interaction
• Flash animations
• Connection requirements:
  ➢ Any normal connection to the network
  ➢ Internet explorer 6.0 or higher
• A contact centre was set up at MSD and available for 24hr assistance to participants
• Tracking was built in the system
• Online references and access to COZAAR web-site was enabled
5.6 DATA ANALYSIS TECHNIQUES

In order to avoid any misconceptions, the survey response data was statistically analysed to determine relationships and significances within and between data sets. Such an analysis also ensures the reliability of our research findings. The SAS package was used to run the statistical tests required in the analysis of the e-Survey responses. Please see ADDENDUM C for more theory on statistical tests used.

From an e-Profiling perspective we used Chi Square tests to measure comparability between independent groups, frequency distributions and general observations to determine whether e-Profiling could improve our understanding of customers in terms of techno know-how, their interest, as well as their perceptions and scripting behaviour.

From an e-Detailing perspective more statistical measurements were used to assess the overall impact of this initiative on the physician’s perceptions in regard to Hypertension, LVH, Stroke and the compelling indications for COZAAR. In terms of measuring the impact of e-Detailing, the following statistical methodology was applied:

- To establish baseline comparability between e-workshop and control groups the standard Chi-square test was used. This test is normally used to compare proportion rates between the independent groups.
- Entry survey (baseline) data from both groups were therefore compared for each survey question and therefore later group change comparisons could be performed without risk.
- The Chi square test was not considered appropriate for testing before/after response changes, since these responses are not independent. Instead for each survey question, change trends (changes in perceptions) were statistically measured for significance using symmetry agreement tests: McNemar (for binomial answers) and Kappa (for multinominal answer) statistical calculations.
Essentially these tests would allow us to compare response rates from the same population sample before and after modules were given, and as a result would allow us to determine whether e-Detailing could significantly alter the physicians perceptions and thereby, their responses to survey questions.

Additionally, the Cochran-Mantel-Haenszel (CMH) test was also applied to each before/after survey response in order to determine whether the differences between the e-Detailed physician groups and control group were significantly different. In this way we could also exclude any environmental factors that may have influenced physician responses, thereby ensuring that the significance of any changes in perceptions could be attributed to the impact of e-Detailing.

Table 5.1: Statistical Measures

<table>
<thead>
<tr>
<th>Test</th>
<th>Hypothesis</th>
<th>if p-value &lt; 0.05</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi square</td>
<td>Variables are independent</td>
<td>Variables are not independent, and are thus related</td>
</tr>
<tr>
<td>McNemar/Kappa</td>
<td>Change before / after is random</td>
<td>Change before/after shows a trend</td>
</tr>
<tr>
<td>CMH</td>
<td>Change across Groups is random</td>
<td>Changes across groups show a trend</td>
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</tbody>
</table>

(Source: Burgess, 2005)

5.7 CHAPTER SUMMARY

450 High potential, low prescribing physicians were invited to take part in the COZAAR e-Pilot, which commenced with an online entry survey. 175 physicians were then randomised to receive 4 e-Details alone over a 4 week period, another 175 of them were randomised to receive 4 e-Details and 1 rep visit over a 4 week period, and 100 were randomised to a control group only to receive 1 rep visit over the same period. All were then asked to complete an exit survey. The impact of the e-Detailing experience could then be determined by comparing responses to the exit and entry surveys and statistically analysing the significance of change trends within and between these groups.