



Australian Government
Department of Health and Ageing



The Pharmacy
Guild of Australia

Consumer perceptions on supply of and access to Pharmacy Medicines

Researchers: *Healthcare Management Advisors*



FINAL REPORT

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The Pharmacy Guild of Australia manages the Fourth Community Pharmacy Agreement Research & Development which supports research and development in the area of pharmacy practice. The funded projects are undertaken by independent researchers and therefore, the views, hypotheses and subsequent findings of the research are not necessarily those of the Pharmacy Guild.

Acronyms

Acronym	Explanation
ABS	Australian Bureau of Statistics
ASMI	Australian Self Medication Industry
CATI	Computer Assisted Telephone Interview
COAG	Council of Australian Governments
DoHA	Australian Government Department of Health and Ageing
HMA	Healthcare Management Advisors
NCCTG	National Coordinating Committee on Therapeutic Goods
NSW	New South Wales
OTC	Over-the-counter
PSA	Pharmaceutical Society of Australia
QCPP	Quality Care Pharmacy Program
QLD	Queensland
S2	Schedule 2 (Pharmacy Medicine)
S3	Schedule 3 (Pharmacist Only Medicine)
TGA	Therapeutic Goods Administration
WA	Western Australia

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Background and Rationale

Over-the-counter (OTC) medicines are currently available in Australia as Schedule 2 (S2), Schedule 3 (S3) or unscheduled products, with different levels of control over consumer access and availability based on potential risks and use of the product. S2 medicines, or Pharmacy Medicines, are those defined as: *substances, the safe use of which may require advice from a pharmacist and which should be available from a pharmacy or, where a pharmacy service is not available, from a licensed person*¹. These medicines are for minor ailments or symptoms which can be easily recognised by the consumer and do not require medical diagnosis or management, but require pharmacy advice or counselling to be available if necessary². The objective of these current restrictions on OTC medicines, including S2 medicines, is to ensure that consumers have adequate information and understanding to enable them to select the most appropriate medicines for their condition and to use them safely and effectively taking into account their health status³.

Whilst access to pharmacist advice is a requirement for S2 medicines in all states and territories, there are jurisdictional variations in legislated storage requirements. Pharmacies in Queensland and Western Australia are required to store S2 medicines behind the counter, with other states/territories able to store in front of store but with varying degrees of restriction on product placement. Local pharmacy board and pharmacy accreditation program recommendations may also influence pharmacy storage arrangements for S2 medicines.

As part of the National Competition Policy review in 1999, a review was commissioned entitled *Review of Drugs, Poisons and Controlled Substances Legislation* also known as the Galbally Review^{3,4}. The Galbally Review reported that the costs of maintaining OTC schedules for consumers may relate to limitations on accessibility and cost of medicines, and that the benefit for consumers is the availability of advice on the selection and safe and effective use of these medicines. The Galbally Review also reported that while there may be considerable savings to government and industry if S2 and S3 were combined into a single schedule, insufficient data were available at the time of the review to consider the costs and benefits of one versus two schedules. Subsequent reports considered the costs and benefits of retaining separate S2 and S3 schedules^{5,6}, but the National Coordinating Committee on Therapeutic Goods (NCCTG) felt that additional data were still required to allow it to assess the benefit or otherwise of retaining separate S2 and S3 schedules.

The current project was commissioned by the Pharmacy Guild of Australia to collect some of the data required by the NCCTG. The aims of the current project were to identify how many consumers are using S2 medicines currently in Australia, whether there are any factors affecting consumer access to S2 medicines, how many consumers require advice when purchasing an S2 medicine, and the extent and benefits of any advice provided by pharmacy to S2 purchasers. The specific project objectives are detailed in the following section.

Objectives and Research Questions

The project was designed to address four major project objectives, with primary and related research questions as outlined below.

Primary Research Questions

Project Objective 1: Identify the number of customers seeking to use S2 medicines and compare this to numbers known to be currently using S2 medicines.

- (1) What proportion and number of the Australian population currently use S2 medicines?
- (2) What proportion and number of the Australian population are seeking to use S2 medicines?

Project Objective 2: Determine factors affecting supply of and access to S2 medicines.

- (3) What are the factors affecting access to S2 medicines for purchasers of S2 medicines, and what proportion of purchasers recall experiencing each of these factors?
- (4) What are the factors affecting access to S2 medicines for non-purchasers with S2 condition, and what proportion of non-purchasers recall experiencing each of these factors?
- (5) What are the factors facilitating access to S2 medicines for purchasers of S2 medicines, and what proportion of purchasers recall experiencing each of these factors?

Project Objective 3: Identify, analyse and quantify the perceived customer benefit and need for pharmacy advice about S2 medicines.

- (6) What are the key reasons given by purchasers of S2 medicines for going to the pharmacy to make their purchase?
- (7) What proportion of purchasers of S2 medicines seek and/or receive pharmacy advice or discussion regarding their purchase?
- (8) Where no pharmacy advice or discussion occurs with S2 purchase, what are the reasons given by purchasers of S2 medicines for this and in what proportion of purchasers does this occur?
- (9) What type of advice do purchasers of S2 medicines recall receiving from the pharmacy and what are the perceived benefits of this advice?
- (10) How satisfied are purchasers of S2 medicines with pharmacy advice or discussions provided?
- (11) In the future, do customers want continued availability of advice with medicines currently listed as S2?

Project Objective 4: Provide pilot, interim and annual data sets to inform the final submission to the NCCTG enquiry.

Related Research Questions

Is there an association between S2 purchasing behaviour and the following variables:

- state or territory location;
- metropolitan or non-metropolitan location;
- gender;
- age;
- household income;
- existing underlying medical conditions; or
- familiarity with product.

Definitions

A number of definitions have been developed to ensure consistent terminology across this report:

Internal factors affecting purchase decision	One or more of the following: person does not believe that they have needed any non-prescription medicines or treatments; person prefers not to use medicines or treatments if possible; and/or person prefers to use alternative medicines or treatments when possible
Non-purchasers with S2 condition	Computer Assisted Telephone Interview (CATI) participants recalling S2 condition (see below) in past 12 months for which they did not make a product purchase
Non-purchasers with S2 condition seeking to use S2	CATI participants recalling S2 condition in past 12 months for which they did not make a product purchase, stating no internal factors affecting purchase decision
Non-purchasers with S2 condition not seeking to use S2	CATI participants recalling S2 condition in past 12 months for which they did not make a product purchase, stating internal factors affecting purchase decision
Pharmacy staff	Pharmacist(s) and pharmacy assistant(s)
Possible S2 medicine	Medicines listed in MIMS Annual Issue No. 5 2008 where product name is an S2 item as well as an unscheduled item and/or S3 item
Potential S2 customers	CATI participants recalling S2 condition in past 12 months
Purchasers of S2 medicine	CATI participants stating purchase of a known S2 medicine in the last 12 months (i.e. product as stated by consumer is only available as an S2 medicine) as well as all participants in the in-pharmacy consumer survey
Purchasers of possible S2 medicine	All CATI participants stating purchase of a possible S2 medicine
S2 condition	A minor ailment or symptom for which S2 medicine/s are available, and which can be easily recognised by the consumer and does not require medical diagnosis or management ²
S2 medicine	Medicines listed as available only as an S2 item in MIMS Annual Issue No. 5 2008
S2 users	Purchasers of S2 medicines have been used to approximate S2 users for the purposes of this report due to the absence of actual usage data collected
Underlying medical conditions	Medical conditions including hypertension, asthma, stomach ulcers, arthritis, heart disease, diabetes and pregnancy, which previous research concluded placed the consumer at greater risk of adverse events from the use of non-prescription medicines ⁵

Materials and Methodology

Overall Project Design

The project was undertaken by Healthcare Management Advisors (HMA) and involved two primary data collection methods: a general population survey conducted via Computer Assisted Telephone Interview (CATI); and face-to-face surveys in pharmacies with consumers, pharmacists and pharmacy assistants. Data collection for both methods occurred across three time periods (February/March, June/July and October/November 2009) to take account of any seasonal variation in S2 purchase behaviour. CATI interviews were conducted by an independent market research organisation experienced in CATI implementation and pharmacy interviews were conducted by HMA staff. Each pharmacy visit was four hours in length and scheduled at varying times of the day, with pharmacy staff directed to invite all customers who purchased an S2 medicine during this time to participate in the project.

A Project Advisory Panel provided project oversight and comprised representatives of the Australian Government Department of Health and Ageing (DoHA), Pharmacy Guild of Australia, The Pharmaceutical Society of Australia (PSA), NCCTG, consumers, and practising community pharmacists.

A separate Project Reference Group was established to advise on design issues arising in the project and to ensure that project implementation was practical. This Reference Group comprised the HMA project manager and director representatives from DoHA-Pharmaceutical Benefits Division, Pharmacy Guild of Australia, PSA, Australian Self Medication Industry (ASMI), consumers, practising pharmacists and a practising pharmacy assistant.

Survey and Materials Development

Survey materials and tools to address each of the project objectives were developed with input from the Project Reference Group. Factors including survey length, question design, use of open or closed questions, order effect, recall period for CATI surveys, and draft responses for closed questions were considered based on HMA experience and input from the Project Reference Group, Advisory Panel and available literature on survey design.^{7,8,9} Draft materials were piloted in four pharmacies and 32 respondents to the CATI survey. Materials were subsequently amended and endorsed by the Project Advisory Panel for use in the project. A briefing document containing an outline of the project, background information regarding the current S2 medicines environment, a glossary of terms and information on survey implementation was prepared by the HMA project manager and provided to the market research team for education of staff involved in administering the surveys and to HMA staff involved in pharmacy visits.

As this was de novo research addressing specific project objectives, a previously validated survey instrument was unavailable. Questions were designed and piloted with the input of experts in the field of study (Reference Group and Advisory Panel) to encourage provision of optimal answers by respondents and to optimise content validity in line with recommended principles of survey design⁷. Prompted responses and some simple open probing questions with clear interviewer instructions were used to ensure consistent and clear administration and communication with participants. Consistent results across the three data collection periods (apart from seasonal differences in prevalence of some conditions such as hay fever, which were expected) support reliability of the survey instruments.

CATI survey

The CATI survey was designed as a general population survey of 15 questions seeking participant's 12-month recall regarding experience of a condition for which S2 medicines are available (an *S2 condition*), specific product purchase, purchase experience for the condition, and view on availability of advice for that condition and/or product in the future. Thirteen conditions were read to consumers for which S2 medicines are commonly available based on listing in MIMS Annual Issue No. 5 2008. These conditions comprised the following:

- Pain such as headache, backache, muscle or joint pain, period pain, dental pain
- Cough, cold or flu
- Allergies or hayfever
- Sore or itchy eyes
- Sore throat or mouth
- Indigestion or stomach cramps
- Vomiting or diarrhoea
- Fungal infections such as tinea, athlete's foot, ringworm, jock itch
- Haemorrhoids
- Warts
- Worms
- Hair loss
- Anaemia due to low iron

An additional question was included to capture any S2 purchases for conditions which were not included on the list because S2 medicines formed only a very small part of available treatment options for that condition (i.e. sore ears;

eczema, dermatitis or other rash) and/or were difficult to summarise for consumers (i.e. platelet aggregation). Flu was included in the list of read conditions despite the majority of available medicines for flu being S3, due to the lack of differentiation by the general public between cold and flu.

Additional questions were included to capture information on respondent age, gender, household income and existing underlying medical conditions which previous research had concluded were important in provision of pharmacy advice for non-prescription medicines⁵. Underlying medical conditions included high blood pressure, diabetes, arthritis, stomach ulcers, asthma, and/or pregnancy. Household income categories were determined based on tertiles of Australian gross household income per week in 2005-06¹⁰.

Minor amendments to the CATI survey were made subsequent to Round 1 data collection based on decisions agreed to by the Project Advisory Panel at meeting 1 June 2009. These changes were to the response categories for questions regarding reasons for purchase or non-purchase. Response categories were changed from a true/false response to a rating scale indicating level of importance. Where this occurred, a 'true' response in round one was taken to equate to a 'somewhat important', 'quite important' or 'very important' response in rounds two or three, and a 'false' response in round one was taken to equate to a 'not at all important or not true' or 'slightly important' in rounds two or three. The CATI survey is provided in Appendix A, with amendments shown.

In-pharmacy surveys and materials

In-pharmacy surveys included a consumer survey for purchasers of S2 medicines, a pharmacist survey and a pharmacy assistant survey. The in-pharmacy consumer survey contained 15 questions regarding product purchase, pharmacy advice or discussions received, any factors affecting access to S2 medicine, and consumer view on availability of advice for that condition and/or product in the future. Information was also obtained on respondent age, gender, existing underlying medical conditions, and time of day survey conducted. The survey was initially designed for use with any customers making an enquiry about or purchasing for an S2 condition, but on project roll-out was only used for purchasers of S2 medicines as this simplified implementation by pharmacy staff. Pharmacy staff were requested to invite all customers who purchased an S2 medicine during the data collection period to participate in the survey.

The pharmacist survey contained six questions regarding S2 product sales and storage, availability of on-line ordering and supply of S2 medicines to consumers, perceived benefits of pharmacy advice regarding S2 medicines, and perceived factors affecting or facilitating access to S2 medicines. Pharmacy demographic data were also obtained including accreditation status with the Quality Care Pharmacy Program (QCPP), and whether the pharmacy was independent or banner. The pharmacy assistant survey contained three questions which mirrored questions to pharmacists regarding perceived benefits of pharmacy advice regarding S2 medicines and perceived factors affecting or facilitating access to S2 medicines.

One change was made to the in-pharmacy consumer survey for Round 3 based on a decision made by the Project Advisory Panel on 8 October 2009. An open-ended question on facilitators of access to S2 medicines was added to the survey to reflect the same question asked of pharmacists and pharmacy assistants. The in-pharmacy consumer survey is provided in Appendix B with amendments shown, and the pharmacist and pharmacy assistant surveys are provided as Appendix C and Appendix D.

Additional materials developed and used in organising and conducting pharmacy visits and surveys included a letter to pharmacies inviting participation in the project, a telephone script for HMA staff contacting pharmacies to ascertain participation status and organise visit, a script for HMA staff introducing self to pharmacy on day of visit, a laminated sheet explaining the project and providing suggested wording for pharmacy staff inviting S2 purchaser participation, and a checklist for HMA staff conducting pharmacy visits. A media release outlining the project was sent by the Pharmacy Guild on 6 January 2009 to all pharmacies with email addresses on the Pharmacy Guild database. A copy of this media release was included with the letter to pharmacies inviting participation.

Stratification and Sampling

Stratified random sampling for both CATI surveys and pharmacy visits was based on both state/territory and metropolitan/non-metropolitan proportionate representation in the Australian population. Metropolitan or non-metropolitan location was based on postcode and Australian Bureau of Statistics (ABS) population data using a capital city/balance of state split. The sample stratification provided by the market research organisation conducting the CATI surveys was based on postcodes linked to ABS data. These were checked against ABS population data observed at 30 June 2006. As there was a close alignment between 2002 and 2006 Australian population state/territory and metropolitan/non-metropolitan strata, postcodes used to stratify the CATI sample were also used by HMA to stratify the pharmacy sample.

Potential CATI participants were contacted according to a randomly generated list of residential telephone numbers within each geographical stratum. In addition to geographical stratification, the overall CATI sample was also stratified by age and gender, again based on ABS Australian population data 2002.

Pharmacy sampling was based on a list of all known pharmacies in Australia (n=5,075) provided to HMA by Australian Department of Health and Ageing (DoHA) in 2008 under a Confidentiality Deed. This list also contained information on annual pharmacy prescription numbers (2007-08) and was used to generate quintiles of pharmacy size, where the lowest quintile of prescription numbers equated to the smallest pharmacy size. 451 pharmacies (8.9%) from the list supplied by DoHA did not have prescription numbers available and were excluded from the sampling process. Pharmacy allocation to metropolitan or non-metropolitan status used the postcode classification as described above. The pharmacy list was then stratified according to state/territory and metropolitan/non metropolitan location, with sampling based on proportionate representation of pharmacies within each of these geographic strata. The sampling process also aimed to ensure that a mix of pharmacy sizes was included in the survey process. Pharmacies within each geographical stratum were randomly ordered and this random list was used for generation of letters inviting pharmacy participation and for follow-up telephone calls confirming participation and organising visit times. Pharmacies were contacted by telephone one week after letter of invitation was sent, working through the randomised list until 50 pharmacies within identified strata and representing a mix of pharmacy size quintiles had agreed to participate in each round. Pharmacy visit days were agreed with pharmacy usually based on presence of pharmacist-in-charge, and were scheduled from Monday to Saturday.

Data Entry and Management

Data entry for CATI surveys occurred during the interview process and provided to HMA in Excel format for analysis. The HMA project manager reviewed all responses to open-ended questions in each data collection round, identified appropriate response categories to correspond with response categories for open-ended questions on in-pharmacy surveys where appropriate, and coded all responses. For all responses to Question 4 in the CATI survey where a product name and/or usage were recorded, the product was categorised into one of the following groups based on product listing in MIMS¹¹:

1 = S2	5 = Unscheduled
2 = S2 / Unscheduled	6 = S3
3 = S2 / S3	7 = Unknown product
4 = S2 / S3 / Unscheduled	8 = Other (i.e. S3/S4, S4 or S8)

Products could only fall into one category based on which schedule or schedules the product was listed under in MIMS. For example, where a product was only available as an S2, it was categorised as S2. Where a product was available as an S2 or S3 depending on pack size for example, it was listed as S2/S3. Where response category could differ based on state/territory of purchaser for that particular product, the state or territory location of the respondent was checked and the product category selected according to this. Thus a product was only categorised as S2 if it fell into a jurisdiction where it could only be an S2 medicine.

Data collected from pharmacy surveys were entered into an Excel spreadsheet by an HMA administrative staff member who was briefed by the project manager regarding response coding for open-ended questions. For any responses where coding was unclear, the HMA project manager provided advice as to the most appropriate code. The HMA project manager reviewed data from the first 20 pharmacies (consumer, pharmacist and pharmacy assistant surveys) in each data collection round to ensure response categories remained accurate and comprehensive, and to ensure accuracy of data categorisation and entry, with re-briefing of data entry staff as required. Where possible, in-pharmacy survey responses to open-ended questions were categorised as per the CATI survey.

Statistical Analysis

Statistical analyses were conducted by the Department of Statistics at the University of Adelaide, who were part of the project team and advised on project design from the outset. Statistical significance was set at the $p < 0.05$ level, with anything over this value deemed not significant. Chi squared tests of independence were applied to analyse CATI data.

The consumer data obtained in the pharmacy survey can be seen to be clustered, in the sense that consumers who purchase from the same pharmacy could be expected to have more similar responses than consumers who purchase from separate pharmacies. For this reason, the usual chi-squared test of independence cannot be applied to tables of frequencies. To analyse the data, generalised linear mixed models that included a Gaussian pharmacy term and the logistic link function were fit using the method of maximum likelihood. Chi-square statistics quoted are the generalised log likelihood ratio statistics.

Results

Study Participants

Key points:

- A total of 4,500 CATI respondents, 150 pharmacies and 734 in-pharmacy purchasers of S2 medicines participated in the project;
- CATI population matched Australian 2002 population by geographic location and gender and closely matched by age, with little change in results when adjusted to Australian 2006 population;
- Pharmacy population matched Australian pharmacy population by geographic location with sample distribution in pharmacy size quintiles +/- 3.3%.

A total of 4,500 CATI respondents, 150 pharmacies and 734 in-pharmacy consumers who had purchased an S2 product participated in the project. The numbers of CATI and pharmacy participants by geographic strata are presented in Table 1, and by age and gender strata presented in Table 2.

Stratification of CATI participants by geographic location, age and gender, and participating pharmacies also by geographic location, ensured that these sample populations were representative of the Australian population based on these variables. Slight variations from target occurred in age strata due to difficulty recruiting certain age quota within the data collection timeframes for each round. This has been accounted for in extrapolation to the current Australian population and in analyses of results by age. The response rate for the CATI survey across the three rounds was 19.8% (excluding persons not qualified to participate as <18 years or refusing to give age, and those excluded when age and/or gender quota were closed) which is commensurate with response rates for similar surveys, and showed little variation across the three data collection rounds.

Note that while the age and gender split in CATI participants was stratified to represent the Australian population ≥18 years, the split across the in-pharmacy consumer participants is based only on purchasers of S2 medicines participating in the survey. Although a similar representation across age strata exists in both groups, the male:female ratio is higher in the Australian population than the in-pharmacy consumer population surveyed. An analysis of the gender split of *purchasers of S2 medicine* in the CATI survey has therefore also been included in

Table 2. These data demonstrate a closer alignment of gender split between the S2 purchasing groups in CATI and in-pharmacy surveys, allowing comparison between these groups without significant confounding by gender. These results also support other available data indicating that men generally use the bulk of health services at a lower rate than women¹².

Table 1: No. and percentage of CATI and pharmacy participants by geographic strata (state/territory and metropolitan/non metropolitan location)

State or Territory	CATI participants				Participating pharmacies				Participating pharmacy consumers			
	Metro	Non metro	Total		Metro	Non metro	Total		Metro	Non metro	Total	
			No.	% total			No.	% total			No.	% total
NSW	964	559	1,523	33.8%	31	20	51	34.0%	128	114	242	32.7%
VIC	820	305	1,125	25.0%	23	12	35	23.3%	99	81	180	24.3%
QLD	382	453	835	18.6%	15	15	30	20.0%	92	74	166	22.4%
WA	323	113	436	9.7%	11	4	15	10.0%	43	10	53	7.2%
SA	261	95	356	7.9%	9	3	12	8.0%	47	14	61	8.2%
TAS	45	63	108	2.4%	2	2	4	2.7%	10	2	12	1.6%
NT	24	18	42	0.9%	0	1	1	0.7%	0	8	8	1.1%
ACT	75	0	75	1.7%	2	0	2	1.3%	12	0	12	1.6%
Total No.	2,894	1,606	4,500		93	57	150		431	303	734	
% TOTAL	64.3%	35.7%			62.0%	38.0%			58.7%	41.3%		

Table 2: No. and percentage of CATI and pharmacy consumer participants by age and gender

Age	CATI participants						Participating pharmacy consumers					
	Male		Female		Total		Male		Female		Total	
	No.	% total	No.	% total	No.	% total	No.	% total	No.	% total	No.	% total
18-24	296	6.6%	212	4.7%	508	11.3%	15	2.0%	45	6.1%	60	8.2%
25-34	372	8.3%	506	11.2%	878	19.5%	47	6.4%	91	12.4%	138	18.8%
35-44	396	8.8%	453	10.1%	849	18.9%	46	6.3%	117	15.9%	163	22.2%
45-54	476	10.6%	409	9.1%	885	19.7%	43	5.9%	105	14.3%	148	20.2%
55-64	325	7.2%	325	7.2%	650	14.4%	38	5.2%	73	9.9%	111	15.1%
65-74	213	4.7%	253	5.6%	466	10.4%	23	3.1%	46	6.3%	69	9.4%
>=75	130	2.9%	134	3.0%	264	5.9%	18	2.5%	25	3.4%	43	5.9%
TOTAL	2,208	49.1%	2,292	50.9%	4,500		230	31.4%	502	68.6%	734*	
<i>Known S2 purchasing population</i>	366	38.7%	579	61.3%	945							

*Total includes 2 participants for whom age and/or gender data were not recorded

Table 3 presents participating pharmacy demographic data regarding data collection round, pharmacy size, QCPP accreditation status and independent/banner status. 50 pharmacies participated in each data collection round, with 92.7% of participating pharmacies being accredited or undergoing accreditation with the QCPP. There is a slight over-representation of larger size pharmacies in the sample as small to medium pharmacies were more difficult to recruit within the project time frames. Pharmacies falling into the lowest size quintile were often reluctant to participate as pharmacists did not believe there would be sufficient numbers of S2 purchasers in the four hour period to warrant participation in the project. Small to medium sized pharmacies choosing to not participate often stated that they were too busy and did not have sufficient staff numbers to be involved in the project.

Table 3: No. and percentage of participating pharmacies (n=150) by data collection round, pharmacy size, QCPP accreditation status and independent/banner

Variables	No. and percentages in each response category				
Data collection round	March/ April	June/ July	October/ November		
No.	50	50	50		
%	33.3%	33.3%	33.3%		
Pharmacy size*	0 – 13, 417 scripts per year	13,418 – 21,729 scripts per year	21,730 – 31,960 scripts per year	31,961 – 48,188 scripts per year	Over 48,188 scripts per year
No.	28	26	26	35	35
%	18.7%	17.3%	17.3%	23.3%	23.3%
QCPP Accreditation Status	Accredited	Not Accredited	Undergoing Accreditation		
No.	126	11	13		
%	84.0%	7.3%	8.7%		
Independent or banner	Independent	Banner	Other		
No.	75	73	2		
%	50.0%	48.7%	1.3%		

*Quintiles based on 2007-08 annual prescription data supplied by Department of Health and Ageing

Table 4 presents CATI and in-pharmacy consumer demographic data regarding data collection round, household income for CATI participants, existing underlying medical conditions, and time of survey for in-pharmacy consumers. Approximately one third of the 4,500 CATI participants and 734 in-pharmacy consumer participants were involved in each of the three data collection rounds, with around half of the in-pharmacy participants being interviewed between 9am-1pm and others later in the afternoon or early evening. As there was considerable variation in pharmacist verbal reports regarding the “busiest periods” of the day, additional data analysis based on time of survey has not been conducted. Data regarding household income for CATI participants and presence of underlying medical conditions as presented in Table 7 have been used in further analyses. There is a slightly higher than Australian population representation of highest income households by tertile and under-representation of lowest income households in the CATI sample. 49.9% of CATI participants reported one or more existing underlying medical conditions compared with only 38.7% of the in-pharmacy consumers. Analysis of CATI subgroup of purchasers of S2 medicine indicates a similarly high proportion (50.7%) reporting existence of one or

more existing underlying medical conditions (data not tabulated in this report) compared with in-pharmacy purchasers of S2 medicines. Reasons for this are unknown.

Table 4: No. and percentage of CATI (n=4,500) and in-pharmacy consumer participants (n=734) by data collection round, household income, existing underlying medical conditions, and time of in-pharmacy survey

Variables		No. and percentages in each response category							TOTALS
Data collection round		March/ April1	June/ July	October/ November					
CATI	No.	1501	1500	1499				4,500	
	%	33.4%	33.3%	33.3%					
In-pharmacy consumers	No.	239	260	235				734	
	%	32.6%	35.4%	32.0%					
Household income		<\$30K	\$30-\$80K	>\$80K	Not Disclosed				
CATI	No.	886	1,710	1,560	344			4,500	
	%	19.7%	38.0%	34.7%	7.6%				
Existing underlying medical conditions		High Blood Pressure	Heart Disease	Stomach Ulcers	Diabetes	Arthritis	Asthma	Pregnancy	
CATI	No.	1,019	294	189	352	1049	807	103	2,244*
	%	22.6%	6.5%	4.2%	7.8%	23.3%	17.9%	2.3%	49.9%*
In-pharmacy consumers	No.	145	41	17	40	116	95	10	284*
	%	19.8%	5.6%	2.3%	5.4%	15.8%	12.9%	1.4%	38.7%*
Time of survey		9-12am	12-1pm	1-3pm	3-5pm	5-9pm	Not Recorded		
In-pharmacy consumers	No.	296	83	144	139	10	62		734
	%	40.3%	11.3%	19.6%	18.9%	1.4%	8.4%		

*No. and percentage of participants citing one or more existing underlying medical conditions

Project Objective 1: Population Currently Using or Seeking to Use S2 Medicines

The proportion of the population currently using or seeking to use S2 medicines is based on data obtained from the CATI survey. As data were not obtained on actual usage of S2 medicines but rather on purchase of S2 medicines, *purchasers of S2 medicines* rather than *S2 users* per se have been reported. This section of the report outlines the purchasing behaviour of the population regarding S2 medicines, followed by the population known to be currently using S2 medicines and the population seeking to use S2 medicines.

Research findings:

- 21.1% of the CATI survey population report purchase of an S2 medicine in the previous 12 months;
- Up to 56.8% of the CATI survey population report purchase of an S2 or possible S2 medicine in the previous 12 months;
- Only 1.3% of the CATI survey population have sought to use but not purchased a product for a reported S2 condition in the previous 12 months;
- S2 medicine purchase is not affected by geographic location (state/territory or metropolitan/non metropolitan) but is affected by gender, age and household income. Females, those aged 25-44 years, and those with annual household income >\$80,000 are most likely to have made an S2 purchase.

These findings are further explored below.

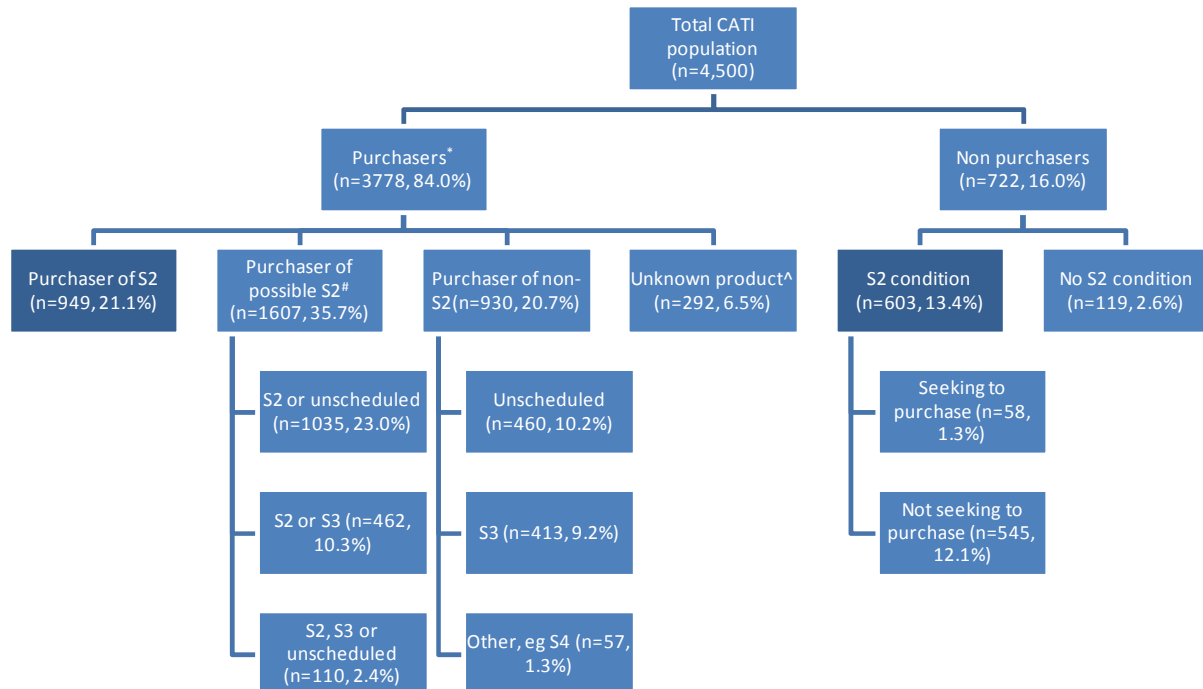
Population purchasing or not purchasing S2 medicines

The numbers and percentage of the CATI population reporting purchase of an S2 or other OTC product, and non-purchasers split by presence or absence of reported S2 condition, are presented in Figure 1. Overall purchase categories are presented as a pie chart in Figure 2.

As presented in Figure 1, 21.1% of the participating CATI population reported purchasing a known S2 product in the last 12 months, with an additional 35.7% reporting purchase of a possible S2 where the product is available as an S2 depending on pack size, product formulation and/or state or territory of purchase. 13.4% of the CATI population report having an S2 condition but not making a product purchase from the pharmacy for this condition.

These are discussed in further detail in the following section. Note that an explanation of the categorisation of non-purchasers with an S2 condition into those seeking to purchase or not seeking to purchase is provided in this report under the heading *Survey population seeking to use S2 medicines* on page 13.

Figure 1: Numbers and percentage of CATI survey population (n=4,500) according to reported product purchase categories in pharmacy without a prescription (flow diagram)

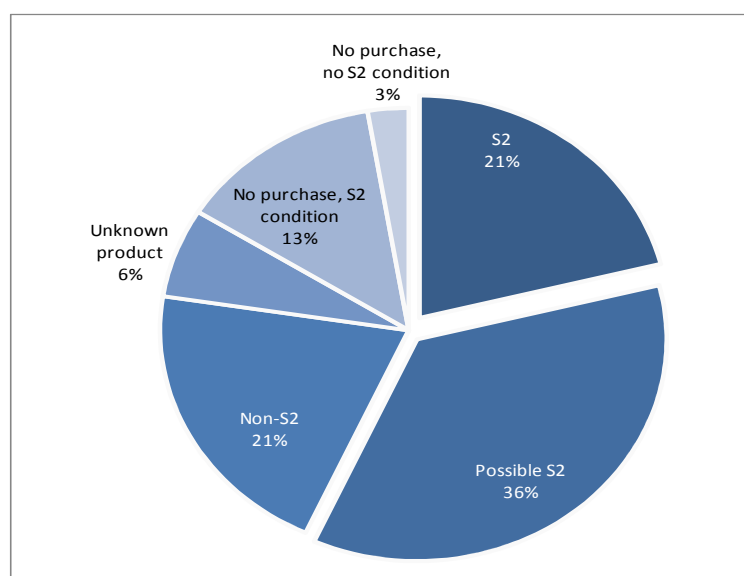


*Total purchasers include 9 on-line purchasers (S2=4, possible S2=3, unknown=2) and 37 purchasers who did not report an S2 condition (S2=2, possible S2=18, Non S2 or unknown=17)

#Possible S2 medicine is one available as an S2 depending on pack size, product formulation and/or state or territory of purchase

^Unknown product includes respondents who could not recall product name (n=215) and those where product name was not decipherable as stated by consumer and/or recorded by CATI interviewer (n=77)

Figure 2: Percentage of CATI survey population (n=4,500) according to reported product purchase categories in pharmacy without a prescription (pie chart)



A total of 96.5% of CATI participants reported experiencing an S2 condition from the prompted list in the last 12 months either themselves or in their partner, children or other dependents. Those reporting an S2 condition can be viewed as *potential S2 customers* as they have a condition for which an S2 medicine is available. The most

common S2 conditions reported by respondents were pain (84.9% of total respondents), cough, cold or flu (72.6%), sore throat or mouth (57.8%), allergies or hay fever (43.6%), sore or itchy eyes (38.7%), indigestion or stomach cramps (37.7%) and vomiting or diarrhoea (35.9%). Other S2 conditions were reported by less than 25% of all respondents. There was some variation across the data collection rounds in the reported prevalence of different conditions (allergies/hayfever and cough, cold or flu), reflecting participant recollection according to seasonal variation.

Survey population currently using S2 medicines

The population currently using S2 medicines can be based most simply on the proportion of CATI respondents defined as *purchasers of S2 medicines* in the last 12 months (i.e.. where the product purchased could only be an S2 medicine based on the information provided by the consumer as recorded by the CATI interviewer).

Proportion of population known to be currently using S2 medicines

≈ purchasers of S2 medicine
= **21.1%** (from Figure 1)

The proportion of the population currently using S2 medicines may be considerably higher than the figure above if *purchasers of possible S2 medicines* are also taken into account. In the absence of data on the proportion of possible S2 medicines sold as actual S2 medicines for this report, the equation below assumes that all purchasers of possible S2 from CATI actually purchased S2 medicines. Note that while this may overestimate the proportion of purchasers of possible S2 medicines who are actually purchasing an S2 product, it is also a conservative figure in that it assumes that purchasers of unknown products have not made purchase of S2 medicines. Using these assumptions, an estimated possible proportion of population currently using S2 medicines is obtained as below.

Estimated possible proportion of population currently using S2 medicines

≈ purchasers of S2 medicines + purchasers of possible S2 medicines
= 21.1% + 35.7% (from Figure 1)
= **56.8%**

Note that the above equations do not account for any S2 purchases made by CATI participants stating non-purchase despite recalling an S2 condition in themselves, partners or dependents where non-purchase was for any of the following reasons: someone else had been to the pharmacy to make the product purchase; the product was purchased on-line; or where the participant used product already available at home. These respondents were categorised as non-purchasers but could in fact be viewed as purchasers of S2 medicines. As information was not available on product purchase for these consumers though, and as they had also stated other reasons for non-purchase which variously categorised them as seekers or non-seekers of S2 medicines, they have not been included in the estimate of current S2 users.

The proportion of the population purchasing S2 medicines in the last 12 months is therefore between 21.1% and 56.8% based on the CATI survey population.

S2 purchasing behaviour and geographic location, age, gender and annual household income

Analyses of any association between S2 purchasing or non-purchasing behaviour and state/territory, metropolitan or non-metropolitan location, age, gender, and household income were conducted for the CATI population. No significant association was found between purchasing behaviour and state/territory of purchase (Chi-squared=53.24, p=0.11) or metropolitan/non-metropolitan location (Chi-squared=11.82, p=0.07).

As shown in Figure 3 to Figure 5, a statistically significant association was found between S2 purchase or non-purchase category and respondent age (Chi-squared= 221.14, p<0.0001), gender (Chi-squared=137.59, p<0.0001) and annual household income (Chi-squared=158.21, p<0.0001).

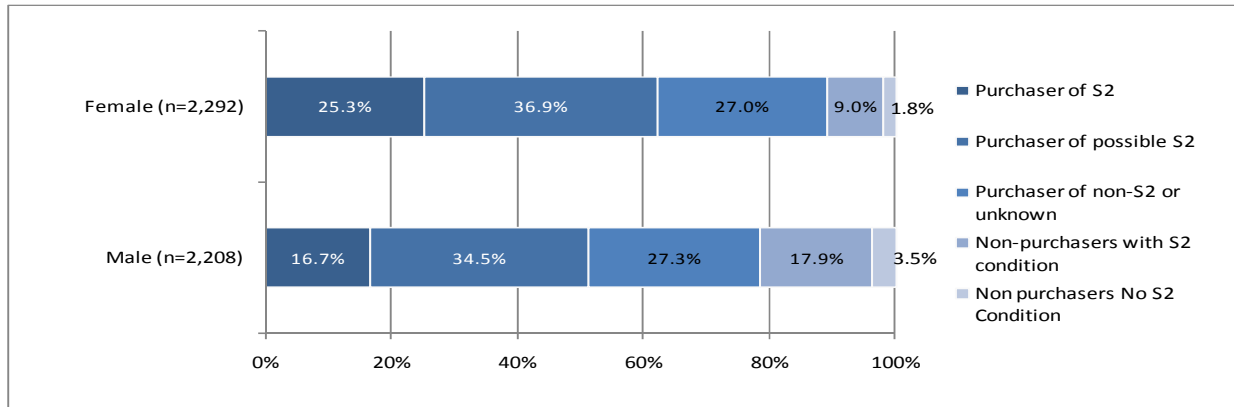
Figure 3 demonstrates that 25.3% of females have purchased a known S2 product in the past year compared with only 16.7% of males. Males are almost twice as likely as females to be non-purchasers despite reporting an S2 condition. Some of this difference may be explained if females are more likely to purchase S2 medicines on behalf of other members of the household than males, but information was not available in this study to allow this analysis.

Figure 4 demonstrates that persons aged between 25-44 years are most likely to have purchased an S2 or possible S2 product in the past year. Beyond 44 years, as people age they are less likely to purchase any medicine for an S2 condition, including S2 or possible S2 medicines, with those aged 18-24 years also less likely to purchase an S2 medicine.

As demonstrated in Figure 5, participants in households where the household income was >\$80,000 per annum were also more likely to purchase a known S2 product than those where household income was <\$80,000.

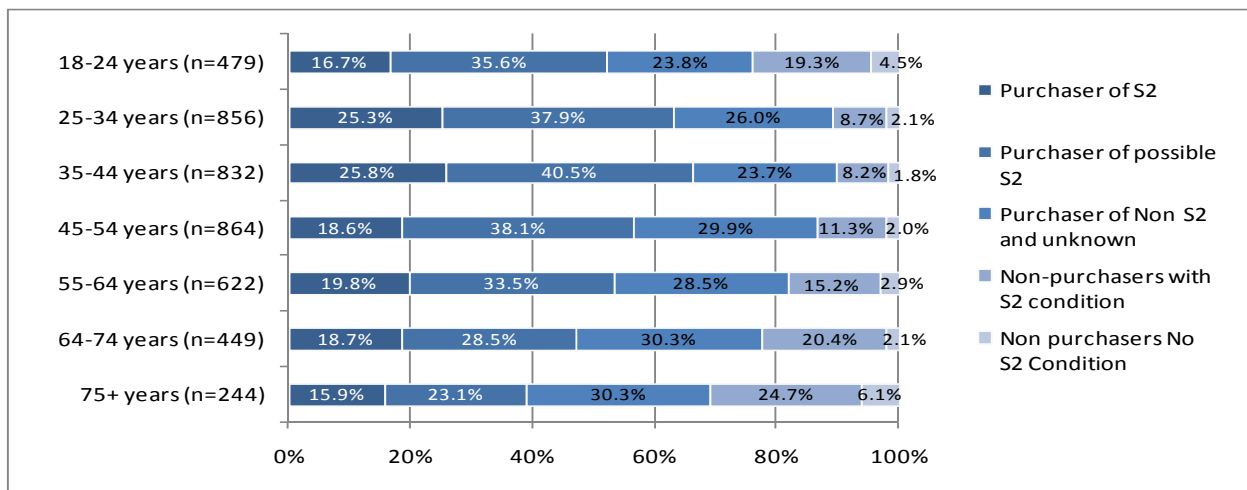
Participants living in households where annual income was <\$30,000 are more than twice as likely as highest income households to make no product purchase despite having an S2 condition.

Figure 3: Reported product purchase in CATI participants over past 12 months by gender (n=4,500)



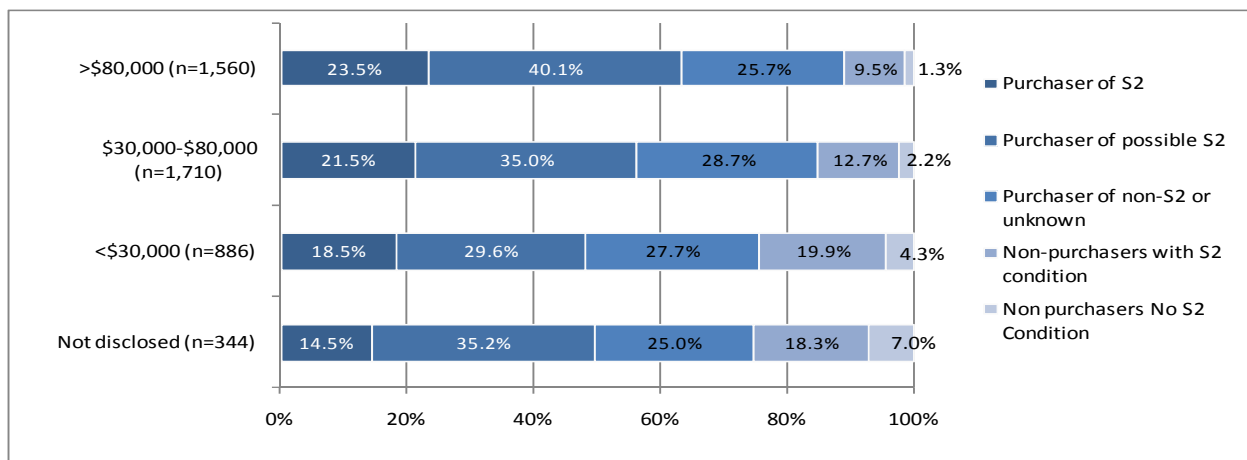
(Chi-squared=137.59, df=6, p<0.001)

Figure 4: Reported product purchase in CATI participants over past 12 months by age (n=4,500)



(Chi-squared=221.14, df=36, p<0.001)

Figure 5: Reported product purchase in CATI participants over past 12 months by annual household income (n=4,500)



(Chi-squared=158.21, df=18, p<0.001)

In order to exclude any effect of S2 condition prevalence on reported S2 purchasing or non-purchasing behaviour, further analyses were conducted on S2 purchasing behaviour as a proportion of those reporting an S2 condition only. Statistically significant associations were still found between proportions of the population making an S2

purchase and the same variables. That is, no significant association was found between proportions with reported S2 condition purchasing an S2 medicine and state/territory of purchase (Chi-squared=11.6033, $p=0.1144$) or metropolitan or non-metropolitan location (Chi-squared=0.0303, $p=0.8617$). A statistically significant association was again found between the proportion of the population purchasing an S2 medicine and age (Chi-squared=31.9049, $p<0.001$), gender (Chi-squared = 46.1534, $p<0.0001$) and annual household income (Chi-squared = 13.306, $p<0.01$).

Survey population seeking to use S2 medicines

The population seeking to use S2 medicines has been approximated as the population of current users (as defined above) plus a proportion of the non-purchasing population who may have been seeking to use S2 medicines but did not do so. All non-purchasers with a reported S2 condition were asked to rate 18 propositions in the CATI survey as true/false (CATI round 1) or according to their level of importance (CATI rounds 2 and 3) as a reason for non-purchase (see Table 6 in following section for details). Where response categories contained a ranking scale on level of importance of proposition to purchase or non-purchase decision, responses of 'somewhat important', 'quite important' and 'very important' were considered to equate to a 'true' response, and responses of 'not at all important or not true' and 'slightly important' were considered to equate to a 'false' or neutral response.

Non-purchasers with an S2 condition who were seeking to purchase could be defined in several ways based on their responses to prompted reasons for non-purchase. As the key driver for non-purchase was unknown for each respondent, the absence of clear 'internal' factors affecting purchase decision was taken as the delineator of those seeking to purchase. 'Internal' factors were defined as those where presence of the factor was likely to be a key driver of non-purchase irrespective of presence of other factors. These internal factors include:

- 'I have not needed any of these medicines or treatments'; and/or
- 'I prefer not to use medicines or treatments if possible'; and/or
- 'I prefer to use alternative medicines or treatments when possible'.

Using this definition of *non-purchasers with S2 condition seeking to access medicines* (i.e. absence of internal drivers preventing access), only 58 out of 603 non-purchasers with an S2 condition were seeking to access medicines, which equates to 1.3% of the total CATI population who were seeking but did not access medicines for a reported S2 condition. If it is assumed that the CATI survey population currently using S2 medicines as previously defined were also seeking to use S2 medicines, the differential between current users and those seeking to use S2 medicines is the 1.3% of the population defined as non-purchasers with S2 condition seeking to use S2. That is, only 1.3% of the population were seeking to use but had not purchased S2 medicines.

Based on the above assumptions, and on the conservative assumption that no purchasers of non-S2 or unknown products were actually seeking to use an S2 medicine, the lower and upper estimates of CATI population proportions seeking to use S2 medicines are given in the equations below.

Lower estimated proportion of the population seeking to use S2 medicines

$$\begin{aligned} &\approx \text{Proportion of population known to be currently using S2 medicines} + \text{Non-purchasers with S2} \\ &\text{condition seeking to purchase} \\ &= 21.1\% + 1.3\% \\ &= \mathbf{22.4\%} \end{aligned}$$

Upper estimated proportion of the population seeking to use S2 medicines

$$\begin{aligned} &\approx \text{Estimated possible proportion of population currently using S2 medicines} + \text{Non-purchasers with S2} \\ &\text{condition seeking to use} \\ &= 56.8\% + 1.3\% \\ &= \mathbf{58.1\%} \end{aligned}$$

Note that as the population of non-purchasers in CATI defined as seekers was small, and as the primary driver for non-purchase was unknown (i.e. some classified as 'seekers' may in fact be 'non-seekers' and vice versa), any analyses of differences in this group alone according to state, metropolitan or other location, gender, age and household income have not been reported. It should also be noted that some non-purchasers with an S2 condition, both 'seekers' and 'non-seekers', stated that they had actually been to the pharmacy but had been told to seek more medical advice or that medicine or treatment was not needed. Whilst these respondents could all have therefore been classified as seeking to purchase, those also citing 'internal' factors have been classified as non-seekers as it is not known what their key driver for non-purchase was, and whether they sought an S2 product or merely advice from the pharmacy. The number of respondents to each of these propositions is given in Table 6.

Australian population using and seeking to use S2 medicines

When data from the CATI survey are translated to the Australian population based on age and gender stratification in the Australian 2006 census population ≥ 18 years of age, the estimated number and percentage of the Australian population purchasing S2 and possible S2 medicines, and those seeking to use S2 medicines, are as presented in Table 5. The Australian population known to be purchasing S2 medicines is approximately 3.15 million with a S.E. of approximately 92 thousand, and the Australian population purchasing S2 or possible S2 medicines is approximately 8.42 million with a S.E. of approximately 200 thousand persons.

Table 5: Estimated number and proportion of Australian 2006 population ≥ 18 years of age purchasing or seeking to purchase S2 medicine

Population	Number		Percentage	
	Estimate	SE	Estimate	SE
Purchaser of S2 medicine	3,152,761	91,997	20.9%	0.6%
Purchaser of possible S2 medicine	5,263,943	107,944	34.9%	0.7%
Purchaser of non-S2 or unknown product	4,037,564	101,108	26.8%	0.7%
Non-purchaser with S2 condition seeking to use medicine	208,487	27,799	1.4%	0.2%

Project Objective 2: Factors Affecting Supply of and Access to S2 Medicines

Results from both the CATI and in-pharmacy surveys were used in this section of the report to consider factors affecting supply of and access to S2 medicines for the following groups:

- Purchasers of S2 medicines from CATI;
- Non-purchasers with S2 condition from CATI; and
- Purchasers of S2 medicines from in-pharmacy surveys.

Both consumers and pharmacy staff were questioned in pharmacy surveys regarding perceived factors making access to S2 medicines difficult for consumers, and CATI respondents were also asked about potential factors affecting access to S2 products. Pharmacists, pharmacy assistants and in-pharmacy consumers (Round 3 only) were questioned regarding factors they believed made access to S2 medicines easy for consumers. Factors affecting supply are not specifically addressed as it was felt that factors perceived by pharmacy staff to affect consumer access to medicines would be similar to factors affecting supply of medicines to those consumers. Results for factors affecting access to S2 medicines are presented in this section of the report.

Research findings:

- The most commonly cited factors affecting a person's decision to not purchase medicine for an existing S2 condition are 'internal' – the consumer prefers not to use medicines or treatments or does not believe they have needed them.
- Whether a person purchases an S2 medicine or makes no product purchase is associated with whether they mind talking to pharmacy staff about their condition but not associated with whether they perceive cost of S2 medicines as high or with difficulty accessing pharmacy. Males and those aged 18-24 years are most likely to mind talking with pharmacy staff about their condition.
- Although the cost of medicines was perceived as high by almost half of respondents, it made no significant difference to the purchase or non-purchase decision. The exception was for those respondents from the lowest annual income households where there was a significantly stronger view that S2 medicines cost too much and had a lower propensity to purchase S2 medicines.
- When surveyed in pharmacy, 79.6% of those purchasing an S2 product could think of no factors making it difficult to access S2 medicines. The most commonly given factors making access difficult (given by <5% of S2 purchasers in pharmacy) were difficulty getting to pharmacy due to reliance on public transport or others, and poor health or disability.*
- Over 25% of those purchasing an S2 and surveyed in pharmacy believe that having an easily accessible pharmacy in a convenient location made access to S2 medicines easy.*

*Not included in separate *Key Findings* summary paper

These findings are further explored below.

Factors affecting access to S2 medicines (CATI)

In order to consider any differences in factors affecting access to S2 medicines between purchasers of S2 medicines and non-purchasers with an S2 condition, responses from CATI participants in each of these groups were analysed according to each proposition presented in the CATI survey. These results are presented in Table 6. Responses for non-purchasers split into seekers versus non-seekers are also presented in Table 6, but have not been used in further analyses in this report.

Table 6: Potential factors affecting access to S2 medicines experienced by non-purchasers with an S2 condition and purchasers of S2 medicine

Potential factor affecting access	Non-purchaser with S2 condition (n=603)					Purchasers of S2 medicine (n=945*)	
	Seeking to purchase (n=58)		Not seeking to purchase (n=545)		Total non-purchasers (n=603)		
	No.	% of seekers	No.	% of non-seekers	% of non-purchasers	No.	% of purchasers
Factors present in those defined as seeking to purchase or not seeking to purchase							
<i>Questions asked of non-purchasers and S2 purchasers*</i>							
Non prescription medicines and treatments cost too much for me	21	36.2%	255	46.8%	45.8%	464	49.1%
I do not want to always speak to pharmacy staff about my condition	14	24.1%	190	34.9%	33.9%	63	6.7%
Getting to a pharmacy is difficult for me [#]	4	6.9%	36	6.6%	6.6%	43	4.6%
<i>Questions asked of non-purchasers only</i>							
I only go to the pharmacy if my doctor tells me to	24	41.4%	358	65.7%	63.4%	n/a	n/a
If I have products at home I sometimes use them without going back to the pharmacy or doctor	27	46.6%	284	52.1%	51.6%	n/a	n/a
I don't really know what medicines or treatments are available without a prescription	15	25.9%	292	53.6%	50.9%	n/a	n/a
I prefer to buy medicines and treatments at other places like convenience stores when I can	13	22.4%	184	33.8%	32.7%	n/a	n/a
Someone else has been to the pharmacy for me to purchase medicine or treatment	15	25.9%	142	26.1%	26.1%	n/a	n/a
I went to the pharmacy but they told me to seek more medical advice	6	10.3%	87	16.0%	15.5%	n/a	n/a
I could not get the product I wanted from a pharmacy	7	12.1%	69	12.7%	12.6%	n/a	n/a
I have previously purchased medicines or treatments from a pharmacy without a prescription and was not happy with the product	3	5.2%	68	12.5%	11.8%	n/a	n/a
I have previously purchased medicines or treatments from a pharmacy without a prescription and was not happy with pharmacy advice or service	4	6.9%	59	10.8%	10.4%	n/a	n/a
I went to the pharmacy but they told me I did not need medicine or treatment	4	6.9%	45	8.3%	8.2%	n/a	n/a
In the last 12 months I have purchased non-prescription medicines at on-line pharmacies	0	0%	13	2.4%	2.2%	n/a	n/a
Factors present in those defined as not seeking to purchase only (internal factors)							
I prefer not to use medicines or treatments if possible	0	0	475	87.2%	78.8%	n/a	n/a
I have not needed any of these medicines or treatments	0	0	416	76.3%	69.0%	n/a	n/a
I prefer to use alternative medicines or treatments when possible	0	0	301	55.2%	49.9%	n/a	n/a

*Excludes 4 known S2 purchasers who purchased on-line

[#] For consumers stating that getting to a pharmacy was difficult, the most commonly given reason for difficulty given by both S2 purchasers and non-purchasers (2%) was distance to pharmacy (this varied between a few kilometres away to hundreds of kilometres away). Other reasons included pharmacy opening hours that did not suit the individual, poor consumer health or disability, and no car or difficulty parking.

Factors affecting access for non-purchasers with S2 condition only

For non-purchasers, the most commonly cited reasons for not purchasing as S2 product for those with an S2 condition are those which have been defined as internal factors which render the person a non-seeker. 78.8% of all non-purchasers with an S2 condition prefer not to use medicines or treatments if possible, and 69.0% believe that medicines or treatments have not been needed despite someone in their household having a condition for which S2 medicines are available. Other reasons for non-purchase given by over 50% of respondents were going to the pharmacy only if the doctor tells them to, using products previously purchased for the condition and available at home, and not really knowing what medicines or treatments are available without a prescription for these conditions.

Factors affecting access for non-purchasers with S2 condition versus purchasers of S2 medicine

Where potential external factors affecting access were asked of both non-purchasers and purchasers, the significance of any differences between non-purchasers with an S2 condition and purchasers of S2 or possible S2 medicine were considered. There was a statistically significant association between whether the respondent minded talking to pharmacy staff about their condition and purchase or non-purchase behaviour (Chi-square=333.9, $p<0.0001$), but no association between S2 purchasing behaviour and belief that non-prescription medicines cost too much (Chi-square=4.1, $p=0.25$) or in reported difficulty getting to a pharmacy (Chi-square=4.7, $p=0.19$).

Non-purchasers were five times as likely to say that they did not want to always speak to pharmacy staff about their condition (33.9%) compared with purchasers of S2 medicines (6.7%). Further analyses were conducted to determine any association between independent variables of age, gender and state/territory on consumer desire to talk with pharmacy staff. A statistically significant association was found between respondent desire to talk to pharmacy staff and age (Chi-square=18.9, $p<0.01$), gender (Chi-square=12.6, $p<0.001$), and state/territory of purchase (Chi-square=15.1, $p<0.05$). As previously noted, state or territory of purchase was not significantly associated with eventual S2 purchase decision though, irrespective of differences in desire to talk to pharmacy staff about condition. 12.9% of males compared with 9.5% of females reported that they didn't always want to speak with pharmacy staff about their condition, and those in the youngest age group of 18-24 years were least likely to want to speak with pharmacy staff about their condition (16.3%) compared with those in other age categories.

Whilst cost of S2 medicines was cited as a possible factor affecting access in almost half of respondents, it made no significant difference to the purchase or no-purchase decision. However belief that cost of S2 medicines was too high was significantly associated with annual household income (Chi-square=37.4, $p<0.0001$). As outlined previously, lowest income households are also least likely to purchase an S2 or possible S2 medicine.

Although there was no significant association between consumers stating 'getting to a pharmacy is difficult' and S2 purchase or non-purchase, there was a statistically significant association between difficulty getting to a pharmacy and metropolitan or non-metropolitan location (Chi-squared=49.8, $p<0.001$) and age (Chi-squared=24.3, $p<0.001$). Consumers living in non-metropolitan locations and those aged over 75 years are more likely to find getting to a pharmacy difficult than those in metropolitan locations or younger age groups, despite this not affecting eventual purchase of S2. It should be noted though that only 8.6% of non-metropolitan respondents and 10.6% of respondents over 75 years stated that getting to a pharmacy was difficult for them.

Factors making it difficult to access S2 medicines (in-pharmacy surveys)

As outlined above, the CATI survey prompted participants regarding potential factors affecting access to S2 medicines. In order to ascertain unprompted responses from the S2 purchasing population and from pharmacy staff as to perceived factors affecting access, open ended questions were used in the in-pharmacy surveys. Results from these participants are presented in Table 7. It should be noted that consumer responses may have been biased by conducting surveys in the pharmacy.

Results in Table 7 demonstrate that cost was not perceived as a factor making it difficult for purchasers of S2 medicines to access these products when this was not a prompted response. Cost was also not perceived by pharmacy staff to be a factor making access to S2 medicines difficult for consumers. The most common factor perceived by both pharmacists and pharmacy assistants making it difficult for customers to get S2 medicines was the need to discuss the condition in the pharmacy and/or answer pharmacy questions. Despite this being cited as a perceived factor affecting access by one third of both pharmacists and pharmacy assistants, it was only raised by four purchasers of S2 medicines in the pharmacy (0.5%) as a factor making it difficult to get the product.

The majority of S2 purchasers in pharmacy (79.6%) could think of no factors making access to the pharmacy or S2 product difficult. The most common factors affecting access, albeit given by less than 5% of S2 purchasers in pharmacy, were difficulty getting to the pharmacy due to reliance on public transport or difficulty parking, and poor health or disability. Note that 'language barriers' was not given by any consumers as a factor affecting access to S2 medicines despite being raised by 8.0% of pharmacists, most likely because consumers not speaking English were excluded from the survey.

Table 7: Factors making it difficult to access S2 medicines reported by pharmacists, pharmacy assistants and purchasers of S2 products in pharmacy (open ended question)

Factor making it difficult to access S2 medicines	Purchasers of S2 (n=734)	Pharmacists (n=150)	Pharmacy Assistants (n=150)
Difficult access / no car	4.9%	4.0%	4.7%
Poor health or disability	4.6%	0.7%	2.0%
Young children or dependents	3.5%	0.0%	0.0%
Distance to pharmacy	3.3%	1.3%	1.3%
Inconvenient opening hours	2.9%	8.0%	5.3%
Have to discuss condition and/or answer pharmacy questions	0.5%	33.3%	33.3%
Cost	0.4%	2.7%	3.3%
Busy pharmacy	0.1%	12.0%	6.7%
Language barriers	0.0%	8.0%	6.7%
Product not available at pharmacy	0.0%	4.0%	2.7%
Person buying on behalf of others (difficulty answering pharmacy questions)	0.0%	8.7%	9.3%
Other (cited by < 5 respondents in each group)*	5.0%	14.7%	17.3%
None stated	79.6%	30.7%	36.0%

* Examples of responses in 'other' include "having too much choice", "pharmacist won't supply" (the latter in relation to products containing pseudoephedrine), and "had to attend a funeral"

Factors making it easy to access S2 medicines (in-pharmacy surveys)

Pharmacists, pharmacy assistants and S2 purchasers in pharmacy (Round 3 only) were asked if they could think of anything that made getting S2 medicines easy for customers. The most commonly reported factor facilitating access to S2 medicines given by S2 purchasers interviewed in pharmacy was that the pharmacy was easily accessible and/or conveniently located (25.5%). Other factors making access to S2 medicines easy cited by over 10% of S2 purchasers in pharmacy were the availability of advice, and the availability of trusted, qualified and/or helpful staff. These latter two responses were also those cited most often by pharmacy staff as perceived facilitators of access to S2 medicines for consumers in pharmacy. 29.3% of pharmacists also perceived their extended opening hours as being helpful to consumers in accessing medicines.

Project Objective 3: Perceived Customer Benefit and Need for Pharmacy Advice about S2 Medicines

To address the question of consumer need for pharmacy advice when purchasing an S2 medicine, the proportion of purchasers of S2 medicines seeking and/or receiving pharmacy advice and the proportion of consumers wanting advice to be available for these products or conditions in the future were ascertained. In consumers receiving pharmacy advice, the types of advice received and the perceived benefits from this advice have been considered.

Research findings:

Need for pharmacy advice

- 66.5% of purchasers of S2 medicines surveyed in CATI and 28.6% surveyed in pharmacy report seeking pharmacy advice, with 66.5% in CATI and 61.9% in pharmacy reporting receiving pharmacy advice.
- Almost all purchasers of S2 medicines seeking advice reported receiving it (91.4% in CATI and 84.2% in pharmacy), and almost half (49.7%) of all purchasers of S2 medicines surveyed in pharmacy who had a product in mind and were not seeking advice nonetheless received advice.
- The key reason for purchasers of S2 medicines not receiving advice was purchaser familiarity with the product (81.8% of those not receiving advice).

Perceived benefits of pharmacy advice

- Types of pharmacy advice most commonly recalled by purchasers of S2 medicines (>50% in CATI) relate to symptoms being experienced, best choice of product and correct use of product.*
- 87.9% of purchasers of S2 medicines receiving advice reported remembering this advice when they started using the product, and over half believed that without advice they may have used or purchased a sub-optimal product.
- A clear majority of purchasers of S2 medicines are quite or very satisfied with level of advice provided by pharmacy staff (86.7% in CATI and 93.7% in pharmacy).

*Not included in separate *Key Findings* summary paper

Research findings (continued):

Future desire for pharmacy advice

- Although 55.1% of purchasers of S2 medicines in CATI believe that S2 medicines should **not** be more widely available at places like supermarkets without availability of advice, 33.5% **did** agree with this proposition (the remainder were undecided).
- A clear majority of purchasers of S2 medicines (79.5% in CATI and 82.1% in pharmacy) would like advice to always be available for these products in the future.

These findings are further explored below.

Need for pharmacy advice for S2 medicines

Both CATI participants and purchasers of S2 medicines surveyed in pharmacy were asked specifically if they had come to the pharmacy with a product in mind or to seek pharmacy advice/discussion or both, and whether advice/discussion had been received. Results for each of these are presented in this section to address the question of consumer perceived need for pharmacy advice with S2 medicines and pharmacy provision of that advice.

Consumers seeking and/or receiving pharmacy advice

Both CATI and in-pharmacy consumers were asked whether they had gone to the pharmacy with a particular product in mind or to get advice or both. All purchasers were also asked whether they had received advice or discussions from pharmacy staff as part of their pharmacy visit. These results are presented in Figure 6 for CATI participants and Figure 7 for in-pharmacy consumer participants.

Only 28.6% of purchasers of S2 medicines surveyed in pharmacy reported coming to the pharmacy to seek advice, with 69.6% coming with a product in mind and not to seek advice. These figures were almost reversed in CATI responses, where 66.5% of purchasers of S2 medicines recalled coming to the pharmacy seeking advice, and 32.6% with a product in mind only. This may reflect the different recall times in each of the surveys.

A similar percentage of total purchasers of S2 medicines in both CATI and in-pharmacy surveys reported receiving advice (66.5% of purchasers of S2 in CATI and 61.9% of purchasers of S2 in pharmacy), with 84.2% of those actually seeking advice reporting receipt of advice in CATI and 91.4% in pharmacy. For those only seeking advice without a product in mind, over 95% reported receipt of advice in both CATI and in-pharmacy surveys. For purchasers of S2 medicines surveyed in pharmacy immediately following product purchase, almost half (49.7%) of those not seeking advice nonetheless received advice from the pharmacy regarding their product purchase or condition.

Figure 6: Number of purchasers of S2 medicines in CATI (n=945) receiving advice by each category of seeking advice and/or having a product in mind

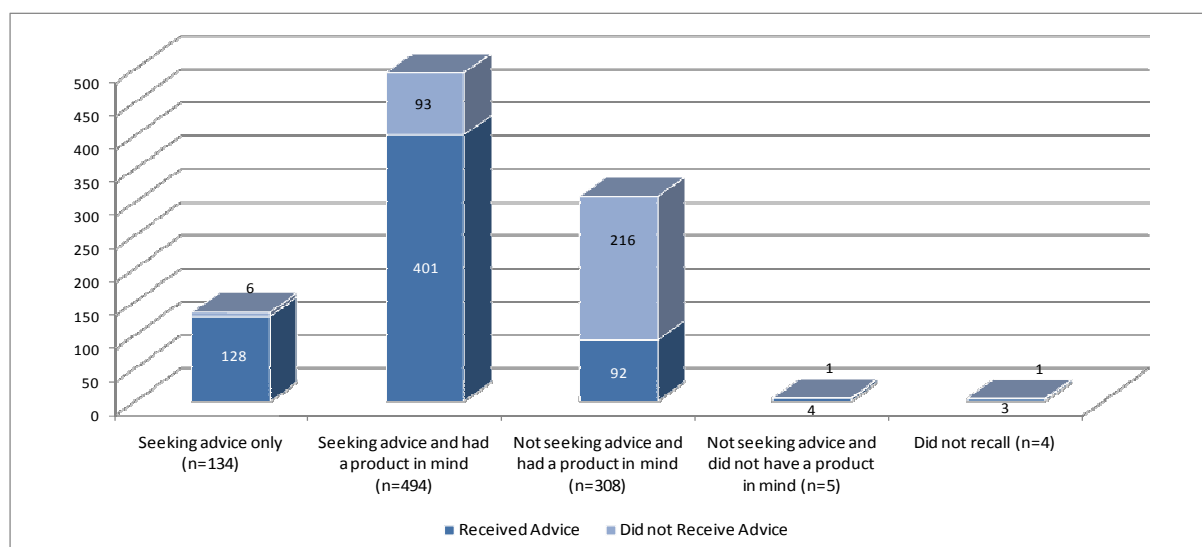
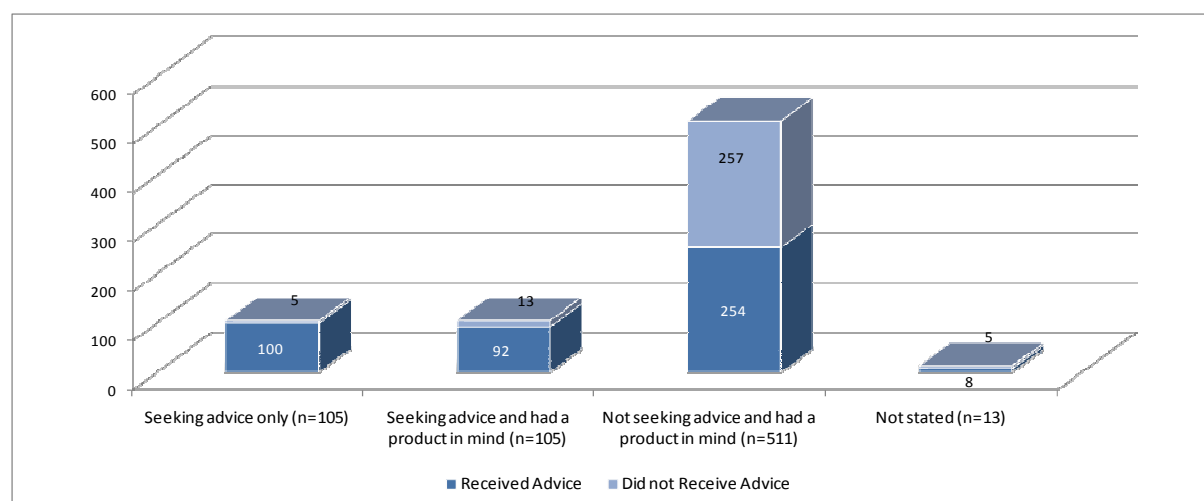


Figure 7: Number of purchasers of S2 medicines surveyed in pharmacy (n=734) receiving advice by each category of seeking advice and/or having a product in mind



Advice seeking and receipt by purchaser familiarity with product, geographic location, gender, age, presence of underlying medical condition and intended user of product

Further analyses were conducted to consider whether there were any differences in proportions of purchasers of S2 medicines seeking and receiving advice according to familiarity with product, state/territory, metropolitan or non-metropolitan location, gender, age, presence of underlying medical conditions (high blood pressure, diabetes, arthritis, stomach ulcers, asthma, and/or pregnancy), and whether the product was for self or someone else.

Consumers who were familiar with the S2 medicine they were purchasing were less likely to seek advice (CATI: Chi-squared=22.8, $p<0.001$; In-pharmacy: Chi-squared=129.58, $p<0.001$) or receive advice (CATI results: Chi-squared=16.4, $p<0.0001$; In-pharmacy results: Chi-squared=94.21, $p<0.0001$) than those where the product was unfamiliar or had not been used for a while. A total of 16.7% of purchasers of S2 medicines familiar with the product compared with 61.4% purchasing an unfamiliar product reported coming to the pharmacy to seek advice in the in-pharmacy survey. Of those familiar with the product, 50.7% received pharmacy advice compared with 86.7% of those unfamiliar with the product. Although 81.6% of those surveyed in pharmacy who were familiar with the product reported not seeking advice, 45.4% of these purchasers nonetheless received pharmacy discussions or advice during their visit.

There was a trend toward less S2 purchasers seeking advice as age increased, although this was only significant in the CATI survey (Chi-squared=15.6, $p<0.05$). In CATI respondents, 71.0% of 18-24 year olds and only 42.9% of those aged ≥ 75 years reporting purchase of an S2 medicine sought pharmacy advice. Similarly, as purchasers of S2 medicines aged, they were less likely to receive pharmacy advice (CATI: Chi-squared=19.0, $p<0.01$; In-pharmacy: Chi-squared=25.82, $p<0.001$). 75.0% of 25-34 year olds in CATI and 74.6% of 18-24 year olds in the in-pharmacy survey received pharmacy advice, with only 54.8% of those aged ≥ 75 year in CATI and 37.2% in pharmacy receiving advice.

There was no statistically significant association in CATI and in-pharmacy surveys between proportion of S2 purchasers seeking or receiving advice and geographic location, gender, presence of existing underlying medical condition in the intended user of the product, or whether the product was purchased for self or for someone else. Although purchasers of S2 medicines with existing underlying medical conditions surveyed in pharmacy were less likely to report receiving advice than those without these conditions (Chi-squared=7.27, $p<0.01$), this result was not supported in CATI (Chi-squared=0.0125, $p=0.9111$). Underlying medical conditions are also reported more frequently as people age, and increasing age was associated with a lesser degree of advice being reported. Note that any correlation between these results and pharmacy familiarity with the intended S2 user's medical condition or medication history was not ascertained.

Reasons for non-receipt of advice

Purchasers of S2 medicines in the pharmacy who indicated that they did not receive advice were asked why they did not receive advice. These were asked as closed questions but with an option to state other reasons. Results for these consumers not receiving advice are shown in Table 8.

A total of 81.8% of S2 purchasers who did not receive pharmacy advice or discussions stated familiarity with product as the reason for no advice being provided. Product familiarity was also stated by the majority of

consumers who had actually been seeking advice but did not receive it as the reason for not receiving advice. Only 5.8% of those not receiving advice stated that it was because pharmacy staff were familiar with the S2 purchaser.

Table 8: Reasons given by purchasers of S2 medicines surveyed in pharmacy for not receiving pharmacy advice

Reason Given	Purchasers of S2 who did not receive advice		Purchasers of S2 who sought but did not receive advice	
	Number	%	Number	%
Purchaser is familiar with product	225	81.8%	13	76.5%
Pharmacy staff know the purchaser	16	5.8%	3	17.6%
Advice not offered	6	2.2%	0	0.0%
Other*	24	8.7%	1	5.9%
No response	4	1.5%	0	0.0%
Total	275	100.0%	17	100.0%

*Examples of reasons given in the 'other' category included "doctor advised which product to get" or reason not provided.

Perceived benefits of pharmacy advice about S2 medicines

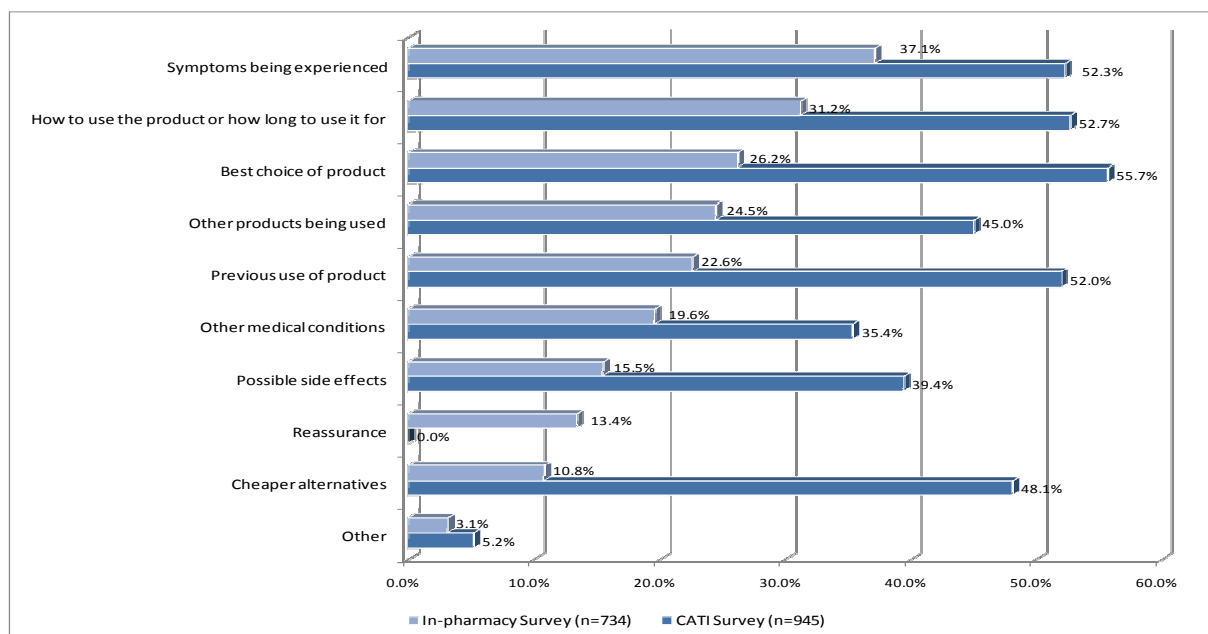
All purchasers of S2 medicines who reported receiving pharmacy advice or discussion were asked about the types of advice received and their satisfaction with the level of advice received. CATI purchasers and pharmacy staff were also asked about the perceived benefits of pharmacy advice. Results from each of these are presented here.

Types of pharmacy advice recalled by purchasers of S2 medicines

The types of pharmacy advice or discussion recalled by purchasers of S2 medicines in both the CATI and in-pharmacy surveys are presented in Figure 8. There is some difference in recollection of types of advice or discussion received from pharmacy staff between purchasers of S2 medicines surveyed immediately post product purchase in pharmacy compared with those recalling purchase experience over the last 12 months in CATI. It should be noted that these data relate to consumer recollection of advice rather than actual provision of advice by pharmacy staff, as HMA interviewers in pharmacy observed many instances of consumers not recalling types of pharmacy advice which had actually just been provided to them (observation made by research team, data not recorded), and which may or may not have been recalled by the purchaser at a later time.

As demonstrated in Figure 8, over half of all purchasers of S2 medicines from CATI, when considering S2 purchase in the last 12 months, recall receiving pharmacy advice about best choice of product, correct use of product, previous use of product, and/or symptoms being experienced by the intended user. These were also the most commonly reported types of advice recalled by those surveyed immediately post purchase in pharmacy. Over 40% of CATI purchasers of S2 medicines also recalled receipt of advice about cheaper alternatives and/or other products being used.

Figure 8: Type of pharmacy advice recalled by purchasers of S2 medicines (prompted responses)*



*Note that respondents in CATI were not asked to respond to 'Reassurance' as a type of advice recalled, so number of CATI respondents to this option was zero.

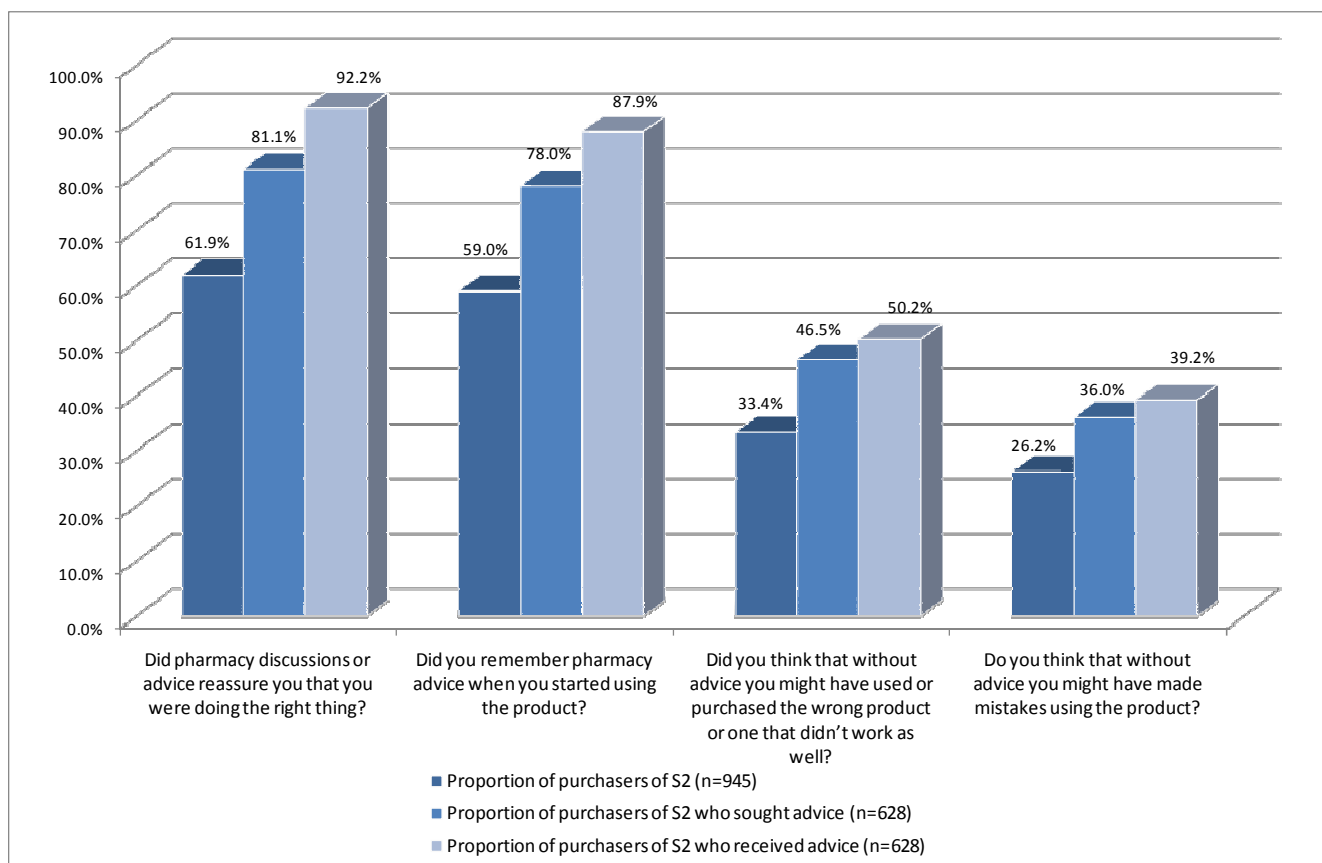
Perceived benefits of pharmacy advice about S2 medicines – consumer perspective

Purchasers of S2 medicines in the CATI survey were also asked several questions related to the advice or discussions received at pharmacy, where a positive response has been regarded as a benefit to consumers. These questions and response proportions are presented in Figure 9, with responses considered as a proportion of all purchasers of S2 medicines, and also as a proportion of those who sought pharmacy advice and of those who received pharmacy advice.

A total of 61.9% of all purchasers of S2 medicines from CATI felt reassured by pharmacy discussions or advice that they were doing the right thing, 59.0% remembered pharmacy advice when they started using the product, 33.4% believed that without advice they may have purchased a sub-optimal product, and 26.2% believed that without advice they may have made mistakes using the product.

When considering the approximately two thirds of CATI purchasers of S2 medicines who also reported receiving advice, the proportion reporting a benefit is much higher. A total of 87.9% of purchasers of S2 medicines who reported receiving advice also reported remembering this advice when they started using the product, with 50.2% believing that without advice they may have purchased a sub-optimal product, and 39.2% reporting that without advice they may have made mistakes using the product. Results demonstrate that 92.2% of those purchasers of S2 medicines receiving advice also felt reassured that they were doing the right thing.

Figure 9: CATI purchaser's of S2 medicines perceptions regarding benefits of pharmacy advice (prompted responses)*

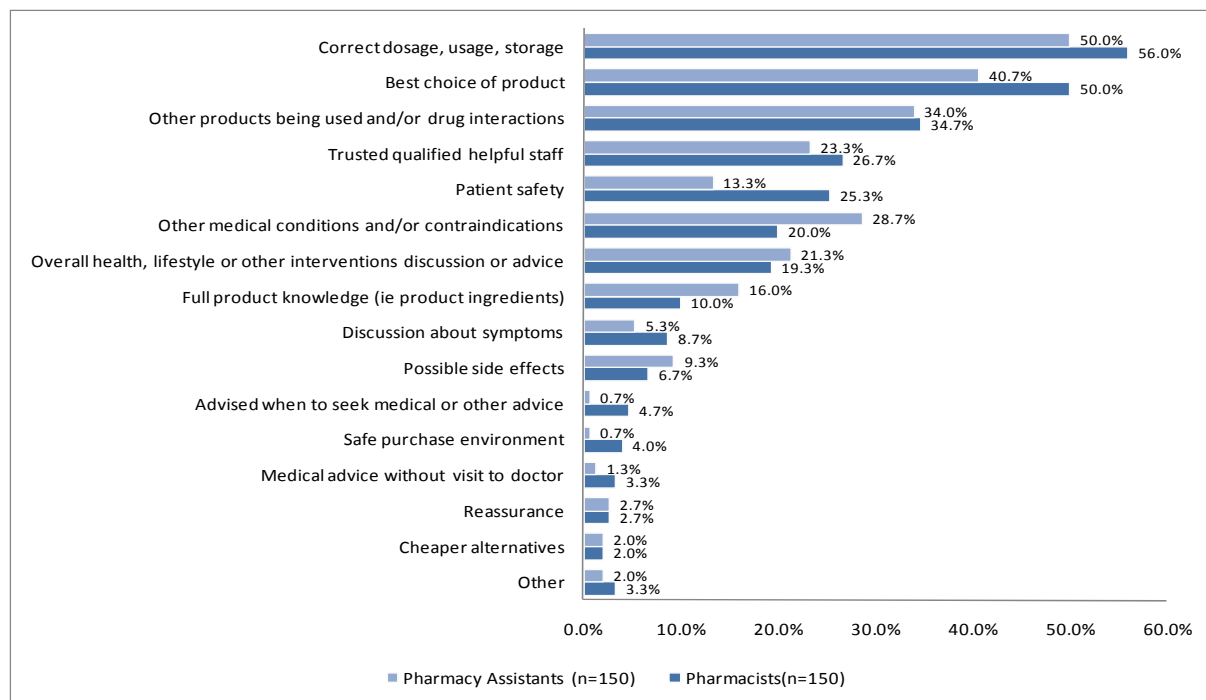


*Note that the n=628 purchasers of S2 medicines seeking advice and the n=628 receiving advice are not identical groups. The repeat of this number is coincidental as not all seekers of advice receive it, and vice versa.

Perceived benefits of pharmacy advice about S2 medicines – pharmacy staff perspective

Pharmacist and pharmacy assistant perceptions regarding perceived benefits of advice to consumers regarding S2 medicines are presented Figure 10. The most commonly reported benefits of pharmacy advice about S2 medicines, given by over half of all pharmacist and/or pharmacy assistants surveyed, related to correct use of product and best choice of product for the intended user. Other responses given by pharmacists also indicated a focus on patient safety, with perceived benefits relating to advice about drug interactions, contraindications, and product ingredients (for example, when discussing possible allergic reactions with customers). Around 20% of both pharmacists and pharmacy assistants also reported a perceived benefit being advice provided to consumers about overall health, lifestyle or alternative therapy options.

Figure 10: Benefits pharmacy staff believe consumers derive from pharmacy advice about S2 medicines or conditions



Consumer satisfaction with level of pharmacy advice about S2 medicines

Consumers purchasing an S2 medicine were asked to rank their level of satisfaction with advice or discussions provided by the pharmacy. These responses are presented in Table 9.

Of all S2 purchasers responding to this question in the CATI survey (90.7% of S2 purchasers), 86.7% were quite or very satisfied with pharmacy advice. This percentage was slightly higher for the in-pharmacy surveys with 93.7% of respondents indicating that they were quite or very satisfied, and zero indicating that they were not at all satisfied with pharmacy advice. This slightly higher satisfaction rating was not unexpected for in-pharmacy participants as interviews were being conducted in the store, at times within earshot of pharmacy staff. With this in mind, CATI responses may be more indicative of the degree of S2 purchaser satisfaction with pharmacy advice. Even for CATI respondents though, where proximity of pharmacy staff could not influence results and recall period is longer, the majority of S2 purchasers were clearly satisfied with pharmacy advice.

It should be noted that although some S2 purchasers chose not to respond to this question on the basis that they had not received pharmacy advice, well over half of all purchasers of S2 medicine stating that they had not received advice nonetheless provided a response to this question regarding satisfaction with level of advice, and their responses are incorporated in the result.

Table 9: Purchaser's of S2 medicine satisfaction with level of pharmacy advice about S2 condition and/or product

Rating scale response category	S2 purchasers – CATI survey (n=945)		S2 purchasers – in pharmacy survey (n=734)	
	No.	% of respondents giving response (n=857)	No.	% of respondents giving response (n=633)
Not at all satisfied	6	0.7%	0	0.0%
Not really satisfied	10	1.2%	4	0.6%
Somewhat satisfied	98	11.4%	36	5.7%
Quite satisfied	271	31.6%	101	16.0%
Very satisfied	472	55.1%	492	77.7%
Total giving response	857	100%	633	100%
No response given as stated they did not receive advice	87	n/a	101	n/a
Don't recall	1	n/a	n/a	n/a

Future desire for pharmacy advice about S2 medicines

In order to gain further understanding of consumer perceptions regarding supply of and access to S2 medicines in the future, all study participants were asked whether they would like products for S2 conditions to be more widely available at places like supermarkets even if advice were not available, and as a separate question whether they would like advice to always be available for these products.

As seen in Figure 11, whilst a majority of both the total survey population and the S2 purchaser population did not believe that S2 products should be more widely available at places such as supermarkets without availability of advice, it is worth noting that 33.5% of known S2 purchasers surveyed in CATI and 21.2% of S2 purchasers surveyed in pharmacy agreed with broadening the availability of products for these conditions. The lower percentage agreeing with this proposition in pharmacy surveys may be reflective of the fact that the survey was being conducted in the pharmacy environment.

Figure 11: Total participant and purchaser of S2 response to whether they would like current S2 medicines or products for S2 conditions to be more available at places like supermarkets in the future even if advice were not available

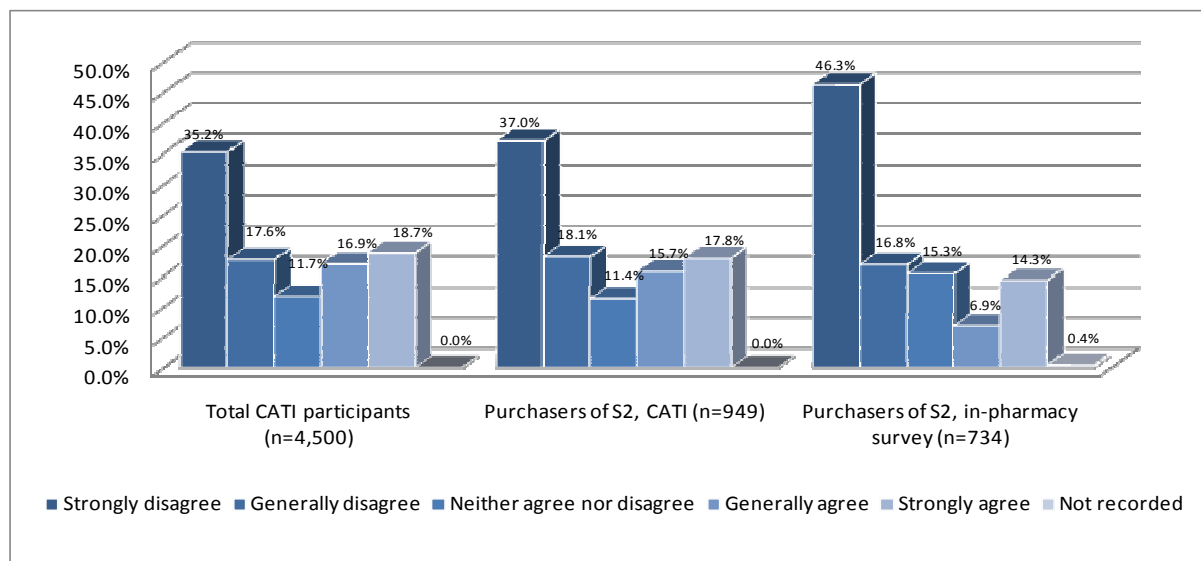
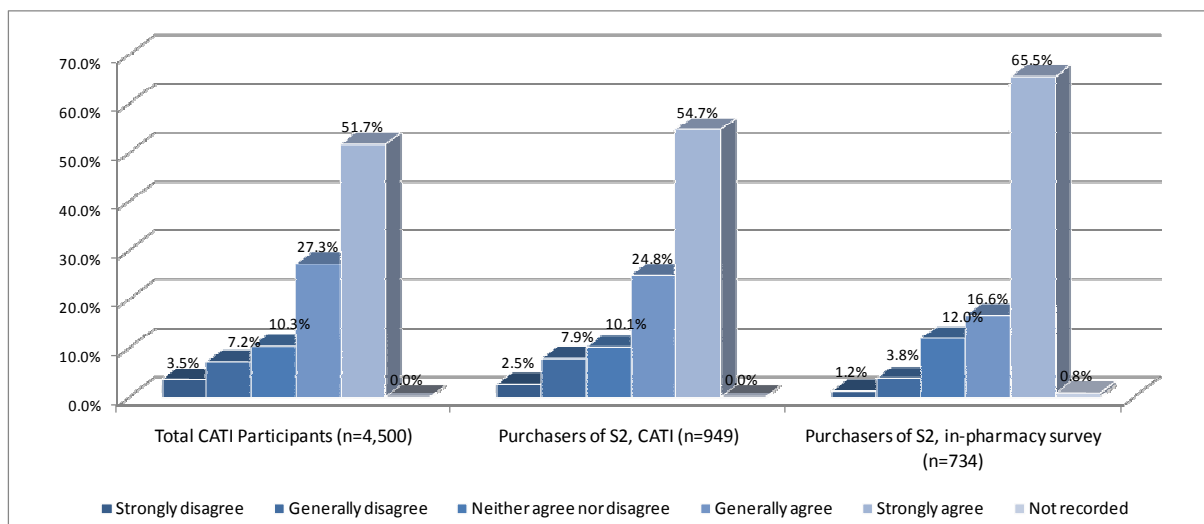


Figure 12 presents total participant and purchaser of S2 responses to the question of whether they believe that advice should always be available for products for S2 conditions in the future. Support for continued availability of advice for products for S2 conditions was very high in both purchasers of S2 medicines and the total surveyed population in CATI. A total of 79.5% of those purchasing S2 medicines surveyed in CATI, 82.1% of purchasers of S2 medicines surveyed in pharmacy, and 79.0% of the total population surveyed in CATI generally or strongly agreed that they would like advice to always be available for these products in the future.

Figure 12: Total participant and purchaser of S2 response to whether they would like advice to always be available for current S2 medicines or products for S2 conditions in the future



Limitations

The following limitations should be taken into account when reviewing the results of the project.

- (1) *Purchaser of S2 medicines* as defined in this report is at best a crude approximation of S2 users as it does not account for the following:
 - Actual S2 usage (i.e. some persons purchasing an S2 medicine may not use the product).
 - Number of persons each respondent in CATI is responsible for purchasing for. If respondent is purchasing S2 medicine for ≥ 1 household member or other dependent, this may equate to ≥ 1 S2 user per purchaser of S2 medicine.
 - Those reporting an S2 condition in themselves, partner or dependents (CATI) for whom someone else makes the product purchase. A total of 3.5% of the CATI population reported fitting into this category, but as it was not known if this was the respondent's primary reason for non-purchase, and as no information was available on whether the product purchased was actually an S2 medicine, they have not been included as a purchaser of S2 medicine.
 - The true proportion of purchasers of possible S2 medicines (i.e. product could be S2, S3 or unscheduled) that are purchasers of actual S2 medicines (referred to as *purchasers of S2 medicines* in this report). This group accounts for 35.7% of the total CATI population, and for whom it was not possible to determine actual S2 purchase or usage.
 - Persons not purchasing an S2 medicine in the previous 12 months who are in fact S2 users because they are using an S2 medicine previously purchased and still available at home.
- (2) The population of those seeking to use S2 medicine as defined in this report does not account for the following:
 - Non-purchasers who actually went into the pharmacy but did not make a purchase based on pharmacy advice or for other reasons. Note that approximately 2% of CATI respondents reported fitting into this category, but as it was not known if this was their primary reason for non-purchase, and whether they had actually sought an S2 medicine, other medicine or only advice, they were not included in the population of those seeking to use S2 medicine.
 - Those who sought to purchase an S2 medicine but purchased a non-S2 medicine (eg. S3 or unscheduled).
 - Those defined as non-purchasers with an S2 condition seeking to purchase who may have sought product other than an S2.
 - Those defined as non-purchasers with an S2 condition not seeking to purchase, based on the definition of non-seekers as those with one or more 'internal' factors affecting purchase decision, who may have actually sought to purchase.
- (3) Bias may have been introduced into the sample via the following:
 - Selection bias: The survey population excluded the non-English speaking population and for CATI participants only, those not residing in a house with a fixed telephone. In addition, consumers choosing to participate may have done so based on their interest in health or use of medicines and therefore may not entirely represent the Australian population. Data were not available on non-participant characteristics. For in-pharmacy consumer surveys, although pharmacy staff were instructed to invite *all* purchasers of S2 medicines to participate in the survey, some purchasers may not have been asked (eg. during busy serving periods) and information is not available on these individuals or on those refusing to participate.
 - Location bias: Purchasers of S2 medicines surveyed in pharmacy may have varied their responses as they were answering survey questions in the pharmacy, at times within earshot of pharmacy staff. This should be noted not only for consideration of in-pharmacy results per se, but also when using these results for comparison with the CATI survey population.

Discussion

The aims of this project were to identify how many consumers are currently using or seeking to use S2 medicines in Australia, whether there are any factors affecting consumer access to S2 medicines, how many consumers require advice when purchasing an S2 medicine, and the extent and benefits of any advice provided by pharmacy to S2 purchasers. The discussion below considers answers to each of these questions under specific project objectives.

Project Objective 1: Population Currently Using or Seeking to Use S2 Medicines

This research found that between 21.1% and 56.8% of the survey population, or between 3.15 million and 8.42 million Australians, have purchased an S2 medicine in the past twelve months. Data on actual S2 usage was not collected in this research, so those purchasing an S2 medicine have been taken as an approximation of S2 users.

A total of 21.1% of the CATI survey population purchased a product known to be an S2 medicine in the past year either for themselves or for someone in their household or other person with a medical condition for which S2 medicines are available. An additional 35.7% of the population purchased a product termed a *possible S2 medicine* which is variously available as an S2, S3 and/or unscheduled product based on pack size, active ingredients, formulation and/or state or territory of purchase. As data were not available from this research project on the proportion of these possible S2 medicines sold as actual S2 medicines, it has been assumed that if all were considered to be S2 purchases they would contribute to the upper estimate of purchasers of S2 medicines in the population being 56.8% or 8.42 million Australians.

This research found that only 1.3% of the survey population did not purchase an S2 medicine despite seeking to do so. As neither the CATI nor in-pharmacy surveys directly asked consumers what or if they had been seeking to purchase an S2 medicine though, this figure is at best an approximation and has not been used in further analyses.

Project Objective 2: Factors Affecting Supply of and Access to S2 Medicines

This research was interested in determining factors affecting access to S2 medicines both for those not making a purchase despite reporting a condition for which an S2 medicine was available, and for purchasers of S2 medicines. Factors affecting supply were not specifically addressed, but the assumption was made that from a consumer perspective, factors affecting supply by the pharmacy would be similar to those affecting access by the consumer to those medicines.

Factors affecting access for non-purchasers with S2 condition

A total of 13.4% of the population reported an S2 condition but had made no product purchase for this condition. The most common reasons for non-purchase in this group were those which could be considered 'internal' factors, where the consumer was unlikely to make a product purchase irrespective of the presence of any external factors affecting access (therefore rendering the respondent a 'non-seeker'). These internal factors include 78.8% of non-purchasers stating that they prefer not to use medicines or treatments if possible and 69.0% saying that they have not needed any of these medicines or treatments despite reporting an S2 condition.

Only 1.3% of the population reported having an S2 condition and no internal factors affecting non-purchase decision. These consumers have been considered to be those seeking but not purchasing an S2 medicine as outlined above. The most commonly given reasons for non-purchase in over 40% of these consumers was that they had products at home which they sometimes use without going back to the pharmacy or doctor and that they only go to the pharmacy if the doctor tells them to.

Factors affecting access for non-purchasers compared with purchasers of S2 medicines

The research considered whether those who did purchase an S2 medicine experienced any factors affecting access to these medicines, and whether these factors were common to both purchasers and non-purchasers with an S2 condition. The Galbally Review made comment that there may be some limitations in current access to S2 medicines based on cost or on accessibility particularly for those in rural locations. This research found that whether a person purchases an S2 medicine or makes no product purchase is not associated with geographic location, whether they perceive cost of S2 medicines as high or with difficulty accessing pharmacy, but is associated with age, gender, annual household income and whether they mind talking to pharmacy staff about their condition.

Perceived high cost of S2 medicines was not found to affect purchase behaviour, except in lowest income households where respondents were most likely to believe that S2 medicines cost too much and also least likely to purchase an S2 or possible S2 medicine. Despite the fact that over 45% of total non-purchasers with S2 condition believed that S2 medicines were too expensive, 49.1% of S2 purchasers also believed this, and this belief did not affect purchase behaviour. In fact when S2 purchasers were interviewed in pharmacy, only 0.4% reported cost of S2 medicines as a top-of-mind factor affecting access at the time of purchase. Thus close to half the population thought cost of non-prescription medicines was too high, but this generally did not stop them purchasing S2 medicines.

Difficulty getting to a pharmacy was not a commonly reported factor affecting access and was also not significantly different between purchasing and non-purchasing groups. Whilst only 6.6% of non-purchasers and 4.6% of S2 purchasers reported difficulty getting to a pharmacy, there was a significant association between difficulty getting to pharmacy and location and age. Those in non-metropolitan locations and 75+ years were most likely to find it difficult to get to a pharmacy. Thus a small percentage of the population found it difficult to access pharmacy, but this generally did not stop them purchasing S2 medicines.

The attitudinal factor that did make a difference to S2 purchase behaviour in CATI survey respondents was whether the consumer minded talking to pharmacy staff about their condition. This was also the factor cited most often by pharmacy staff as potentially affecting consumer access to S2 medicines. Only 6.7% of S2 purchasers reported that they didn't want to always speak to pharmacy staff about their condition, compared with 33.9% of non-purchasers. Males and those aged 18-24 years were most likely to mind talking to pharmacy staff about their condition. Males were also twice as likely as females to be non-purchasers despite having an S2 condition, and those aged 18-24 years were least likely, other than those 75+ years, to be S2 purchasers. Thus not wanting to talk to pharmacy staff may be one of the reasons for lower S2 purchase by males and young adults.

The fact that females were more likely to make an S2 purchase than males may to some extent be explained if females are more frequently purchasing S2 medicines on behalf of others compared to males. Information was not available in this study to determine if this was a factor in the higher female S2 purchasing population.

As there are different legislative storage regulations for S2 medicines in state and territory jurisdictions which require Western Australia and Queensland for example to store all S2 medicines behind the counter, any difference in whether consumers minded talking to pharmacy staff between jurisdictions was also analysed. Although there was a significant association between state/territory in the extent to which S2 purchasers minded talking to pharmacy staff, WA and QLD did not fall near the extremes in this result. Overall, geographic location was not found to affect S2 purchase or non-purchase behaviour. The fact that only 0.5% of consumers surveyed in pharmacy cited having to discuss condition or answer pharmacy questions as a factor affecting access may reflect that this was a sample of the S2 purchasing population only rather than non-purchasers.

Project Objective 3: Perceived Customer Benefit and Need for Pharmacy Advice about S2 Medicines

Need for pharmacy advice with S2 medicines

This research found that two thirds of consumers reporting S2 purchase in the previous twelve months recall seeking advice from the pharmacy regarding their product purchase, although less than one third of S2 purchasers report seeking advice on a single occasion of purchase (69.6% report coming to the pharmacy with a product in mind and not to seek advice). This may reflect different recall periods in the surveys, where CATI participants are recalling advice-seeking behaviour related to an S2 product over a twelve month period rather than advice-seeking at a point in time. Irrespective of the recall period, purchasers of S2 medicine are less likely to seek advice when they are familiar with the product than if the product is new or has not been used for a while. Interestingly though, despite over 70% of S2 purchasers in both CATI and in-pharmacy surveys reporting being familiar with the product they are purchasing, a much higher proportion of these reported seeking advice when asked to recall behaviour over the previous year (62.6%) rather than on one occasion of purchase (16.7%). Again, CATI results may reflect behaviour over the previous twelve months or at the time of initial product purchase. Thus whilst a majority of S2 purchasers may not be seeking advice at time of purchase due to product familiarity, two thirds of consumers familiar with the S2 medicine do recall wanting advice regarding the medicine or condition at some point in the past year.

Almost all purchasers of S2 medicines seeking advice from the pharmacy reported receiving advice. Even amongst those who did not seek advice but had a product in mind, almost half still reported receiving pharmacy discussions or advice regarding their purchase. Discussions or advice most commonly reported by S2 purchasers were around symptoms being experienced by the intended user, best choice of product and correct use of the product. Where advice was not received, this was most commonly related to S2 purchaser familiarity with the product.

This research found no significant difference between state/territory of purchase and extent of pharmacy advice provision recalled by purchasers of S2 medicines, despite state differences in storage requirements. Those with underlying medical conditions which affected up to half the survey population were actually less likely to receive pharmacy discussions or advice when purchasing an S2 medicine than those without an underlying condition (in-pharmacy survey only). As this was only significant for those surveyed in pharmacy though, it is not known whether these purchasers of S2 medicines received advice at a previous occasion of purchase. Purchasers of S2 medicines with underlying medical conditions were also more likely to be older, and older purchasers were also less likely to receive or in fact seek pharmacy advice. Due to this possible confounding by age, conclusions cannot be drawn from this research regarding the significance of those with underlying medical conditions being less likely to receive pharmacy advice when making an S2 medicine purchase.

Perceived benefits of pharmacy advice about S2 medicines

A clear majority (over 85%) of purchasers of S2 medicines were quite or very satisfied with the level of advice provided to them by pharmacy staff. It should be noted though that this figure includes some purchasers who did not recall receiving any advice but were nonetheless satisfied with this at the time of purchase.

Beyond general satisfaction with the level of pharmacy advice provided, some insight was also gained on perceived benefits of pharmacy advice for consumers surveyed regarding S2 purchase over the previous twelve months. 87.9% of these purchasers who received advice report remembering this advice when they started using the product, 50.2% believed that without advice they may have used or purchased a sub-optimal product, and 39.2% believed that without advice they may have made mistakes using the product. Over 90% of those receiving pharmacy advice also felt reassured by this advice.

Future desire for pharmacy advice about S2 medicines

Over half the purchasers of S2 medicines believe that S2 medicines should **not** be more widely available at places like supermarkets without availability of advice, but one third of purchasers of S2 medicines **did** agree with this proposition (the remainder were undecided). In response to a separate question, a clear majority of purchasers of S2 medicines (79.5% in CATI and 82.1% in pharmacy) believe that advice should always be available for these products in the future.

To exclude any effect of pharmacy staff proximity when responding to questions regarding S2 purchaser desire for continued availability of advice with S2 medicines, CATI responses to these questions were regarded as more valid than those provided at time of S2 purchase in pharmacy. Responses from purchasers of S2 medicines in CATI were very similar to responses from the entire survey population, and indicate that whilst a majority (over 55%) of purchasers do not want S2 medicines to be more widely available at places like supermarkets without the availability of advice, one third of purchasers of S2 medicines agreed with this proposition. It should be noted that consumers were not asked the question of whether this response applied only to products with which the purchaser was familiar though.

Whether purchasers of S2 medicines agreed or disagreed with broadened availability of S2 medicines without advice, a clear majority of purchasers (79.5%) wanted advice to always be available for S2 medicines in the future, with only 10.4% disagreeing with this proposition. Thus whilst a third of purchasers of S2 medicines wanted greater access to S2 medicines beyond the current pharmacy environment even where advice was unavailable, the majority of purchasers did not want greater access without advice, and an even greater majority wanted advice to always be available for these medicines if required.

Despite only 28.6% of purchasers of S2 medicines surveyed in pharmacy and 66.5% of those surveyed in CATI reporting that they had sought pharmacy advice when purchasing S2 medicines, around 80% or more wanted advice to always be available for these medicines in the future.

Conclusions

Project Objective 1: Population Currently Using or Seeking to Use S2 Medicines. Known or possible purchasers of S2 medicines comprise 21.1% or as high as 56.8% of the population, with males, those in the youngest (18-24 years) and older age groups, and those from lower income households least likely to make an S2 purchase. Geographic location either by state or metropolitan/other location does not affect the proportion of the population purchasing an S2 medicine.

Overall, most people who want an S2 medicine are able to purchase it. Only 1.3% of the population could be regarded as non-purchasers who may have wanted an S2 medicine but did not make a purchase. Even amongst this group, the main reason given for non-purchase was that they already had the product at home.

Project Objective 2: Factors Affecting Supply of and Access to S2 Medicines. The most commonly given reasons for non-purchase, despite having a condition for which an S2 medicine was available, were those which could not be considered as factors affecting access as they related to the consumer not wanting to use medicines or treatments, or not believing medicines were required. Perceived high cost of S2 medicines, whilst reported by almost half the population, did not affect extent of S2 purchase although may affect purchase decision for those in low income households. Although a small proportion of consumers primarily aged over 75 years or in non-metropolitan locations found access to a pharmacy difficult, this also did not affect extent of S2 purchase. Males and those aged 18-24 years do not always want to speak to pharmacy staff about their condition, and this was associated with them being less likely to purchase an S2 medicine despite having a condition for which an S2 medicine is available.

Project Objective 3: Perceived Customer Benefit and Need for Pharmacy Advice about S2 Medicines. Although only 28.6% of purchasers of S2 medicines are seeking advice at each occasion of S2 purchase, 66.5% recall seeking pharmacy advice associated with their purchase over the previous year. A total of 66.5% of consumers also recall receiving pharmacy advice when purchasing an S2 medicine, with advice provided to almost all who are seeking it and most commonly provided to younger rather than older customers. Jurisdictional differences in storage requirements for S2 medicines were not found to affect extent of advice provision by pharmacies.

Purchasers of S2 medicines are generally very satisfied with the level of pharmacy advice provided and approximately 80% want advice to always be available for these products in the future even if it is not sought at every purchase. Although 55.1% of purchasers of S2 medicines believe that these medicines should **not** be more widely available at places like supermarkets without availability of advice, 33.5% **did** agree with this proposition, with the remaining 11.4% being undecided.

The fact that purchasers of S2 medicines rather than actual S2 users were analysed in this research should be noted if using these results to infer S2 user behaviour.

Appendices

APPENDIX A CATI SURVEY

Introductory comments

(Ascertain that the person responding is 18 years or over.)

We are conducting a short phone survey into medicines and treatments that you can buy in a pharmacy *(or chemist shop)* without needing a prescription from a doctor. The survey is not connected to any brand or company and will take around 7 to 8 minutes. Are you happy to participate?

(If asked who has funded the survey: The information is being collected to improve the health of Australians needing or using medicines. It is being funded by the Australian Government through money allocated to pharmacy research and development.)

Confidentiality

Please be assured that all the information and opinions you provide will be used only for research purposes and we abide by the principles of the new privacy act. While we'd prefer you answer all the questions, if there are any you'd rather not answer, that's fine. Just let me know. If you would like to check on our company you could call the Market Research Society Survey Line on 1300 354 830.

Monitoring clause

My supervisor may be monitoring this interview for quality control purposes. If you do not wish this to occur, please let me know.

Age Category

Are you able to tell me which age group you belong to:

- 18 – 24
- 25 – 34
- 35 – 44
- 45 – 54
- 55 – 64
- 65 – 74
- 75 and over

Record Gender

Male/Female

Survey questions

(1) Have you, your partner, children or other dependents had any of the following conditions in the past 12 months? Please answer yes or no as I read them out.

- Pain such as a headache, backache, muscle or joint pain, period pain, dental pain
- Cough, cold or flu
- Allergies or hay fever
- Sore or itchy eyes
- Sore throat or mouth
- Indigestion or stomach cramps
- Vomiting or diarrhoea
- Haemorrhoids
- Fungal infections such as tinea, athlete's foot, ringworm, jock itch
- Warts
- Worms
- Hair loss
- Anaemia due to low iron

If no to all, please go to Question 3

If yes to any please proceed to Question 2

- (2) Do you remember purchasing a product from the pharmacy without needing a doctor's prescription for any of these conditions in the past 12 months? It may have been for yourself or someone else, and may have been a tablet, capsule, ointment, spray, liquid or powder. *(If asked whether this can include from a hospital pharmacy, the response is "Yes").*
If yes, please proceed to Question 4
If no, please go to Question 3
- (3) Do you recall purchasing **any** medicine or treatment from a pharmacy **without needing a doctor's prescription** in the past 12 months? It may have been for yourself or someone else, and may have been a tablet, capsule, ointment, spray, liquid or powder.
If yes, go to Question 4
If no, go to Question 13
- (4) Can you tell me the product's name and what it was for? *(If the respondent says that they have purchased several medicines or products in the last year say: Think about the last one you remember buying, and answer for that one).*
- (5) Was this product something you or the intended user is familiar with, or a new product or one which has not been used recently? *(If asked, "recently" refers to the last few months).*
- (6) Did you go to a pharmacy to make your purchase or purchase at an on-line pharmacy? *(Note that 'on-line' refers only to orders placed via the computer, for all other responses record 'went to pharmacy')*
If 'went to pharmacy', go to Q9
If 'purchased on line', go to Q7
- (7) This question is interested in your reasons for purchasing at an on-line pharmacy. Please answer true or false to indicate if these statements apply to you.
- Purchasing on-line is more convenient for me
 - It is difficult for me to get to a pharmacy. *If answer is "true", ask: Can you tell me why it is difficult? Record answer. (If asked for possible examples, say "It may be because it's hard to park, too far away, not open late, not easy for people with disabilities, or other reasons")*
 - I did not want to talk about my ailments or medical conditions in the pharmacy
 - I did not want to receive pharmacy advice
 - I knew which product I wanted
 - The product is cheaper if I purchase on-line *(if answer is "Don't know" record as "no")*
- (8) Did you receive any advice or discussions from the pharmacist prior to your purchase being delivered?
If 'no', go to Q14
If 'yes', go to Q11
- (9) (ROUND 1) The next question is interested in your reasons for going to the pharmacy to get these products. Please answer true or false to indicate if any of the following things I read out apply to you. *(If at any point in the question does the consumer seek clarification or make a comment that answers may be different depending on which condition or product they are referring to, respond with "Think about the main condition you went to the pharmacy about last time you bought a non-prescription product").*
- (ROUND 2&3) The next question is interested in your reasons for going to the pharmacy to get these products. Please indicate how important each of these reasons for going to the pharmacy is on a scale of 1 to 5, where 1=not at all important or not true, 2=slightly important, 3=somewhat important, 4=quite important, 5=very important. *(If at any point in the question does the consumer seek clarification or make a comment that answers may be different depending on which condition or product they are referring to, respond with "Think about the main condition you went to the pharmacy about last time you bought a non-prescription product").*
- I (or the intended user) had run out of this product at home
 - The pharmacy is the only place I know of to get the product I wanted
 - I went to the pharmacy because I wanted advice about the condition
 - I went to the pharmacy because I wanted advice about whether a medicine or treatment was needed for this condition
 - I went because I saw the product advertised or was recommended it
 - I wanted advice about whether this product was ok for me, or the intended user, to use
 - I wanted advice about the best product for me or the intended user
 - I wanted advice about how to use this product the right way
 - I wanted reassurance that I was doing the right thing
 - When I have bought medicines or treatments before, advice from the pharmacy was helpful
 - The pharmacist knows my background medical conditions (or those of the intended user) and what products are already being taken

- (ROUND 2&3) I don't mind speaking to pharmacy staff about my condition (or that of intended user)
- The doctor told me or the intended user to go to the pharmacy to get the product
- (ROUND 1) Non prescription medicines and treatments cost too much
- (ROUND 1) Getting to a pharmacy is difficult for me. *If answer is "yes", ask: Can you tell me why it is difficult? Record answer. (If asked for possible examples, say "It may be because it's hard to park, too far away, not open late, not easy for people with disabilities, or other reasons").*

(10) The next questions are about buying medicines in the pharmacy, and pharmacy discussions and advice. They require a Yes or No answer. *(Also have a 'don't recall' option for responses, but don't read this out). Only if asked for what type of advice, say: "This may have been about such things as whether treatment was needed or the best product for you or the intended user."*

- Were you offered advice or assistance at the pharmacy?
- Did you want advice from the pharmacy?
- Did you mind talking about your condition or that of the intended user in the pharmacy?
- Was the pharmacist familiar with you and your medical conditions, or those of the intended user?
- (ROUND 2&3) Is getting to a pharmacy difficult for you? *If answer is "yes", ask: Can you tell me why it is difficult? Record answer. (If asked for possible examples, say "It may be because it's hard to park, too far away, not open late, not easy for people with disabilities, or other reasons").*
- (ROUND 2&3) Do you think non-prescription medicines and treatments cost too much for you?
- Did you know which product you wanted?

If no, proceed to last bullet point in this question.

If yes, ask:

- Did you end up purchasing the product you went in for?

If yes, proceed to last bullet point in this question.

If no, ask:

- Can you tell me why not? *(open ended – record responses)*
- Did you have a discussion or get advice from the pharmacist, pharmacy assistant, both or neither? *(Responses: Pharmacist / Pharmacy Assistant or other staff / Both / Neither or no-one / Don't recall).*

For responses 'Pharmacist / Pharmacy Assistant / Both / Don't recall', proceed to Q11.

For response 'Neither or no-one', proceed to Q12.

(11) The next few questions also require a Yes or No answer. *(Also have a 'don't recall' and a 'N/A' option for responses, but don't read these out). If at any point in the question does the consumer seek clarification or make a comment that answers may be different depending on which condition or product they are referring to, respond with "Think about the main condition you went to the pharmacy about **last time** you bought a non-prescription product".*

- Did pharmacy discussions or advice reassure you that you were doing the right thing
- Did you remember pharmacy advice when you started using the product
- Do you think that without advice you might have used or purchased the wrong product or one that didn't work as well
- Do you think that without advice you might have made mistakes using the product

And did the pharmacist or pharmacy assistant talk to you about any of the following? Please answer Yes or No as I read them out *(Also have a 'don't recall' option for responses, but don't read this out).*

- Symptoms being experienced
- Other products being used
- Other medical conditions you or the intended user may have
- The best choice of product for you
- Cheaper alternatives
- Whether the product had been used before
- Possible side effects
- How to use the product or how long to use it for
- Anything else that you recall the pharmacy discussing with you? *(If yes, please record responses)*

(12) The next question involves a rating scale.

On a scale of one to five, where one is "not at all satisfied" and five is "very satisfied", how satisfied were you overall with the pharmacy advice about the condition or product? *(ONLY READ ALL RATING RESPONSES UP FRONT IF ASKED – AFTER PERSON HAS MADE CHOICE, THEN USE RATING WORDS TO CHECK): Rating scale: 1=Not at all satisfied; 2=Not really satisfied; 3=Somewhat satisfied; 4=Quite satisfied; 5=Very satisfied; NA= No advice; DR=Don't recall)*

Proceed to Question 14

- (13) (ROUND 1) The next question is interested in your reasons for **not** purchasing any medicines or treatments at a pharmacy without a prescription in the past 12 months. Please answer true or false to indicate if the response applies to you.

(ROUND 2&3) The next question is interested in your reasons for **not** purchasing any medicines or treatments at a pharmacy without a prescription in the past 12 months. Please indicate how important each of these reasons for **not** purchasing is on a scale of 1 to 5, where 1=not at all important or not true, 2=slightly important, 3=somewhat important, 4=quite important, 5=very important.

- I have not needed any of these medicines or treatments
- I don't really know what medicines or treatments are available without a prescription
- Someone else has been to the pharmacy for me to purchase medicine or treatment
- I prefer not to use medicines or treatments if possible
- I prefer to use alternative medicines or treatments when possible
- Non-prescription medicines and treatments cost too much for me
- Getting to a pharmacy is difficult for me. *If answer is:*

(ROUND 1) "true"; or

(ROUND 2&3) 2-5 (i.e. slightly to very important),

ask: Can you tell me why it is difficult? Record answer. (Only if asked for possible examples, say "It may be because it's hard to park, too far away, not open late, not easy for people with disabilities etc").

- I only go to the pharmacy if my doctor tells me to
 - I went to the pharmacy but they told me to seek more medical advice
 - I went to the pharmacy but they told me I did not need medicine or treatment
 - I have only bought medicines or treatments from the pharmacy that needed a doctor's prescription in the last year
 - If I have products at home, I sometimes use them without going back to the pharmacy or doctor
 - I do not want to always speak to pharmacy staff about my condition
 - I have previously purchased medicines or treatments from a pharmacy without a prescription and was not happy with pharmacy service or advice
 - I have previously purchased medicines or treatments from a pharmacy without a prescription and was not happy with the product
 - I could not get the product I wanted from a pharmacy. *If answer is:*
- (ROUND 1) "true"; or
- (ROUND 2&3) 2-5 (i.e. slightly to very important),

ask: Can you tell me the name of the product you wanted or what it was for? Record answer.

- In the last 12 months I have purchased non-prescription medicines at on-line pharmacies.
- I prefer to buy medicines and treatments at other places like convenience stores when I can. *If answer is:*

(ROUND 1) "true"; or

(ROUND 2&3) 2-5 (i.e. slightly to very important),

ask: Can you tell me why you prefer to buy medicines and treatments at other places? Record answer. (Only if asked for possible reasons, say "You may think convenience stores are easier to get to, open later, may have cheaper prices, don't ask intrusive questions etc"). Do you then go to a pharmacy for advice regarding the condition or product? Your answer may be 'no' / 'sometimes' / 'always'. (Record answer)

- (14) I now want you to think about the conditions I first read out including pain, cough, cold or flu, allergies, hay fever, sore eyes, throat or mouth, vomiting, diarrhoea, fungal infections, warts, worms and hair loss. I am going to read two statements for you to agree or disagree with on a rating scale of 1 to 5, where one is "strongly disagree" and five is "strongly agree".

The first statement is: In the future I would like products for these conditions to be more available at places like supermarkets even if I **cannot** get advice when I buy them. *(If the comment is made that it is different for different conditions or products, say: "Choose the answer which applies most often from 1=strongly disagree to 5=strongly agree". If asked, 2=generally disagree, 3=neither agree nor disagree, 4=generally agree).*

- (15) The second statement is: In the future I would like advice to always be available for products for these conditions. *(If the comment is made that it is different for different conditions or products, say: "Choose the answer which applies most often from 1=strongly disagree to 5=strongly agree". If asked, 2=generally disagree, 3=neither agree nor disagree, 4=generally agree)*

- (16) I would like to finish off with two questions about yourself for statistical purposes. Do you or the intended user of the product have any of the following medical conditions? Please answer 'yes', 'no' or 'don't know'. *(If the person comments that they have not purchased anything, say "The survey is still interested in whether the existence of some*

medical conditions influences purchases of medicines or treatments. So we would still be interested to know if you or someone in your household has any of these conditions Remember that if you would prefer not to answer any questions, that is ok").

- high blood pressure
- diabetes
- heart disease
- arthritis
- stomach ulcers
- asthma
- pregnancy

(17) Are you able to tell me your household income category:

- <\$30,000
- \$30,000 - \$80,000
- >\$80,000

Thank you for your time in completing this survey.

Final standard comments

Once this project is completed your contact details will be removed from your responses. Under the Privacy Act you have the right to request access to the information you have provided.

As this is market research it is carried out in compliance with the Privacy Act and the information you provided will only be used for research purposes. Thank you very much for your cooperation.

In case you missed it earlier my name is (.....) calling from Marketmetrics on behalf of Healthcare Management Advisors. If you would like to contact my supervisor to check the validity of this study you can call Marketmetrics on 03 8781 5777.

Print name:

Interviewer sign:

ID:

Date:

APPENDIX B IN-PHARMACY CONSUMER SURVEY

1	Did you come in about any of the following things today? You don't need to tell me which ones. (Show laminated page of CONDITIONS FOR WHICH AN S2 IS AVAILABLE . Read out)	Yes	No
		If you know an S2 has been purchased, go to Q3 , otherwise thank customer for their time and end survey).	
2	Did you purchase a product today for any of these?	Yes	No. Can you tell me why not? (Then go to Q5)
		<hr/> <hr/> (egg. too expensive, getting more advice from doctor or other health professional, pharmacy suggested different product, pharmacy suggested I don't need product at this stage etc)?	
3	Can you look and tell me if the product has these exact words (show card and read) PHARMACY MEDICINE on the top of the pack.	Yes	No
4.	Is the product for you or for someone else?	Self	Someone else
5	Did you come in today with a particular product in mind, or to get advice, or both?	Product in mind	To get advice Both
6	(If consumer came in with a product in mind): Did you end up purchasing this product?	Yes	No. Can you tell me why not?
		<hr/> <hr/> (egg. too expensive, getting more advice from doctor or other health professional, pharmacy suggested different product, pharmacy suggested I don't need product at this stage etc)?	
7	(If product purchased). Are you (or the person with the condition) familiar with this product, or is this a new product or one which you haven't used for a while?	Familiar with product	New or rarely used item Don't know
8	Did you get any advice or discussion from pharmacy staff about this product(s) or condition today?	Yes (Go to Q9)	No. Can you tell me why not? (Then go to Q11)
		Familiar with product	Pharmacy knows me Advice not offered Other (list)
9	Who did you have a discussion with today?	Pharmacist	Pharmacy assistant Both
10	Was the discussion or advice about any of the following? (Read out and tick any that apply)	Your symptoms (or those of intended user) Other products being used Other medical conditions Best choice of product Cheaper alternatives Previous use of the product Possible side effects How to use the product or how long to use it for General reassurance Any other things: _____	

11	Overall, how satisfied are you with the level of advice you received today?	1 = Not at all satisfied	2	3	4	5 = Very satisfied
12a	What, if anything, made it difficult for you to get to the pharmacy or get this product today?					
12b	(ROUND 3) Can you think of anything that makes getting this product easy for you?					
13	The next two questions are on a rating scale where 1= <i>strongly disagree</i> and 5= <i>strongly agree</i> . In the future, would you like products for such conditions to be more available at places like supermarkets even if you could not get advice when you buy them?	1 = Strongly disagree	2	3	4	5 = Strongly agree
14	In the future, would you like advice to always be available for the condition or products you have purchased today?	1 = Strongly disagree	2	3	4	5 = Strongly agree
15	Do you think you have been provided with enough information about this product or condition?	Yes	No	Undecided		

We just need some background information now from you.

16	Does the intended user of the product(s) have any of the following other conditions <i>(please circle)</i> ?	High blood pressure				Arthritis		
		Heart disease				Asthma		
		Stomach ulcers				Pregnancy		
		Diabetes				Don't know		
17	What is your age group <i>(circle)</i> ?	18-24	25-34	35-44	45-54	55-64	65-74	75 or over
18	Your sex <i>(circle)</i> :	Male	Female					

Thank you very much for your time in completing this survey.

Would you like some information about this project? (*If 'yes', provide 'Consumer Bulletin'*).

Time of day survey conducted:

APPENDIX C PHARMACIST SURVEY

Pharmacy Demographic Data

To be completed by HMA staff.

Pharmacy Contact Details

For contact purposes only, not to be recorded or included in data analysis.

Pharmacy Name:

Pharmacist(s) Name:

Pharmacy Assistant(s) Name:

Address:

Telephone / Email:

Pharmacy Demographic Details

For recording and use in data analysis only.

1	Pharmacy Code Number	
2	State or Territory	NSW VIC QLD SA WA TAS NT ACT
3	Postcode	
4	Metropolitan or Non metropolitan	Metropolitan Non-metropolitan
5	Pharmacy size	
6	Month visited	February/March June October
7	Time of day	Morning – Afternoon (Record time: _____) Afternoon – Evening (Record time: _____)

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Pharmacist Survey

1	Are you able to tell us the number of S2 products (in units) sold in your pharmacy yesterday?	
2	Where do you store S2 products in the pharmacy?	<div> Majority behind the counter Some behind the counter Majority front of store </div> <i>(If any stored behind the counter) What are your reasons for storing S2 products behind the counter?</i>
3	What benefits do you believe consumers derive from pharmacy advice about S2 medicines or associated conditions?	
4	Can you think of anything that makes it difficult for your customers to get S2 medicines?	
5	Can you think of anything that makes getting S2 medicines easy for your customers?	

We are also interested in some background information on your pharmacy.

5	Is your pharmacy accredited with the Quality Care Pharmacy Program?	Yes No Undergoing accreditation
6	Is your pharmacy an independent or banner pharmacy?	Independent Banner (<i>Name:</i> _____) Other
7	Do you offer an on-line ordering and supply service for some or all S2 medicines?	No Yes. Can you describe any processes you have for assessing 'at-risk' status of these consumers prior to supplying product?

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APPENDIX D PHARMACY ASSISTANT SURVEY

1	What benefits do you believe consumers derive from pharmacy advice about S2 medicines or associated conditions?	
2	Can you think of anything that makes it difficult for your customers to get S2 medicines?	
3	Can you think of anything that makes getting S2 medicines easy for your customers?	

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