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The Pharmacy
Guild of Australia

Consumer perceptions on supply of and access to Pharmacy Medicines

Researchers: *Healthcare Management Advisors*



FULL FINAL REPORT

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Acronyms

Acronym	Explanation
ABS	Australian Bureau of Statistics
AGCS	Australian Geographic Classification System
AHMAC	Australian Health Ministers' Advisory Council
AHMC	Australian Health Ministers' Conference
AIHW	Australian Institute of Health and Welfare
ARIA	Accessibility/Remoteness Index of Australia
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
NDPSC	National Drugs and Poisons Schedule Committee
NMP	National Medicines Policy
NSW	New South Wales
OTC	Over-the-counter
QLD	Queensland
PBS	Pharmaceutical Benefits Scheme
PMS	Pharmacy Medicine Schedule
PSA	Pharmaceutical Society of Australia
QCPP	Quality Care Pharmacy Program
QUM	Quality Use of Medicines
RRMA	Rural, Remote and Metropolitan Area classification
S2	Schedule 2 (Pharmacy Medicine)
S3	Schedule 3 (Pharmacist Only Medicine)
SMA	Standards Maintenance Assessment
SUSDP	Standard for the Uniform Scheduling of Drugs and Poisons
TGA	Therapeutic Goods Administration
WA	Western Australia

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Introduction

In Australia, medicines are grouped into schedules according to the appropriate level of control required over access and availability. The Pharmacy Guild of Australia engaged Healthcare Management Advisors (HMA) to develop a methodology and undertake a project to:

*collect **some** of the data required by the National Co-ordinating Committee on Therapeutic Goods (NCCTG) in order to reassess the restrictions on access to over-the counter medicines in Australia and New Zealand.*

In aiming to gather some of the information relevant to consideration of the extent to which there is public benefit in retaining Schedule 2 (S2), also known as the Pharmacy Medicine Schedule (PMS), the objectives of this project were as follows:

- **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;
- **Project Objective 2:** Determine factors affecting supply of and access to S2 medicines;
- **Project Objective 3:** Identify, analyse and quantify the perceived customer benefit and need for pharmacy advice about S2 medicines; and
- **Project Objective 4:** Provide pilot, interim and annual data sets to inform the final submission to the NCCTG enquiry.

Background and Rationale

Over the counter (OTC) medicines in Australia are currently available as Schedule 2, Schedule 3 or unscheduled products, with different levels of control over consumer access and availability based on potential risks and use of the product. Over the past decade the scheduling and supply arrangements for these products have been reviewed. The background regarding OTC scheduling and supply arrangements, the outcomes of previous reviews and the rationale for the current project are presented in this section.

National Medicines Policy

The National Medicines Policy (NMP) was launched in Australia in December 1999 with the overall aim of improving *positive health outcomes for all Australians through access to and wise use of medicines*¹. The term 'medicines' in the NMP refers to all prescription and non-prescription medicines. The NMP has four central objectives:

- timely access to the medicines that Australians need, at a cost individuals and the community can afford;
- medicines meeting appropriate standards of quality, safety and efficacy;
- quality use of medicines; and
- maintaining a responsible and viable medicines industry.²

Application for approval of a medicine for marketing in Australia must be made to the Therapeutic Goods Administration (TGA). Medicines assessed as having a higher level of risk must be assessed by the TGA for quality, safety and efficacy. These medicines are then registered and must display an "AUST R" number on the product label as proof of registration. Non-prescription medicines, including Schedule 2 medicines, are 'low risk' registered, while prescription medicines are 'high risk' registered. Medicines considered to be of lower risk, which do not contain substances that are scheduled in the Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP), are also assessed by the TGA for quality and safety but not efficacy. These medicines are listed, not registered, and given an "AUST L" number which must be displayed on the product label.³ Once approved the medicine is registered or listed for use in Australia, and access to and quality use of that medicine become important.

The NMP states that as all medicines may have potential risks as well as benefits, scheduling arrangements are in place to ensure appropriate consumer access and availability. These are described below. The NMP also states that *cost should not constitute a substantial barrier to people's access to medicines they need*.² Whilst this is often considered in relation to subsidisation of many medicines under the Pharmaceutical Benefits Scheme (PBS), the affordability of non-prescription medicines should also be considered in terms of access for consumers.

The National Strategy for Quality Use of Medicines was developed to address challenges and realise benefits of quality use of medicines (QUM) and integrate it with the other arms of the NMP. The National Strategy for QUM states that QUM means:

- selecting management options wisely;
- choosing suitable medicines if a medicine is considered necessary; and
- using medicines safely and effectively to get the best possible results.⁴

Pharmacists, pharmacy staff and consumers currently all play a role in achieving this QUM objective for non-prescription medicines.

Current Scheduling and Supply Arrangements

Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP)

Medicines are grouped into 'Schedules' according to the appropriate level of control required over access and availability to protect public health and safety. This process, known as 'scheduling', is undertaken by the National Drugs and Poisons Schedule Committee (NDPSC). The schedules recommended by the NDPSC are published in the Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP) which is then given legal effect through State and Territory legislation.

The SUSDP⁵ provides the following definition of Scheduled medicines:

- **Schedule 1** [This Schedule is intentionally blank];

- **Schedule 2. Pharmacy Medicine** – 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;
- **Schedule 3. Pharmacist Only Medicine** – Substances, the safe use of which requires professional advice but which should be available to the public from a pharmacist without a prescription;
- **Schedule 4. Prescription Only Medicine** – Substances, the use of supply of which should be by or on the order of persons permitted by State or Territory legislation to prescribe and should be available from a pharmacist on prescription;
- **Schedule 5. Caution** – Substances with a low potential for causing harm, the extent of which can be reduced through the use of appropriate packaging with simple warnings and safety directions on the label;
- **Schedule 6. Poison** – Substances with a moderate potential for causing harm, the extent of which can be reduced through the use of distinctive packaging with strong warnings and safety directions on the label;
- **Schedule 7. Dangerous Poison** – Substances with a high potential for causing harm at low exposure and which require special precautions during manufacture, handling or use. These poisons should be available only to specialised or authorised users who have the skills necessary to handle them safely. Special regulations restricting their availability, possession, storage or use may apply;
- **Schedule 8. Controlled Drug** – Substances which should be available for use but require restriction of manufacture, supply, distribution, possession and use to reduce abuse, misuse and physical or psychological dependence; and
- **Schedule 9. Prohibited Substance** – Substances which may be abused or misused, the manufacture, possession, sale or use of which should be prohibited by law except when required for medical or scientific research, or for analytical, teaching or training purposes with approval of Commonwealth and/or State or Territory Health Authorities.

Schedule 2 medicines

As outlined above, the purpose of classifying drugs and poisons into schedules is to group them according to the degree of regulatory control required over their availability. This takes into account such factors as toxicity, purpose of use, potential for abuse, safety in use and the need for the substance. The NDPSC classifies poisons as Schedule 2 when they are:

- substantially safe in use but where advice or counselling is available if necessary;
- for minor ailments or symptoms which can be easily recognised by the consumer and do not require medical diagnosis or management.⁶

Schedule 2 medicines should also have the following characteristics in normal use:

- suitability for self treatment of a minor ailment or symptom capable of being monitored by the consumer;
- extremely low abuse potential;
- low potential for harm from inappropriate use;
- low or well characterised incidence of adverse effects or side-effects, and contra-indications for which advice or counselling is available;
- only minor or well characterised interactions with commonly used substances or food for which advice or counselling is available;
- a wide Therapeutic Index;
- low risk of masking a serious disease; and
- low risk of compromising medical management of a disease.⁶

Poisons for therapeutic use (drugs) can be included in Schedules 2, 3, 4 and 8 with increasingly strict controls on access and availability as the schedule number increases. Medicines in Schedules 2 and 3, plus unscheduled medicines, are known as non-prescription or over-the-counter (OTC) medicines. Medicines which are not scheduled in the SUSDP can be sold through any distribution outlet which may include pharmacies, supermarkets or health food stores. It should be noted that some product names cut across different schedules. For example, Panadol tablets are unscheduled when supplied as packets of 12 or 24, but are an S2 product when supplied in packets of 50, 100 or 500.

The SUSDP, based on the decisions of the NDPSC, not only classifies drugs and poisons into Schedules for inclusion in the relevant legislation of the States and Territories, but also makes recommendations regarding other controls such as storage. In relation to Schedule 2 medicines, the SUSDP states that:

A person who sells or supplies Schedule 2 poisons must keep those poisons in such a way that public access to advice from a pharmacist is available if required.⁵

State and territory frameworks

The implementation of the SUSDP in terms of access to and supply of drugs and poisons is given legal effect through relevant State and Territory drugs, poisons and controlled substances legislation. State and Territory Governments classify the vast majority of drugs and poisons in accordance with the SUSDP⁷. For products other than those containing codeine, scheduling is harmonised across jurisdictions. For products containing codeine, there is some variation in schedule category between NSW and other states. For example, whilst Mersyndol tablets or capsules are available as S3 products in all jurisdictions, Mersyndol Daystrength caplets are S2 products when supplied as packets of 12's and 24's, and S3 products when supplied as packets of 48 except in NSW where they are S2.⁸

Differences also exist in storage requirements for S2 medicines across jurisdictions. All states and territories have legislation in place specifying that S2 medicines are only available from pharmacies or poisons licence holders. Whilst New South Wales, South Australia and Tasmania have some restrictions on storage (e.g. in NSW, S2 medicines must be kept apart from food), in all states/territories except Western Australia and Queensland S2 medicines are generally not required to be stored behind the counter. Legislation in WA and Queensland requires that S2 medicines be stored out of public access. This means that in these states, S2 medicines are stored behind the counter and are therefore not available for self-selection by consumers. These legislative frameworks for storage of S2 medicines are presented in Table 1.

Table 1: State/Territory poisons regulations-Storage Requirements⁹

State or Territory	S2 Poisons Regulation-Storage Requirements
Australian Capital Territory	Sale by medical practitioner, pharmacists, veterinary surgeons and poisons licence holders.
New South Wales	Available without prescription from pharmacists or poisons licence holders only. Storage in shop allowed, if apart from food.
Northern Territory	Retail sale from pharmacy, or by holder of Poisons Licence from premises more than 40 km by road from the nearest pharmacy.
Queensland	Available without prescription from pharmacies or licensed poison retailers only; Dentists, doctors and veterinarians may administer, prescribe or supply these poisons. Registered nurses may also administer; Supply to minors is limited to pharmacists on prescription and doctors, veterinarians and some nurses; Must be stored in a place that is not accessible to the public and apart from food.
South Australia	Available only from pharmacies and licensed medicines sellers (more than 25km from nearest pharmacy); Must be stored in an area of the retail premises to which the public is not permitted access OR if it is stored in a part of the premises to which the public is permitted access, it is stored not less than 1.2m above floor level or is enclosed in a child resistant blister pack or is stored in a container that has a capacity of not less than 5L or is stored in a container that has a gross weight of not less than 5kg.
Tasmania	Sale from pharmacies, doctors, dentists, veterinary surgeons and limited list from licensed country stores; Store out of public access in country stores. In pharmacies, store not more than 4m from and in sight of dispensary on level shelves.
Victoria	Labelling: PHARMACY MEDICINE; KEEP OUT OF REACH OF CHILDREN; Sale by pharmacy; limited selection for sale by licensed general dealers.
Western Australia	Sale by pharmacies or specially licensed country stores; Store out of public access.

It should be noted that storage of S2 medicines in pharmacies may not only be influenced by legislative requirements as outlined above, but also by Pharmacy Board recommendations within jurisdictions and by requirements of the Quality Care Pharmacy Program (QCPP), a quality assurance program developed by the Pharmacy Guild of Australia.

Supply of S2 medicines in pharmacies

S2 medicines are primarily available through community pharmacies in Australia, with some provision for supply by other licensed persons in remote areas where access to a pharmacy may be difficult.

Community pharmacies may be accredited through the QCPP, which incorporates a review of pharmacy performance against professional practice standards published by the Pharmaceutical Society of Australia. A full revision of these standards was last completed in November 2005 in conjunction with the revision of the QCPP to take into consideration recommendations that provision of pharmacist and pharmacy assistant advice and intervention should be based on consumer risk rather than product risk (i.e. medicine schedule). A subsequent review of the standards is currently being conducted with some incremental changes likely to be released in 2010. A mystery shopper program entitled Standards Maintenance Assessment (SMA) is conducted to assess and educate pharmacies regarding the application of these standards in accredited community pharmacies, but this program does not generally provide information on consumer satisfaction or perceived benefit obtained from pharmacy advice or discussions. At the end of 2009, around 80% of all community pharmacies were QCPP accredited or undergoing accreditation.¹⁰

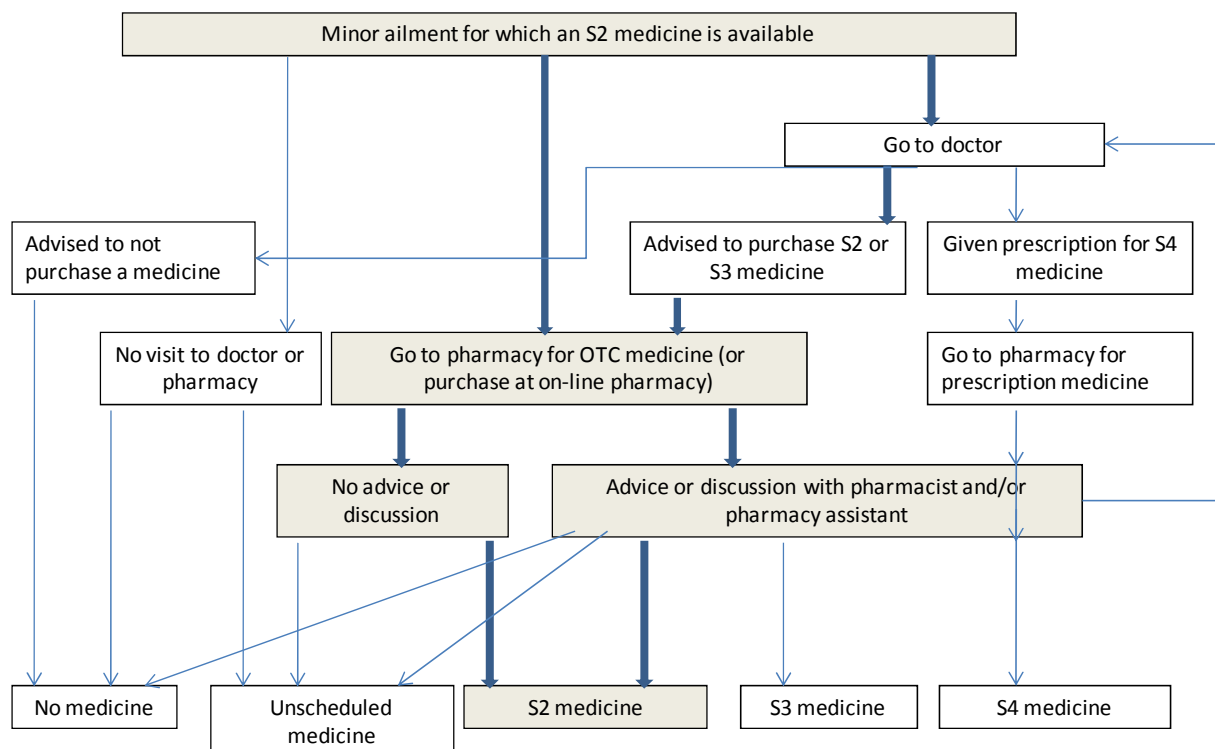
Several pharmacies or pharmacy groups also offer an online service for popular non-prescription and prescription pharmacy products (e.g. Chemist Australia, Pharmacy Direct, ePharmacy). For prescription medicine, these services require that the original prescription be mailed to the pharmacy in order for the product to be supplied. For S3, these services either require a prescription be sent prior to the supply of products by mail¹¹, or direct phone counselling with a pharmacist prior to the product being supplied^{12,13}. For S2 medicines, a phone number or pharmacy contact details are available on the website for consumers to call should they require additional information, although orders may be placed and products supplied without doing so. For products in some on-line pharmacies, if consumers place an order for three or more of the same S2 medicine for the same person, the order is upgraded to an S3 medicine and consumers are required to call and speak with the pharmacist after placing the order (e.g. ePharmacy.com.au). Pharmacies can be accredited for internet and distance dispensing via the QCPP.

The S2 purchasing pathway

S2 medicines are available for a range of minor ailments or symptoms which are usually easily recognised by the consumer. They include treatments for pain, coughs and colds, allergies or hay fever, sore or itchy eyes, indigestion or stomach cramps, vomiting or diarrhoea, haemorrhoids, fungal infections, warts, worms, hair loss, platelet aggregation, and anaemia due to low iron. These minor ailments for which S2 medicines are available have been termed *S2 conditions* in the context of this report.

Consumers with one or more of these minor ailments may choose to do several things. They may elect to not visit a pharmacy or use pharmacy products for managing the condition, they may visit a doctor for advice prior to visiting the pharmacy, or they may go directly to a pharmacy for advice or to purchase a product to manage the condition. Potential consumer purchasing pathways are outlined in Figure 1.

Figure 1: S2 consumer purchasing pathway



The NMP describes consumers as partners in ensuring quality use of medicines, stating that consumers should consider both the risks and benefits of medicines and take responsibility for good health outcomes. As more products move from prescription only to non-prescription items, consumers are increasingly able to self-select their medicines. In order to ensure that consumers are able to consider the risks and benefits of these medicines, they need to have access to information about their medicines including information regarding the safe and effective use of medicines as stated in the NMP Quality Use of Medicines. In Australia, pharmacists are currently the predominant source of information for OTC medicines, with both pharmacists and doctors seen as the most reliable sources of information about these products¹⁴. Other overseas studies have reported patient information leaflets as reliable sources of medicines information also.¹⁵

With increasing deregulation of medicines worldwide, more medicines are becoming available from outlets other than pharmacies (note that in Australia this generally only applies once a medicine is no longer scheduled). Several overseas studies have reported the increasing proportion of consumers choosing to purchase these medicines at non-pharmacy outlets, but also on the value placed on pharmacy advice with these medicines. A Canadian study found that although 81.2% of consumers participating in the study were aware of the availability of certain non-prescription medicines in convenience stores, only 42.3% had purchased them outside the pharmacy, with pharmacists held in reasonably high regard as a potential resource during purchases.¹⁶ A study done in Northern Ireland to investigate the general public's opinion and perceptions of OTC medicines found that 82.1% of non-prescription purchases were made from pharmacies, with pharmacist recommendation being the main influence on choice of medicine.¹⁷ This study also found that directions on the OTC medicines pack were also important as 74.5% of respondents reported that they always followed these directions. Several studies have considered how much consumers would be willing to pay for pharmacy advice regarding proper use of OTC medicines^{18,19}. These studies were done in the United States and found that consumers would be willing to pay around US\$5 for a pharmacy consultation of around five minutes.

Review of Scheduling Arrangements

Given increasing numbers of consumers seeking to self medicate, who are also being asked to self-manage their chronic conditions, and the increasing numbers of products moving from prescription to non-prescription status, the need to explore the costs and benefits of the current scheduling and associated supply arrangements for non-prescription medicines in Australia has been considered through a number of past studies. These provide the background for the current project.

*The Review of Drugs, Poisons and Controlled Substances Legislation (the Galbally Review)*²⁰

A review of drugs, poisons and controlled substances legislation (the Galbally Review) was commissioned by the Council of Australian Governments (COAG) as part of the National Competition Policy in 1999. One of the specific terms of reference of the Review was to consider the processes and arrangements for decisions on scheduling. The Report of the Review was released in January 2001 and an Australian Health Ministers' Advisory Council (AHMAC) Working Party was established to prepare a response which was released in April 2003.²¹ The Report and the response were endorsed by the COAG in 2005.

The Galbally Review considered the costs and benefits of two pharmacy schedules, S2 Pharmacy Medicine and S3 Pharmacist Only Medicines. The Review confirmed that these medicines are restricted to pharmacy to ensure all consumers have adequate information to enable them to use the most appropriate medicines for their condition safely and effectively and to reduce the risk of medicines being abused or used in the illicit manufacture of drugs. The Review reported that the costs of maintaining OTC schedules for consumers may relate to limitations on accessibility and cost of medicines, but that the benefit for consumers is the availability of advice on the selection and safe and effective use of these medicines²².

Three alternative options to the current schedule were considered by the Review. These were:

- **Option 1.** Abolish OTC scheduling and rely on general legislation such as consumer protection legislation and common law duty of care so that products are available from a range of general outlets;
- **Option 2.** Abolish Schedule 2 and retain the criteria and level of professional intervention to redress the information asymmetry that currently exists for S3; and
- **Option 3.** Replace the current two schedules with a single OTC schedule in which case criteria, including the level of professional intervention required for the new OTC schedule, would need to be developed.

Options 1 and 2 were considered to offer no net benefit to the community. The Review acknowledged that the third option may offer considerable savings to the industry and government, but was unable to compare the costs and benefits of one schedule versus the current two schedules due to a lack of data related to the differentiation between the level of intervention by the pharmacist or pharmacy assistant's counselling and its impact on health outcomes. It proposed that the Pharmacist should use his/her professional judgement to establish the level of risk

associated with a particular consumer's use of a product rather than risk being based on the chemical characteristics of the substance.

The Galbally Report made 27 recommendations relevant to medicines and poisons controls, particularly regarding legislation that imposes restrictions on who can supply these substances, to whom they can be supplied, how they can be supplied and in what circumstances. Recommendations 3 and 5 of the Report are particularly relevant to this project.

Recommendation 3 of the Report states that all Commonwealth, State and Territory legislation regarding supply of scheduled medicines should state the objectives of this legislation. Aspects of Recommendation 3 relevant to S2 medicines which were recommended and endorsed by COAG are detailed below.

Recommendation 3: Objectives of scheduled medicines

That all Commonwealth, State and Territory governments agree that legislation covering the supply of scheduled medicines should explicitly set out its objectives. These objectives are to ensure that:

- In the case of over-the-counter medicines, 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 status

Galbally R, Final Report Part A, p23

Recommendation 5 of the Report addressed the current scheduling model in Australia and recommended that baseline data be established and evaluated in order to measure the effectiveness, including any improvement in health outcomes, of the controls on access to OTC medicines and the professional standards for the provision of counselling of consumers on the appropriate selection and purchase of these products. Details of this recommendation are provided below.

Recommendation 5: Medicine schedules and associated professional support

That all Commonwealth, State and Territory governments agree that:

- a) Funds be allocated from the Pharmacy Development Program under the Third Pharmacy Agreement to commission:
 - independent research that provides baseline data and evaluation. Such research should demonstrate any improvements in health and other outcomes that can be attributed to the higher level and quality of pharmacy counselling flowing from the new Quality of Care Standards, the implementation of which is being supported and funded under the Third Community Pharmacy Agreement. The outcomes of this research should be reported to the National Coordinating Committee on Therapeutic Goods by the end of June 2004.
 - the development of comprehensive standards that facilitate a risk-based approach to professional intervention in the supply (including the distance supply) of scheduled products to individual consumers. The PSA should be responsible for developing these standards in consultation with Pharmacy Boards, the Pharmacy Guild of Australia, Pharmacists Branch of the Association of Professional Engineers, Scientists and managers of Australia (APESMA), other relevant professional groups and consumer organisations, and presenting those standards to the National Coordinating Committee on Therapeutic Goods by the end of June 2004.
- b) That the National Coordinating Committee on Therapeutic Goods present the Australian Health Ministers Council (AHMC) with a report by the end of July 2004 on the results of the research and on the Standard proposed to be developed. This Report will enable Health Ministers to:
 - monitor the extent to which the restrictions on access to scheduled medicines, supported by improved counselling, deliver improved health and other outcomes;
 - determine whether there is an appropriate and cost effective control system for meeting the objectives of restricting access to over-the-counter medicines; and
 - review the implications of the expanded standard for the integrated operation of schedules and pharmacy practice.
- c) That until the Australian Health Ministers have considered the report at the end of July 2004, Schedules 2, 3, 4 and 8, and associated Appendices, be retained. If at that time there is no evidence to support the benefits of retaining Schedules 2 and 3 they should be combined and new criteria developed.

Galbally R, Final Report Part A, p36

Cost Benefit Analysis of Pharmacist Only (S3) and Pharmacy Medicines (S2) and Risk-Based Evaluation of the Standards²³

In response to Recommendation 5 of the Galbally Review, funding was provided by the Australian Government under the Third Community Pharmacy Agreement for the Pharmacy Guild to commission an independent study to consider whether there are benefits in retaining the dual S2/S3 non-prescription scheduling framework in Australia.

This study was conducted by a team of researchers from the University of Sydney, University of South Australia and University of Queensland. The final report in June 2005 was titled '*A Cost-Benefit Analysis of Pharmacist Only (S3) and Pharmacy Medicines (S2) and Risk-Based Evaluation of the Standards*'.

This study found that there was no significant difference in the rate of interventions for S2 and S3 medicines, where an intervention was defined as *the promotion of the Quality Use of Medicines by the identification and attempted resolution of an actual or potential drug or symptom related problem arising from the OTC request*. There was a tendency towards a higher rate of 'highly clinically significant interventions' (i.e. those averting harm) with S3 over S2 medicines. Measurement of the health care avoided as the result of interventions suggested that community pharmacy was playing a major role in preventing a 'large number' of GP visits and hospital admissions. The major group of consumers at risk of adverse effects from the intended use of non-prescription medicines were those with underlying conditions including hypertension, asthma and pregnancy. According to pharmacist or pharmacy assistant self-report, pharmacy advice was well accepted by most consumers (up to 90.3%). A total of 84% of participating consumers reported being very satisfied with the advice received.

The overall project recommendation was that *from an analysis of Australian and international scheduling arrangements, clinical benefit perspective, cost-benefit and risk-management perspective, the current non-prescription scheduling system be maintained with regards to separate Pharmacist Only (S3) and Pharmacy Medicines (S2) schedules*. One of the other study recommendations was that better education of consumers needs to occur for those making direct product requests with underlying medical conditions including hypertension, asthma, heartburn/ulcer, arthritis, heart disease, diabetes or pregnancy.

A Report to the Australian Health Ministers' Conference on the results of the research into 'A Cost Benefit Analysis of Pharmacist Only (S3) and Pharmacy Medicines (S2) and Risk-Based Evaluation of the Standards, August 2005'²⁴

A report was prepared by the NCCTG for the Australian Health Ministers' Conference (AHMC) that considered the cost benefit analysis of Pharmacist Only and Pharmacy Medicines.

The NCCTG Report commented that, while the overall results of the research demonstrated that there was likely to be a marginal benefit in retaining the S2 and S3 schedules, the evidence presented in the report was not compelling and NCCTG members were unable to conclude that the evidence clearly supported the benefit of retaining both schedules. The NCCTG also commented that initiatives aiming to improve pharmacy performance in meeting Quality of Care Standards had not been in place long enough to assess risks in moving to a single schedule for non-prescription medicines.

The Report commented that the NCCTG was particularly concerned that there was potential for the research methodology to skew the results of the epidemiology study as it relied on participants being self-selected rather than being selected at random. Supplementary data were considered by the NCCTG on pharmacy provision of counselling via the results of the Mystery Shopper Program.

The NCCTG made several recommendations based on the Cost-Benefit Analysis research and the results of the Mystery Shopper Program at the time. Recommendations relevant to the current project are outlined in the box below.

Recommendations of NCCTG Report

- a) The scheduling model for medicines retain the Pharmacy (S2) and Pharmacist Only (S3) schedules for non-prescription medicines for an interim period of 5 years;
- b) The QCPP be requested to submit the summarised results of the Mystery Shopper Program to the NCCTG on a yearly basis for the next five years in order for the NCCTG to monitor any improvement in compliance with the voluntary S2/S3 standards;
- c) At the end of the five year period, the restrictions on access to OTC medicines be reassessed in Australia and New Zealand to determine if the objectives of these restrictions are being met, taking into account relevant data, including the data gathered from the Mystery Shopper Program and an analysis of pharmacies which are not QCPP accredited; and
- d) The QCPP review of the S2/S3 pharmacy standards consider integrating into the standards the identification of risks to consumers making a product based request and appropriate professional intervention by pharmacists to address those risks.

NCCTG Report, August 2005²⁴

Relationship to current project

The current project was to collect some of the data required by the NCCTG in order to reassess the restrictions on access to S2 medicines in Australia, arising from Recommendation (c) of the NCCTG Report as outlined above. The objective of restrictions imposed by scheduling and referred to in Recommendation (c) above was stated in Recommendation 3 of the Galbally review. In relation to OTC medicines (including S2 medicines), this objective 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 status.*

The specific objectives of the current project were to:

- (1) Identify the number of customers seeking to use S2 medicines and compare this to numbers known to be currently using S2 medicines;
- (2) Determine factors affecting supply of and access to S2 medicines;
- (3) Identify, analyse and quantify the perceived customer benefit and need for pharmacy advice about S2 medicines; and
- (4) provide pilot, interim and annual data sets to inform the final submission to the NCCTG enquiry.

It should be noted that Project Objective 3 originally read: *identify, analyse and quantify the perceived **and actual** customer benefit and need for pharmacy advice about S2 medicines.* A decision was made to revise this objective at the Project Advisory Panel meeting of 1st June 2009 where it was agreed that differentiation between perceived and actual benefit was difficult without collecting data on health outcomes and potential medical events averted (eg. events arising from product misuse due to lack of adequate advice). Without these additional data, perceived versus actual benefit becomes dependent on the perspective of the respondent and the viewer. For example, an argument could be made that perceived benefits are those perceived by pharmacy staff and actual benefits are those recalled by the consumer, but this does not allow for the fact that consumers may perceive no benefit in aspects of pharmacy advice which may lead to actual benefits in terms of health outcomes or potential events averted.

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?
- (6) What proportion of the population has purchased an S2 medicine on-line in the last 12 months? What are their reasons for purchasing S2 medicines on-line? Was advice received from pharmacy staff prior to purchase delivery?

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

- (7) What are the key reasons given by purchasers of S2 medicines for going to the pharmacy to make their purchase?
- (8) What proportion of purchasers of S2 medicines seek and/or receive pharmacy advice or discussion regarding their purchase?
- (9) 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?
- (10) What type of advice do purchasers of S2 medicines recall receiving from the pharmacy and what are the perceived benefits of this advice?
- (11) How satisfied are purchasers of S2 medicines with pharmacy advice or discussions provided?
- (12) 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 (see Appendix R for list of possible S2 medicines reported by CATI participants)
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 ⁶
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 ²³

Materials and Methodology

Overall Project Design

The project 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. A total of 4,500 CATI surveys and 150 pharmacy visits were conducted during the project, split equally across the three data collection periods. CATI interviews were conducted by Market Metrics, 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 S2 purchasers 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 practicing 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, practicing pharmacists and a practicing 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.^{25,26,27} Draft materials were piloted in four pharmacies and 32 respondents to the CATI survey. HMA staff listened in to ten telephone interviews conducted by Market Metrics during piloting to ascertain any difficulties with question design or survey implementation. 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 Market Metrics 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 design²⁵. 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 medicines²³. 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 2005-06²⁸.

Slight 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 an S2 condition or medicine, and/or purchasing an S2 medicine, but on project roll-out was only used for S2 purchasers 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 (see *Process for Pharmacy Visit* on page 18).

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 as shown in Table 2. Other existing classification systems for metropolitan or non-metropolitan status exist (i.e. Rural, Remote and Metropolitan Area classification (RRMA), Accessibility/Remoteness Index of Australia (ARIA) and Australian Geographic Classification System (AGCS)) but the Australian Institute of Health and Welfare (AIHW) suggests that shifting postcode and statistical local area boundaries can complicate the application of these classifications to data collections²⁹. AGCS data²⁹ do indicate however that approximately two thirds of the Australian population live in major cities, which approximates the 64% living in capital cities obtained from ABS data (see Table 2). The sample stratification provided by the market research organisation conducting the CATI surveys, Market Metrics, was based on postcodes linked to ABS data provided to Market Metrics by ABS in 2002. These were checked against ABS population data observed at 30 June 2006 as shown in Table 2. As there was a close alignment between 2002 and 2006 Australian population state/territory and metropolitan/non-metropolitan strata, postcodes used by Market Metrics to stratify the CATI sample were also used by HMA to stratify the pharmacy sample.

Table 2: Australian population, pharmacy population and survey targets by geographic strata (state/territory and metropolitan/non metropolitan location)

	% of Australian population 2006 (n=20.70M)*		% of Australian population 2002 aged 18+ years (n=14.86M)**		CATI survey target numbers based on 2002 stratification		% of pharmacy population (n=4,624)***		Pharmacy survey target numbers	
	Metro	Non metro	Metro	Non metro	Metro	Non metro	Metro	Non metro	Metro	Non metro
NSW	20.7%	12.2%	21.5%	12.4%	967	557	21.0%	13.1%	31	20
total	32.9%		33.9%		1,524		34.1%		51	
VIC	18.1%	6.7%	18.7%	6.7%	822	303	15.7%	7.5%	24	11
total	24.8%		25.0%		1,125		23.2%		35	
QLD	8.8%	11.0%	8.6%	10.1%	385	453	7.4%	12.2%	11	18
total	19.8%		18.6%		838		19.7%		29	
WA	7.3%	2.6%	7.2%	2.5%	324	112	7.7%	2.5%	11	4
total	9.9%		9.7%		437		10.2%		15	
SA	5.5%	2.0%	5.8%	2.0%	262	92	5.9%	2.4%	9	4
total	7.6%		7.9%		354		8.3%		13	
TAS	1.0%	1.4%	1.0%	1.4%	45	62	1.1%	1.7%	2	2
total	2.4%		2.4%		107		2.8%		4	
NT	0.6%	0.5%	0.5%	0.4%	24	18	0.4%	0.2%	1	0
total	1.0%		0.9%		42		0.6%		1	
ACT	1.6%	0.0%	1.6%	0.0%	74	0	1.3%	0.0%	2	0
total	1.6%		1.6%		74		1.3%		2	
Total metro or non metro	63.6%	36.4%	64.5%	35.5%	2,903	1,597	60.4%	39.6%	91	59
Total	100%		100%		4,500		100%		150	

*ABS 2006 observed data by capital city/balance of state for each state/territory³⁰

**ABS 2002 data as supplied by Market Metrics 2008

***DoHA pharmacy location data supplied 2008, excluding pharmacies without information on pharmacy size

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 as supplied to Market Metrics. These data and the CATI survey target numbers based on age and gender strata are provided in Table 3.

Table 3: Australian population and CATI survey target numbers by age and gender

Age Group	% of Australian population 2002 aged 18+ years (n=14.86M)*			CATI survey target numbers based on 2002 stratification			
	Males	Females	Total	Males	Females	Total	Total each round
18-24	6.5%	6.3%	12.8%	293	284	576	192
25-34	9.6%	9.7%	19.4%	433	438	872	291
35-44	10.0%	10.1%	20.1%	449	455	903	301
45-54	9.0%	9.0%	18.0%	403	407	810	270
55-64	6.6%	6.4%	13.0%	296	289	585	195
65-74	4.4%	4.6%	9.0%	196	208	404	135
>= 75	3.1%	4.7%	7.8%	139	212	350	117
Total	49.1%	50.9%	100.0%	2,208	2,292	4,500	1,500
Total each round				736	764	1,500	

* ABS 2002 data as supplied by Market Metrics 2008

Pharmacy sampling was based on a list of all known pharmacies in Australia (n=5,075) provided to HMA by 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. The proportionate representation of pharmacies within each stratum and the pharmacy target numbers are presented in Table 2. In addition to geographical stratification, the sampling process 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. Based on an initial low participation rate of 28% with the first 50 pharmacy letters sent, over 300 letters of offer were sent in each data collection round. Pharmacies were then contacted by telephone one week later, 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. Visits were scheduled from Monday to Saturday, with random allocation of morning or afternoon visits.

Process for Pharmacy Visit

An HMA staff member visited participating pharmacies at the agreed time. At each pharmacy, HMA staff firstly met with the pharmacist to review the project, ascertain the best position to conduct consumer and staff surveys, and to complete administrative tasks. If convenient, the pharmacist survey was also conducted at this time, or otherwise at a suitable time during the course of the visit. After discussing with the pharmacist the best process for informing pharmacy assistants about the project, HMA staff briefed pharmacy assistants and/or provided information cards outlining the project and their involvement. These laminated cards were left on the serving counter to prompt staff to recruit appropriate consumers during the course of the visit. If convenient, pharmacy assistant surveys were also conducted at this time. Any pharmacy assistants arriving after initial briefing were briefed as soon as convenient.

HMA staff remained in each pharmacy for four hours (these four hour timeslots were distributed across morning, afternoon and early evening). During this time, pharmacy staff asked all consumers who enquired about or purchased an S2 medicine if they would be interested in participating in a short survey. The following script was recommended and provided to pharmacy staff for use in requesting consumer participation:

"Just before you go, would you have a few minutes to talk to someone about buying medicines in the pharmacy today. We have a person here who is helping the Pharmacy Guild collect some information about purchasing medicines or treatments. You won't need to tell them what you came in for or what you bought."

Consumers agreeing to participate were directed to HMA staff who conducted the survey. Unless otherwise requested, HMA staff asked the survey questions and completed the form for the consumer.

Data Entry and Management

Data entry for CATI surveys occurred during the interview process. These data sets were provided to HMA in Excel format by Market Metrics. 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 MIMS³¹:

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. For example, Nurofen Plus tablets may be either S2 or S3 depending on pack size and state/territory location. In NSW, all pack sizes of Nurofen Plus are S2, but in all other states and territories packs of 12 and 24 are S2 while 48's and 72's are S3. In non-NSW states therefore, a response of Nurofen Plus was categorised as S2/S3, while in NSW the response was always categorised as S2. 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.

Response categories for all other open-ended CATI and in-pharmacy survey questions are provided in Appendix E.

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 analyses of 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.

The results of tests of statistical significance have been included in either tabular form or as part of the discussion regarding results.

Results

A total of 4,500 CATI respondents, 150 pharmacies and 734 in-pharmacy consumers who had purchased an S2 product participated in the project. This chapter presents demographic data relating to study participants and results addressing project objectives. Frequency tables for all survey questions are provided in Appendix P (CATI Survey) and Appendix Q (In-pharmacy Survey).

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%.

The numbers of CATI and pharmacy participants by geographic strata are presented in Table 4, and by age and gender strata presented in

Table 5. 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 as previously presented in Table 2 and Table 3. Slight variation from target numbers in CATI participants by age only are accounted for in extrapolation to the current Australian population and in analyses of results by age. These slight variations occurred due to the difficulty recruiting certain age quota within the data collection timeframes for each round. 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 5. 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 women³².

Table 4: 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 5: 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*	
Known S2 purchasing population	366	38.7%	579	61.3%	945							

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

Table 6 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 6: 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 7 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. The number and percentage of CATI S2 purchasers in each data collection round have been included in Table 7 and indicate little difference in proportion of S2 purchasers between data collection rounds. Around half of the in-pharmacy participants were 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 7: 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							Total
Data collection round		March/ April1	June/ July	October/ November					
CATI	No.	1,501	1,500	1,499				4,500	
	%	33.4%	33.3%	33.3%					
CATI S2 purchasers	No. (% of Round)	317 (21.1%)	302 (20.1%)	330 (22.0%)					
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	1,049	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%		

*Number 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.

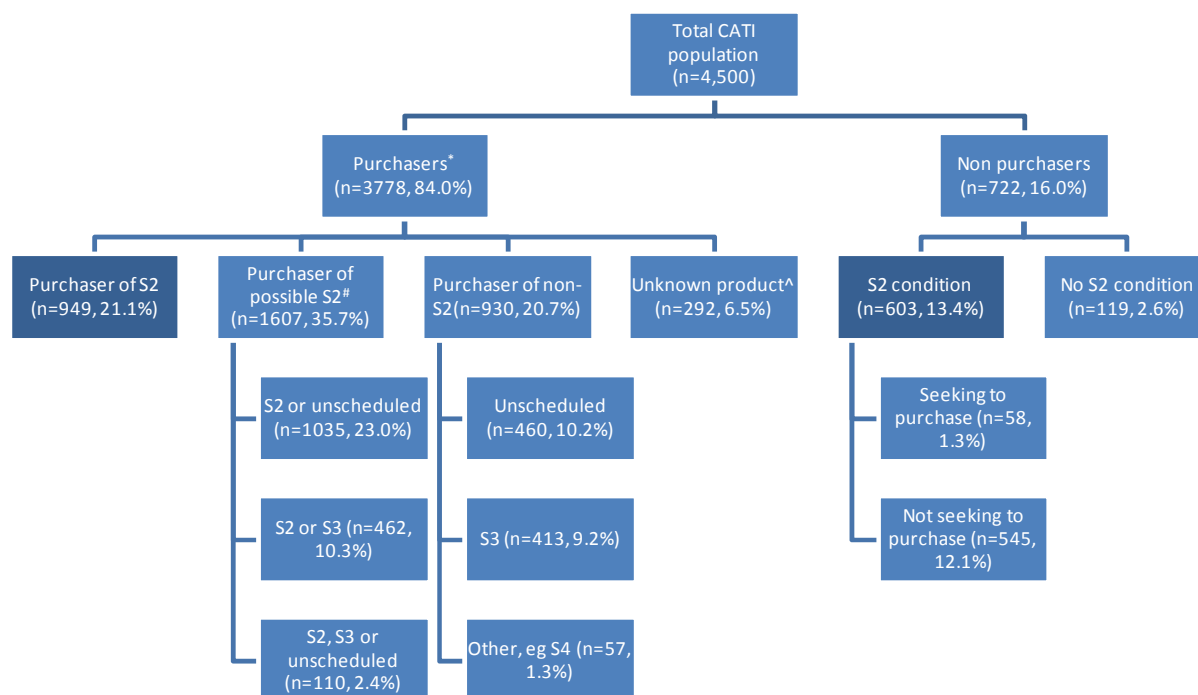
Population purchasing or not purchasing S2 medicines

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 2. Overall purchase categories are presented as a pie chart in Figure 3.

As presented in Figure 2, 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 28.

Figure 2: Numbers and percentage of CATI survey population (n=4,500) according to reported product purchase categories in pharmacy without a prescription (flow diagram)

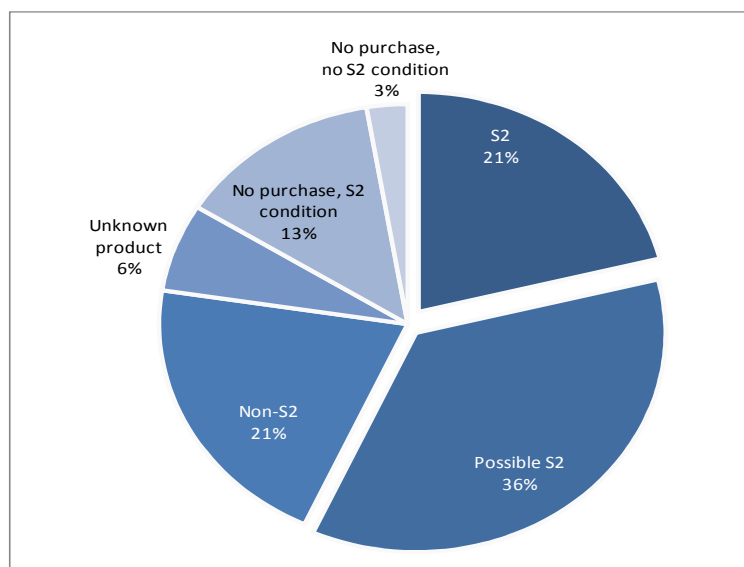


*Total purchasers include 9 on-line purchasers (S2=4, possible S2=3, unknown=2) and 37 purchasers who did not report an S2 condition (S2=2, possible S2=18, Non S2 or unknown=17)

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

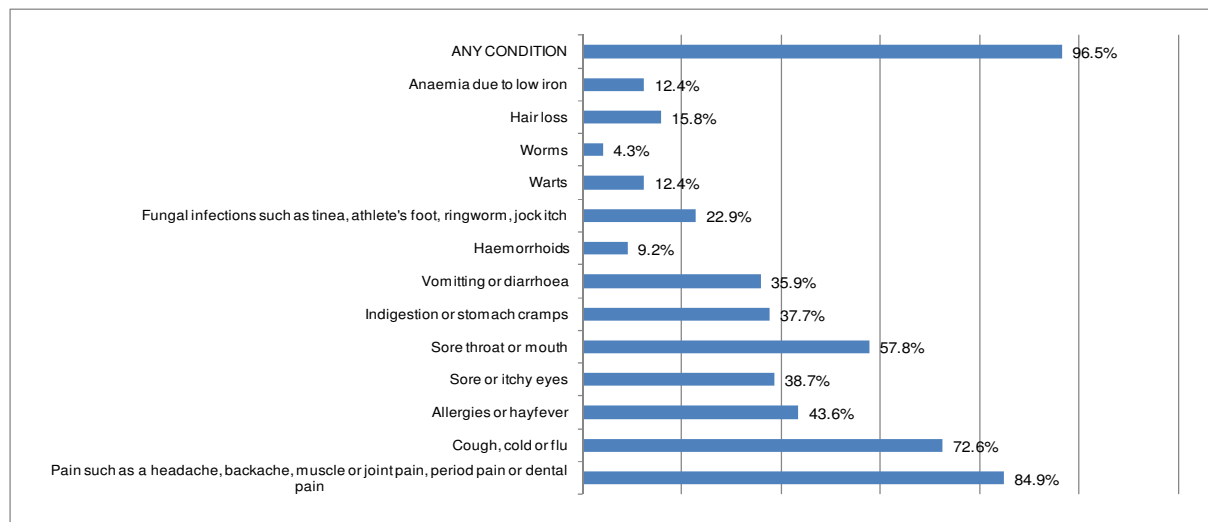
^Unknown product includes respondents who could not recall product name (n=215) and those where product name was not decipherable as stated by consumer and/or recorded by CATI interviewer (n=77)

Figure 3: 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. Figure 4 indicates the percentage of CATI participants reporting each of the prompted S2 conditions. 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 (data not shown), reflecting participant recollection according to seasonal variation. For example, the percentage of consumers indicating experience of cough, cold or flu in the previous 12 months went from 65.8% in Round 1 to 77.9% in Round 2 and 74.1% in Round 3. Reported allergies or hay fever went from 45.2% in Round 1 to 39.2% in Round 2 and back up to 46.3% in Round 3.

Figure 4: Percentage of CATI participants reporting each S2 condition in the past 12 months in themselves, partner, children or other dependents (n=4,500)*



*Note that respondents could report more than one condition

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 2)

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 2)
= **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. This is discussed under *Limitations* of the project on page 47.

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. The population splits across these variables and the significance of any association between each of these variables and purchasing behaviour are presented in Figure 5 to Figure 9.

As shown in Figure 5 and Figure 6, 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, $p=0.07$).

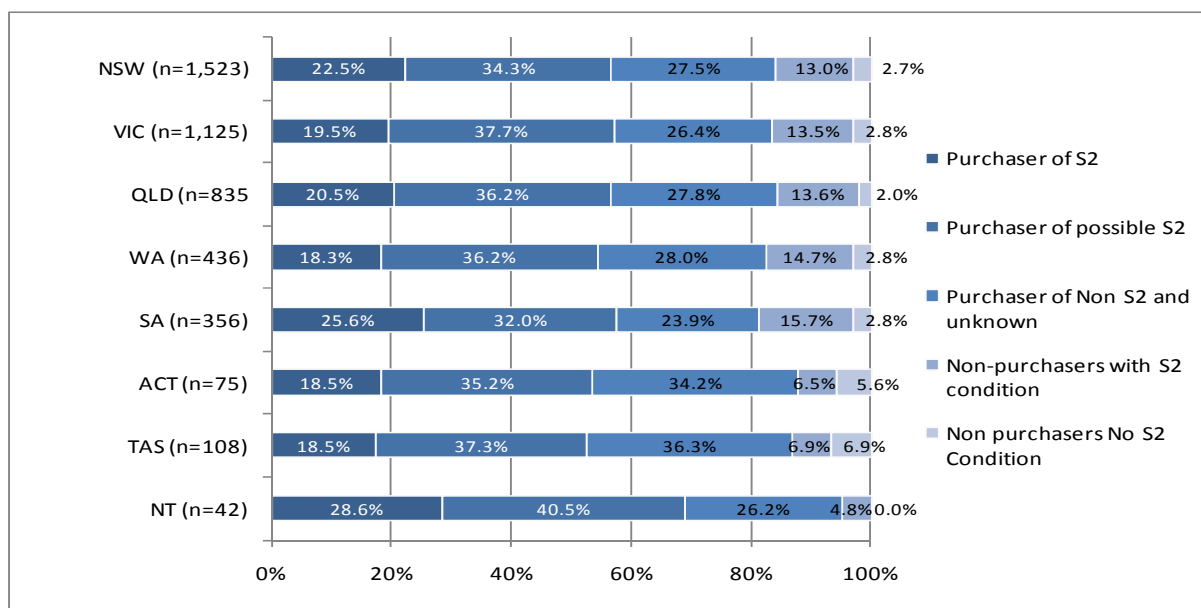
As shown in Figure 7 to Figure 9, a statistically significant association was found between S2 purchase or non-purchase category and respondent age (Chi-squared= 221.14, $p<0.0001$), gender (Chi-squared=137.59, $p<0.0001$) and annual household income (Chi-squared=158.21, $p<0.0001$).

Figure 7 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 8 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.

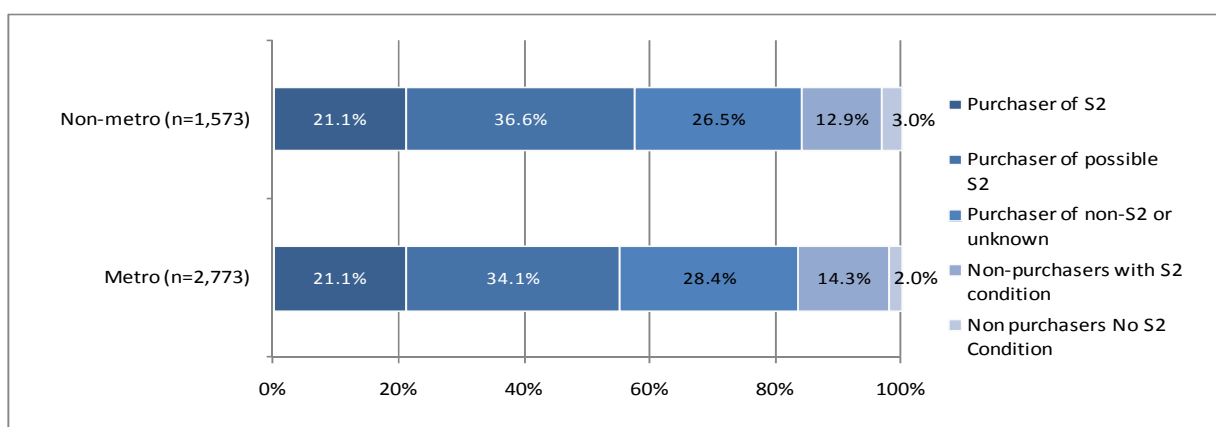
As demonstrated in Figure 9, participants in households where the household income was >\$80,000 per annum were also more likely to purchase a known S2 product than those where household income was <\$80,000. Participants living in households where annual income was <\$30,000 are more than twice as likely as highest income households to make no product purchase despite having an S2 condition.

Figure 5: Reported product purchase in CATI participants over past 12 months by state/territory (n=4,500)



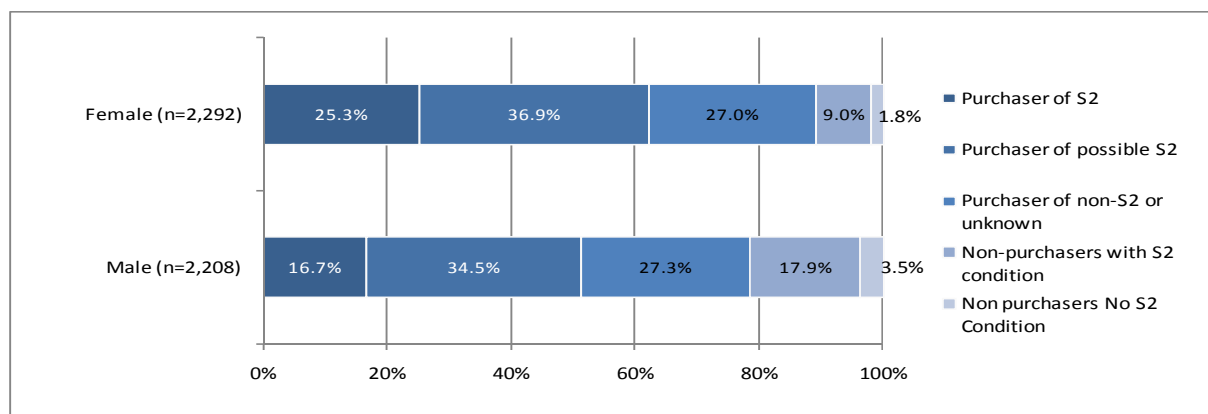
(Chi-squared=53.24, p=0.1146)

Figure 6: Reported product purchase in CATI participants over past 12 months by metropolitan or non-metropolitan location (n=4,500)



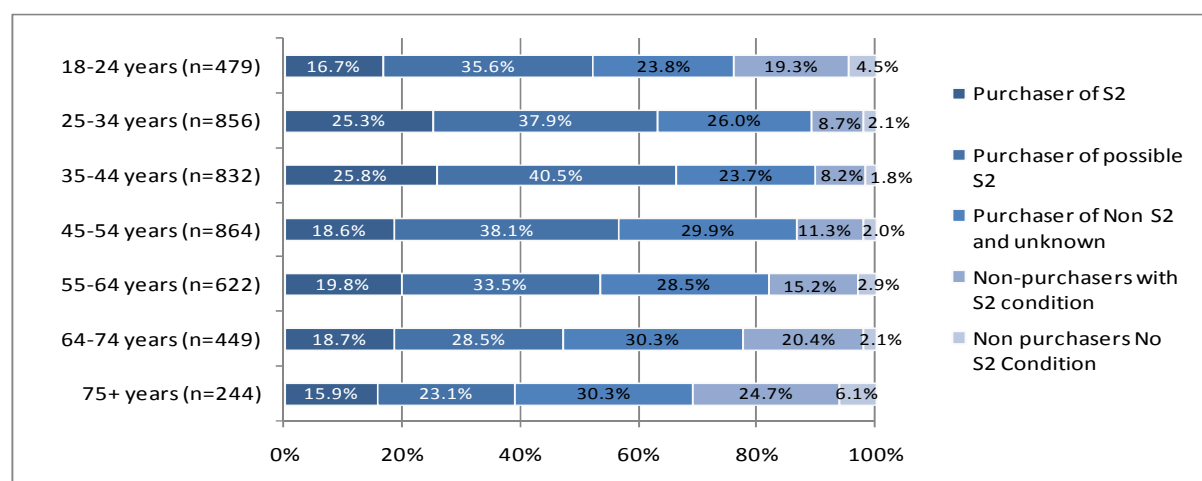
(Chi-squared=11.82, p=0.0659)

Figure 7: Reported product purchase in CATI participants over past 12 months by gender (n=4,500)



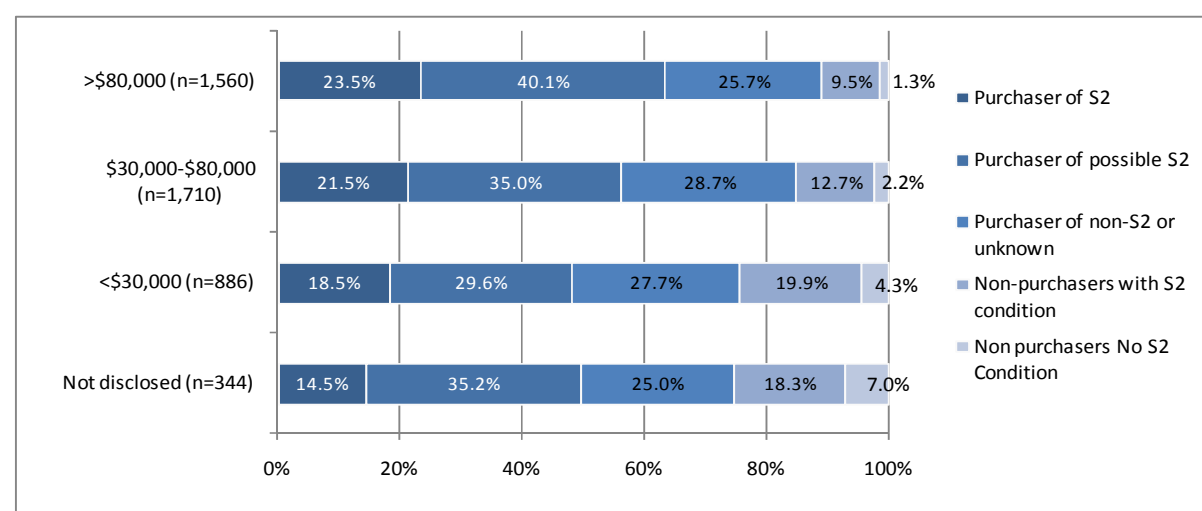
(Chi-squared=137.59, p<0.001)

Figure 8: Reported product purchase in CATI participants over past 12 months by age (n=4,500)



(Chi-squared=221.14, $p < 0.001$)

Figure 9: Reported product purchase in CATI participants over past 12 months by annual household income (n=4,500)



(Chi-squared=158.21, $p < 0.001$)

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, $p < 0.01$). Further detail on these analyses is included in Appendix F.

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 9 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 possible reasons for non-purchase. As the key driver for non-purchase was unknown for each respondent, the presence or absence of clear 'internal' factors affecting purchase decision was taken as the delineator of those seeking or not 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'.

Non-purchasers with S2 condition seeking to use medicines for their condition were therefore defined as anyone giving a 'false' or neutral response to each of the propositions above. Using this definition, 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

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

Upper estimated proportion of the population seeking to use S2 medicines

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

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 9.

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 8. 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 8: 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 cost of medicines was perceived as high by almost half of respondents, it made no significant difference to the purchase or non-purchase decision, except in lowest annual income households which were significantly associated with belief that S2 medicines cost too much and least propensity to purchase S2.
- 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, including propositions given in CATI survey, are presented in Table 9. Responses for non-purchasers split into seekers versus non-seekers are also presented in Table 9, but have not been used in further analyses in this report.

Participants in the CATI survey were asked to respond to a series of propositions regarding purchase of S2 medicines in the pharmacy or their reasons for non-purchase. Where response categories for these propositions changed from a yes/no response in round one to a rating scale indicating level of importance in rounds two and three (see CATI survey instrument Appendix A), 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.

Table 9: Potential factors affecting access to S2 medicines experienced by non-purchasers with an S2 condition and purchasers of S2 medicine in CATI survey (n=4,500)

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. For non-purchasers overall, cost of S2 medicines was given as a reason for non-purchase in 45.8% of respondents, not wanting to speak with pharmacy staff about condition in 33.9%, and difficulty getting to a pharmacy in only 6.6% of respondents.

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. These analyses are included as Appendix G. 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, $p=0.19$). These are explored further below.

Talking to pharmacy staff. 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%). As there was a statistically significant association between S2 purchase behaviour and whether the respondent minded talking to pharmacy staff about their condition, 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. These analyses are included in Appendix H. 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.

Cost of S2 medicines. 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, $p<0.0001$). This analysis is included in Appendix I. As outlined previously, lowest income households are also least likely to purchase an S2 or possible S2 medicine.

Getting to pharmacy. 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, $p<0.001$). These analyses are included in Appendix J. 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 10. Note that these questions specifically asked for factors "making it difficult" to access S2 medicines and results have been worded to reflect this. Responses from the CATI survey discussed in the previous section were designed to address reasons for non-purchase or S2 purchase more generally, and were therefore reported as factors affecting access rather than factors making access difficult.

Results in Table 10 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 10: 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	In-pharmacy S2 Purchasers (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"

Comparing prompted results from consumer recall within the last 12 months (Table 9) with unprompted results for consumers who had just made an S2 purchase in the pharmacy (Table 10) demonstrates that despite 49.1% of those reporting S2 purchase in the last 12 months believing that S2 medicines cost too much, this was not a top-of-mind factor perceived as making it difficult to access S2 medicines at time of purchase. This supports results found in the CATI survey where perceived high cost was not associated with purchase decision (noting that those from lowest income households are more likely to believe that non-prescription medicines cost too much and also less likely to purchase an S2 medicine). The most commonly given reasons for difficulty getting S2 medicines by in-pharmacy consumer respondents were around difficulty getting to a pharmacy, and these reasons were also recalled by a similar low percentage (4.6%) of S2 purchasers in CATI based on recollection of S2 purchase in the last 12 months.

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. These results are presented in Table 11. 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.

Table 11: Factors making access to S2 medicines easy for consumers given by S2 purchasers in pharmacy, pharmacists and pharmacy assistants (open ended question)

Factors making getting S2 medicines easy for consumers	In-pharmacy S2 Purchasers Round 3 (n=235)	Pharmacists (n=150)	Pharmacy Assistants (n=150)
Easily accessible / Convenient location	25.5%	18.7%	10.0%
Advice available / free	11.9%	26.7%	32.0%
Trusted qualified helpful staff	11.5%	44.7%	36.7%
Personalised service (i.e. know their customers)	4.7%	6.7%	9.3%
Competitive product prices	3.4%	4.0%	2.7%
Self selection	2.1%	12.7%	15.3%
Additional services (i.e. home delivery, phone advice)	1.7%	6.7%	8.7%
Clear signage or store layout	1.3%	14.7%	14.0%
High staff to customer ratio	0.9%	7.3%	7.3%
Extended opening hours	0.4%	29.3%	12.7%
Speed of service	0.4%	2.7%	2.7%
Large range of alternatives	0.4%	11.3%	12.7%
Access to interpreter	0.0%	3.3%	1.3%
Other (cited by < 5 respondents in each group)*	13.2%	10.7%	9.3%
None stated	42.1%	9.3%	25.3%

* Examples of responses on 'Other' include "had a day off work today", "I got a lift to the shops"

On-line purchasers

In the CATI survey, 10 consumers stated that they had purchased a product for an existing S2 condition reported purchasing the product at an on-line pharmacy. Four of these products were known S2 products, three were possible S2 products and three were other products. Consumers were prompted in the survey as to whether a reason for on-line purchase applied to them. Reasons for on-line purchase were considered in total for these consumers rather than for known S2 purchasers only due to the small numbers in the groups. All 10 on-line purchasers stated that a reason for on-line purchase was that they knew which product they wanted, with eight of them agreeing that the product was cheaper if they purchased on line, and 6 of them stating that purchasing on-line was more convenient for them. Two consumers stated that they had purchased on-line as they did not want to receive pharmacy advice, although none stated that having to talk about ailments or medical conditions in the pharmacy was a reason for on-line purchase. Seven of the 10 respondents, including all S2 purchasers, received no pharmacy advice prior to purchase delivery.

In addition to the above on-line purchasers, of those who stated that they had not made a product purchase from a pharmacy for an existing S2 condition in the past 12 months (n=603), 22 actually stated a reason for non-purchase as being that they had purchased non-prescription medicines at on-line pharmacies in that time period. As information was not available on product purchase for these consumers, and as they had also stated other reasons for non-purchase which variously categorised them as seekers or non-seekers, they have not been analysed separately in this report.

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).

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.

*Not included in separate *Key Findings* summary paper

These findings are further explored below.

Need for pharmacy advice for S2 medicines

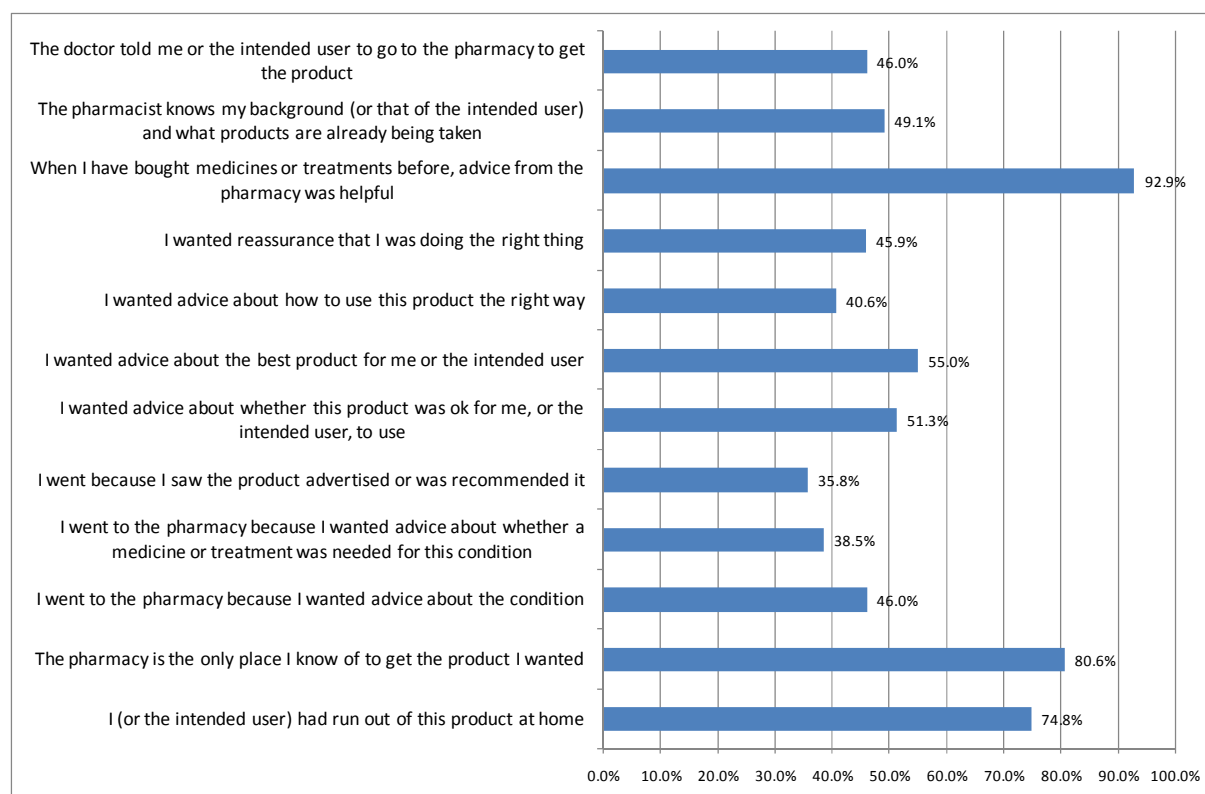
Participants in the CATI survey were questioned regarding their reasons for going to the pharmacy to ascertain their perceived need for pharmacy advice. Both CATI participants and purchasers of S2 medicines surveyed in pharmacy were also asked specifically if they had come to the pharmacy with a product 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.

Reasons for going to the pharmacy – general (CATI)

Participants in the CATI survey were asked to respond to a series of statements regarding their reasons for going to the pharmacy to get medicines for their stated S2 condition. In round one of the CATI survey response categories for these statements were true/false, and in rounds 2 and 3 response categories for these statements were changed to a rating scale indicating level of importance. Figure 10 presents responses from purchasers of S2 medicines in all CATI rounds, with a 'true' response in round 1 taken to equate to a 'somewhat important', 'quite important' or 'very important' response in rounds 2 and 3. Responses of 'not at all important or not true' and 'slightly important' in rounds 2 and 3 were regarded as 'false' or neutral. Figure 11 shows the distribution of responses from purchasers of S2 medicines surveyed in round 2 and round 3 of CATI only, for which the rating scale indicating the level of importance was used.

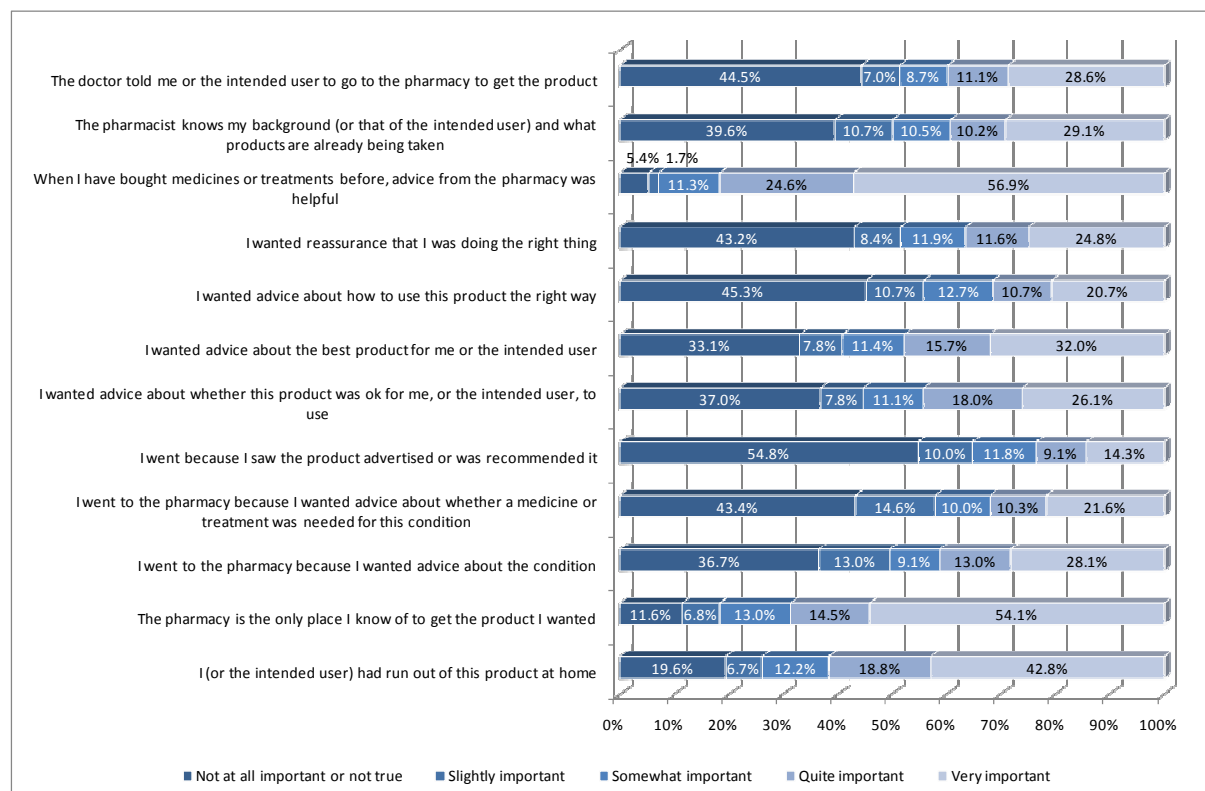
Figure 10 demonstrates that the most important reasons for purchasers of S2 medicines going to the pharmacy to get medicines for S2 condition were that advice from the pharmacy had previously been helpful when buying medicines or treatments (92.9%), that the pharmacy was the only place known to get the product the consumer wanted (80.6%) and that the consumer had run out of the product at home (74.8%). Over half of all purchasers of S2 medicines wanted advice from the pharmacy about one or more of the following: best choice of product; need for treatment or product; the S2 condition; or how to use the product the right way. 46.0% of purchasers of S2 medicines had been told by their doctor to go to the pharmacy for the product and for 49.1% of purchasers of S2, the pharmacist was familiar with the intended user of the product and their medication history. Figure 11 reflects a similar ranking of response importance when results are considered for CATI participants in rounds 2 and 3 only.

Figure 10: Reasons given by purchasers of S2 medicines in CATI (n=945*) for going to pharmacy to purchase product (prompted responses)



*Excludes 4 purchasers of S2 medicines who purchased on-line

Figure 11: Reasons given by purchasers of S2 medicines in CATI Rounds 2 and 3 (n=629) for going to pharmacy to purchase product (prompted responses)



Consumers seeking and/or receiving pharmacy advice (CATI and in-pharmacy)

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 Table 12 and presented graphically in Figure 12 for CATI participants and Figure 13 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.

Table 12: Number and percentage of purchasers of S2 medicine seeking pharmacy advice and/or with product in mind, and percentage receiving pharmacy advice

Category	CATI Survey (n=945)		In-pharmacy Survey (n=734*)	
	No. (%) of S2 Purchasers	% Receiving Advice (number not shown)	No. (%) of S2 Purchasers	% Receiving Advice (number not shown)
Seeking advice only	134 (14.2%)	95.5%	105 (14.3%)	95.2%
Seeking advice and had a product in mind	494 (52.3%)	81.2%	105 (14.3%)	87.6%
Not seeking advice and had a product in mind	308 (32.6%)	29.9%	511 (69.6%)	49.7%
Not seeking advice and did not have a product in mind	5 (0.5%)	80.0%	n/a	n/a
Did not recall / Not stated	4 (0.4%)	75.0%	13 (1.8%)	61.5%
Total	945	66.5%	734*	61.9%
All seeking advice	628 (66.5%)	84.2%	210 (28.6%)	91.4%

*Includes five respondents who did not indicate whether advice had been received, with 1 of these respondents categorised as 'seeking advice'

Figure 12: 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

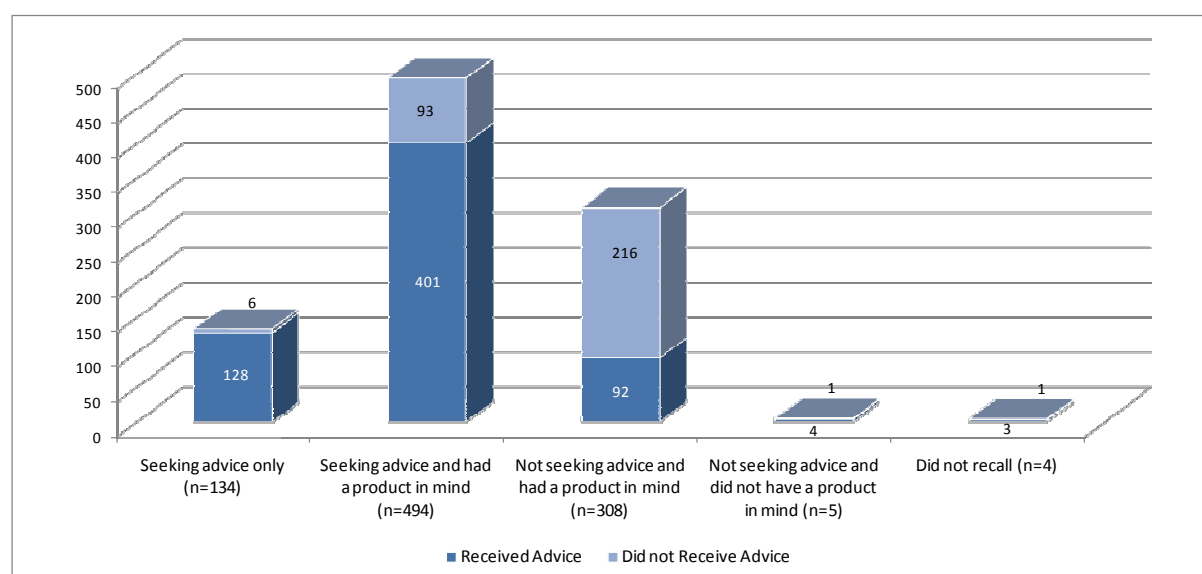
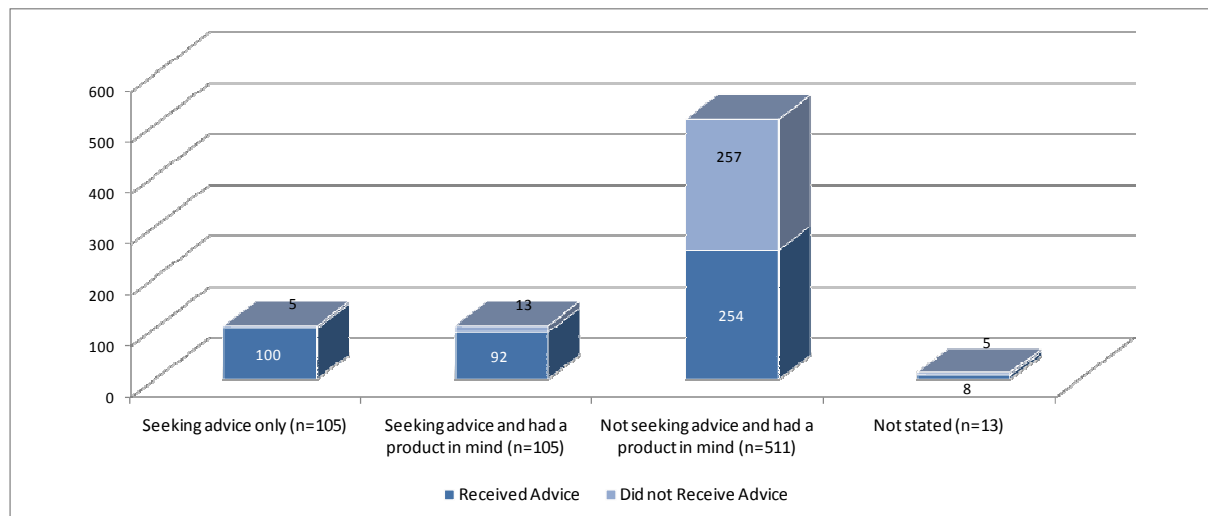


Figure 13: Number of purchasers of S2 medicines surveyed in pharmacy (n=734) receiving advice by each category of seeking advice and/or having a product in mind



Advice seeking and receipt by product familiarity

The numbers and percentage of consumers seeking and/or receiving pharmacy advice or discussions were analysed according to S2 purchaser familiarity with product. These results are presented in Table 13. A total of 78.9% of purchasers of S2 medicines in CATI and 71.5% of those interviewed in pharmacy reported being familiar with the product they were purchasing.

Consumers who are familiar with the product they are purchasing are less likely to seek advice (CATI results: Chi-squared=22.8, df=1, $p<0.001$; In-pharmacy results: Chi-squared=129.58, df=1, $p<0.001$) or receive advice (CATI results: Chi-squared=16.4, df=1, $p<0.0001$; In-pharmacy results: Chi-squared=94.21, df=1, $p<0.0001$) than those where the product is unfamiliar or has not been used for a while. A total of 16.7% of purchasers of S2 medicines familiar with product compared with 61.4% purchasing an unfamiliar product reported coming to the pharmacy to seek advice in the in-pharmacy survey.

Results demonstrate that 50.7% of those familiar with the product received pharmacy advice compared with 86.7% of those unfamiliar with the product receiving advice. 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.

Table 13: Purchasers of S2 medicines seeking and/or receiving pharmacy advice by familiarity with product

Seeking advice or product in mind	Purchasers of S2 - CATI (n=945)				Purchasers of S2 - in-pharmacy (n=734)			
	Familiar with product		New product or not used recently		Familiar with product		New product or not used recently	
	No.	% receiving advice	No.	% receiving advice	No.	% receiving advice	No.	% receiving advice
Seeking advice only	60 (8.0%)	96.7%	74 (37.6%)	94.6%	26 (4.9%)	88.5%	75 (40.8%)	98.7%
Seeking advice and product in mind	407 (54.6%)	80.3%	85 (43.1%)	85.9%	63 (11.8%)	81.0%	38 (20.7%)	97.4%
Not seeking advice and product in mind	274 (36.7%)	29.9%	34 (17.3%)	29.4%	436 (81.6%)	45.4%	67 (36.4%)	74.6%
Not seeking advice and no product in mind	2 (0.3%)	100.0%	3 (1.5%)	66.7%	n/a	n/a	n/a	n/a
Do not recall or not stated	3 (0.4%)	66.7%	1 (0.5%)	100.0%	9 (1.7%)	55.6%	4 (2.2%)	75.0%
Total*	746	63.1%	197	79.2%	525	50.7%	180	86.7%
All seeking advice	467 (62.6%)	82.4%	159 (80.7%)	89.9%	89 (16.7%)	83.1%	113 (61.4%)	98.2%

* Totals exclude 2 CATI participants (both seeking advice) and 16 in-pharmacy participants (8 seekers of advice and 8 non-seekers of advice) where degree of familiarity with product was not stated. Note that for tests of statistical significance, these participants were included as 'not familiar' with product.

Advice seeking by 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 those seeking advice according to 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. Results for purchasers of S2 medicines seeking advice are included as Appendix K and Appendix L.

There was a statistically significant association between age group and proportion of purchasers of S2 medicines seeking advice in the CATI survey (Chi-squared=15.6, $p<0.05$) but this association was not statistically significant in the in-pharmacy survey (Chi-squared=7.50, $p=0.2768$). In the CATI survey 18-24 year olds were most likely to seek advice (71.0%) with the proportion seeking advice decreasing with each age group. Only 42.9% of purchasers of S2 aged ≥ 75 years reported seeking pharmacy advice regarding S2 product purchase or condition. Although not significant, there was also a trend toward less advice-seeking as S2 purchasers aged in the in-pharmacy survey.

Whilst the CATI survey indicated that non-metropolitan consumers were more likely to seek advice than those living in metropolitan areas (Chi-squared=4.4, $p<0.05$), this was not supported by results of in-pharmacy surveys where results were similar for both groups (Chi-squared=0.05, $p=0.8292$). There was no statistically significant association in the CATI or in-pharmacy surveys between proportion of S2 purchasers seeking advice and state/territory, 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.

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

Similar analyses were conducted for purchasers of S2 medicines receiving or not-receiving advice. These results are included as Appendix M and Appendix N.

There was a statistically significant association between age group and proportion of purchasers of S2 medicines receiving advice in both the CATI survey (Chi-squared=19.0, $p<0.01$) and in-pharmacy S2 purchaser survey (Chi-squared=25.82, $p<0.001$). Purchasers of S2 medicines in younger age groups were most likely to receive advice – 75.0% of 25-34 year olds in CATI and 74.6% of 18-24 year olds in the in-pharmacy survey. Those least likely to receive advice are those aged ≥ 75 years (54.8% in CATI and 37.2% in pharmacy).

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, $p<0.01$). Underlying medical conditions are also reported more frequently as people age (see Appendix O), and increasing age is 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.

There was no statistically significant correlation in the CATI or in-pharmacy surveys between proportion of purchasers of S2 medicines receiving advice and state/territory, metropolitan/non metropolitan location, gender, or whether the product was purchased for self or for someone else.

Pharmacy staff member providing advice

All purchasers of S2 medicines receiving advice were asked whether advice or discussion was provided by a pharmacist, pharmacy assistant or both. Results in Table 14 demonstrate that for consumers surveyed in pharmacy immediately after product purchase, 57.0% recall receiving advice from the pharmacy assistant only, with 30.8% reporting advice from the pharmacist only and 7.9% receiving advice from both staff members. This distribution is different in the CATI participants, possibly reflecting differences in recall over the 12 month period.

Table 14: Pharmacy staff member providing advice or discussion to purchasers of S2 medicines receiving advice

Pharmacy staff member providing advice or discussion	% of purchasers of S2 receiving advice	
	CATI survey (n=628)	In-pharmacy survey (n=454)
Pharmacist	27.5%	30.8%
Pharmacy assistant	32.5%	57.0%
Both	40.0%	7.9%
Not stated	n/a	4.2%

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 15.

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 15: 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	
	No.	%	No.	%
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

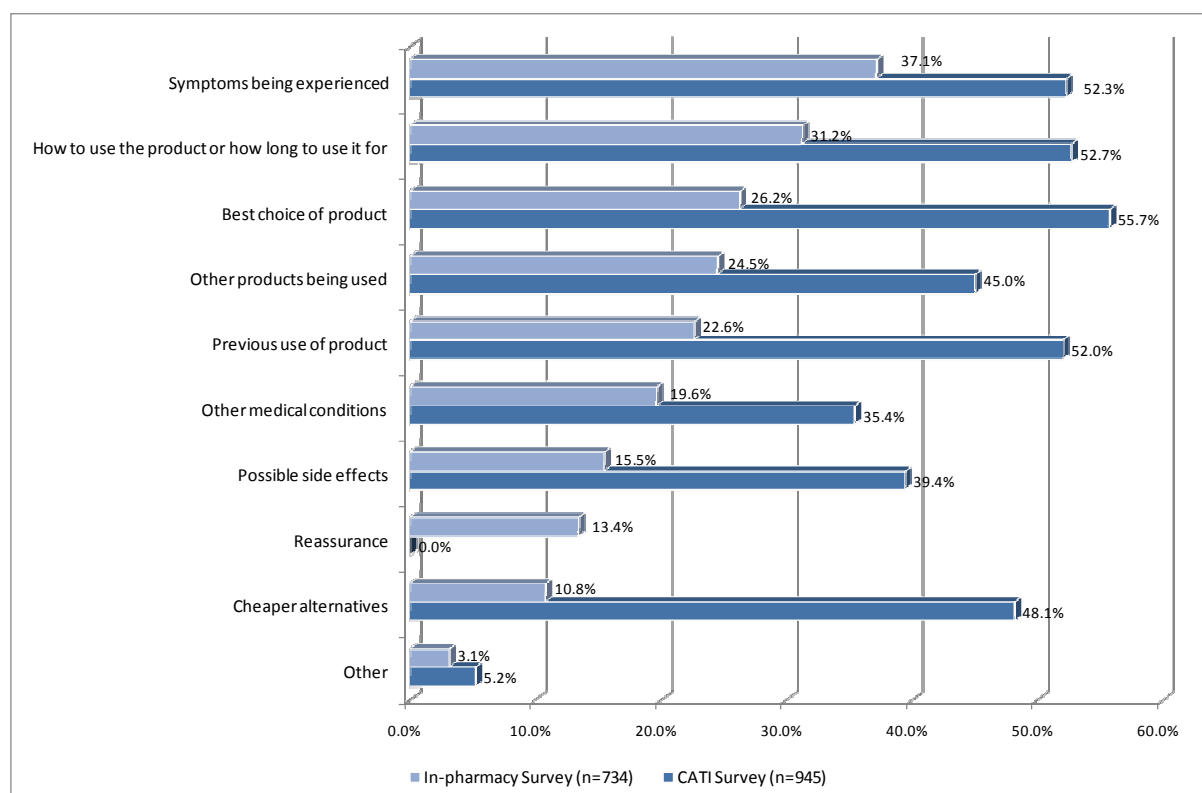
All purchasers of S2 medicines who reported receiving advice or discussion from pharmacy staff were asked about the types of advice received, with CATI purchasers also being asked for recollection regarding perceived benefits of that advice. Pharmacy staff were asked to respond to a question regarding benefits they perceived that consumers obtained from pharmacy advice about S2 medicines. All purchasers of S2 medicines were also asked to rank their level of satisfaction with pharmacy advice or discussions. Results from each of these are presented in this section.

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 14. 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 14, 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 14: Type of pharmacy advice recalled by S2 purchasers (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.

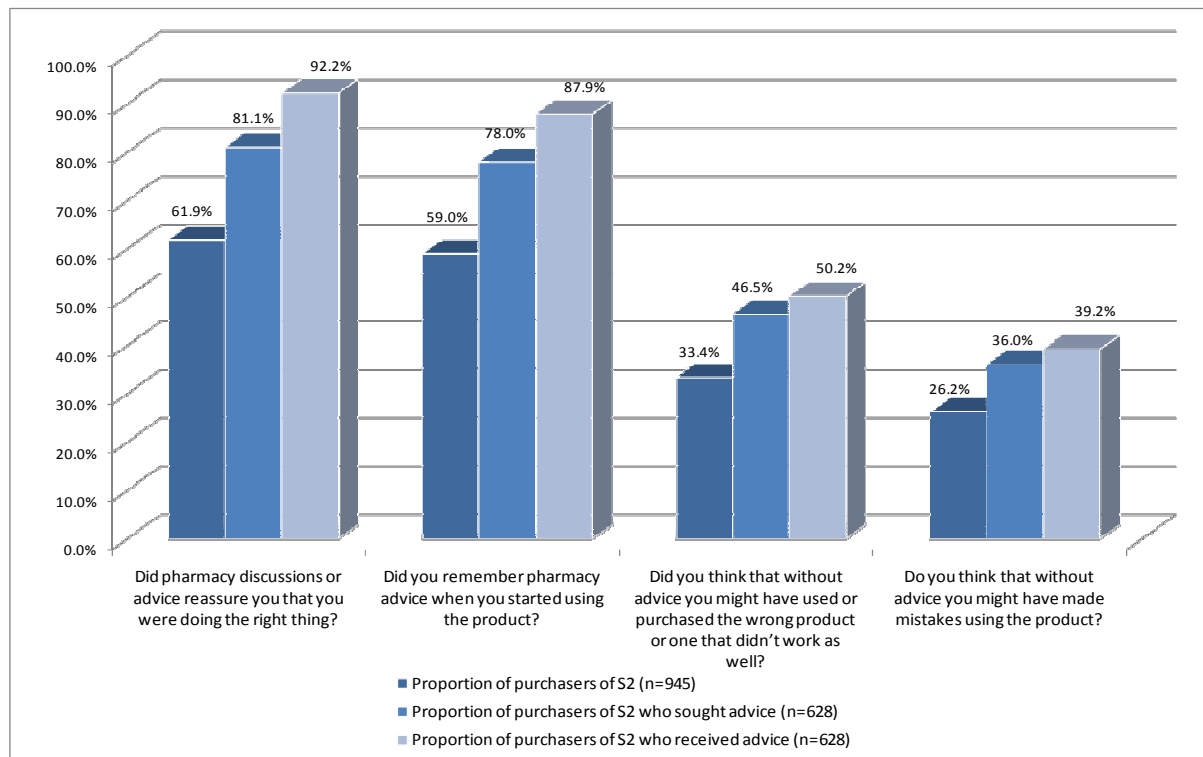
Perceived benefits of pharmacy advice about S2 medicines – consumer perspective

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 numbers are presented graphically in Figure 15, 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 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 15: CATI purchaser's of S2 medicines perceptions regarding benefits of pharmacy advice (prompted responses)*

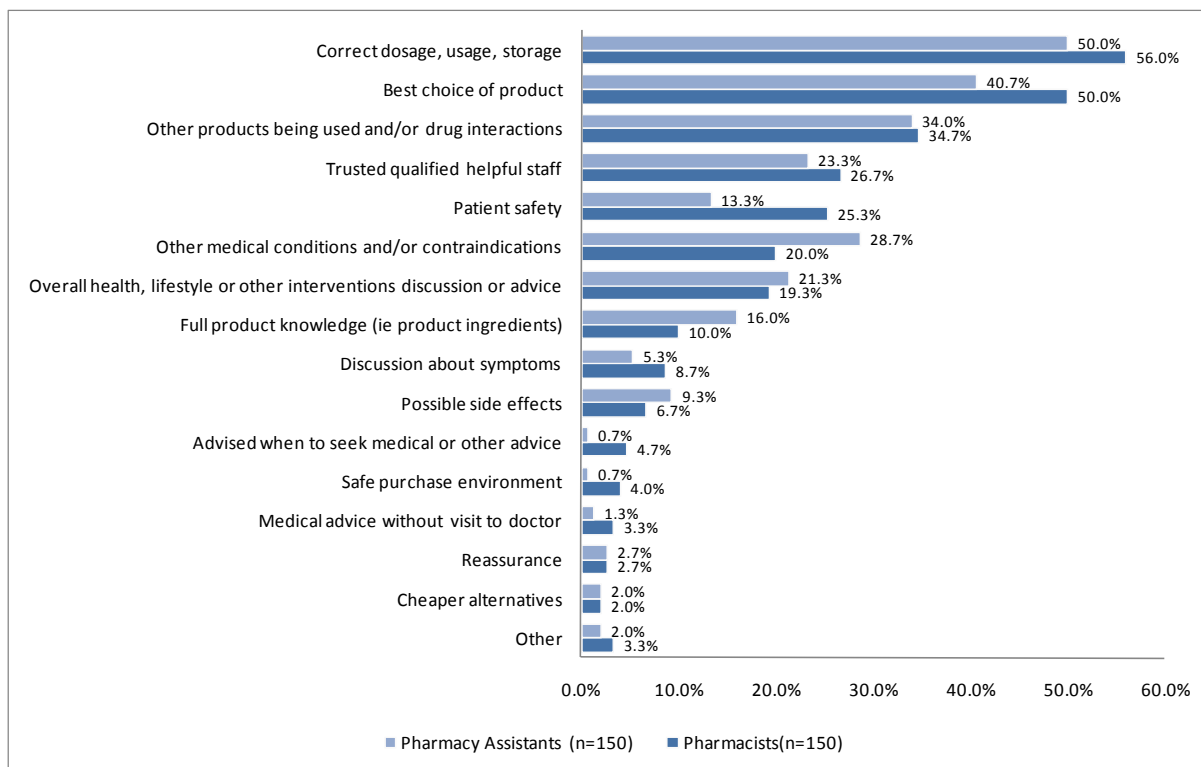


*Note that the n=628 purchasers of S2 medicines seeking advice and the n=628 receiving advice are not identical groups. The repeat of this number is coincidental as not all seekers of advice receive it, and vice versa.

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 16. 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 16: 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 16 and as pie charts in Figure 17 and Figure 18.

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 are 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 16: 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

Figure 17: Purchaser's of S2 medicine satisfaction (CATI) with pharmacy advice in participants giving a rating response (n=857)

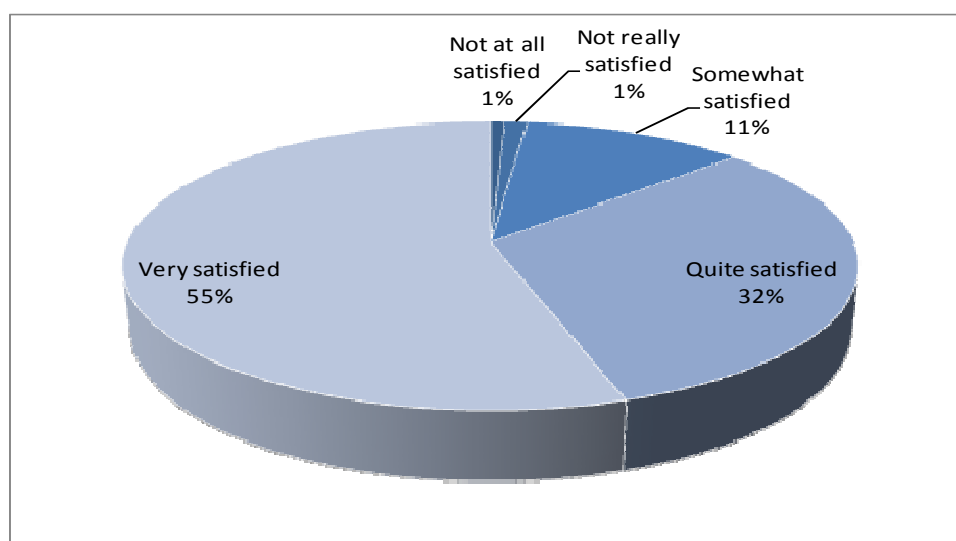
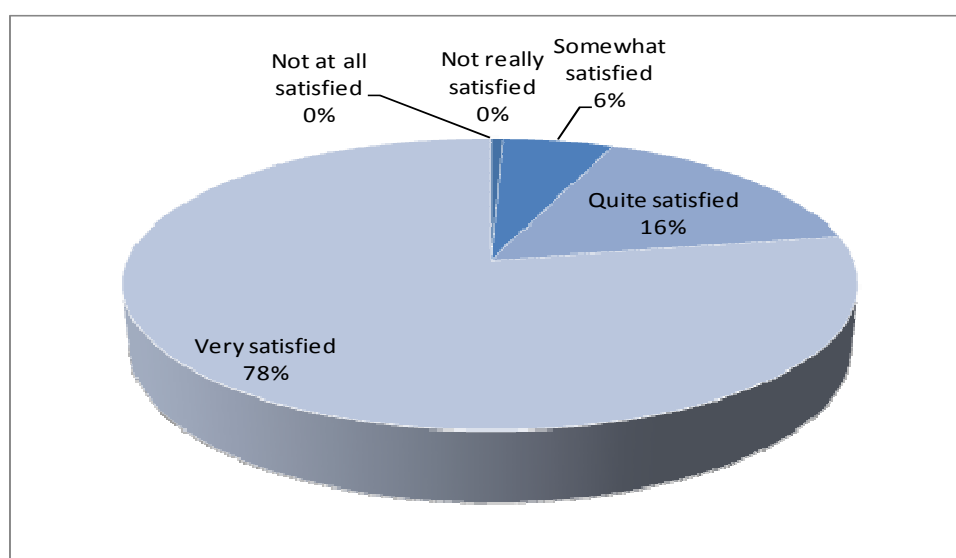


Figure 18: Purchaser's of S2 medicine satisfaction (in-pharmacy survey) with pharmacy advice in participants giving a rating response (n=633)



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 Table 17 and graphically in Figure 19, 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.

Table 17: 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

Response category	CATI survey				In-pharmacy survey, purchasers of S2 (n=734)	
	Total participants (n=4,500)		Known purchasers of S2 (n=949)			
	No.	%	No.	%	No.	%
Strongly disagree	1,582	35.2%	351	37.0%	340	46.3%
Generally disagree	793	17.6%	172	18.1%	123	16.8%
Neither agree nor disagree	525	11.7%	108	11.4%	112	15.3%
Generally agree	760	16.9%	149	15.7%	51	6.9%
Strongly agree	840	18.7%	169	17.8%	105	14.3%
<i>Not recorded</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>3</i>	<i>0.4%</i>

Figure 19: 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

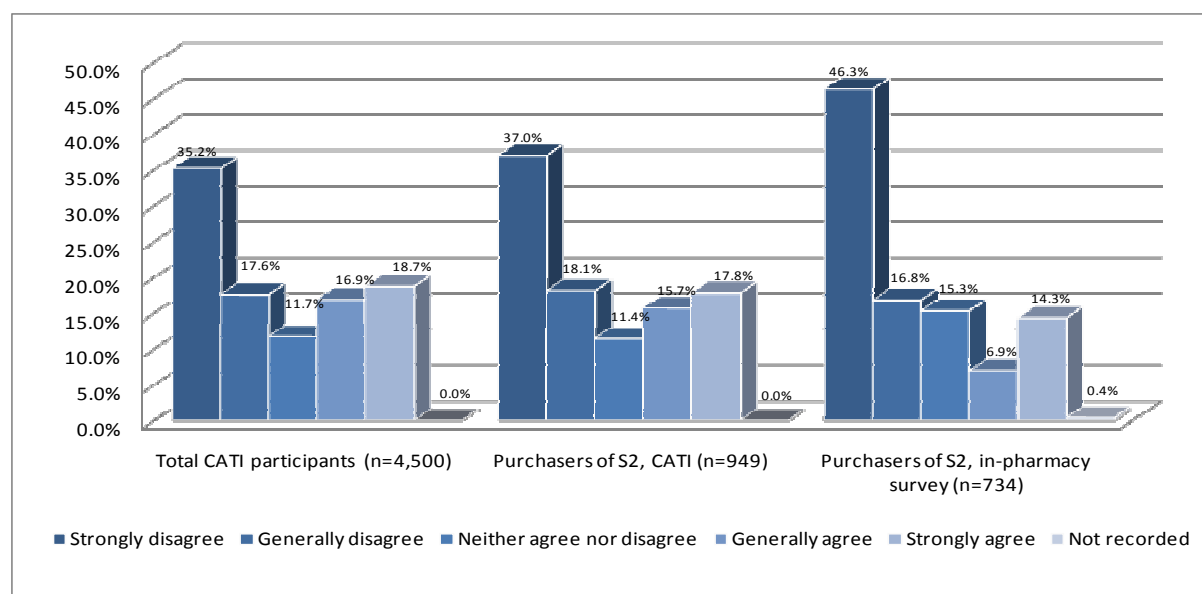
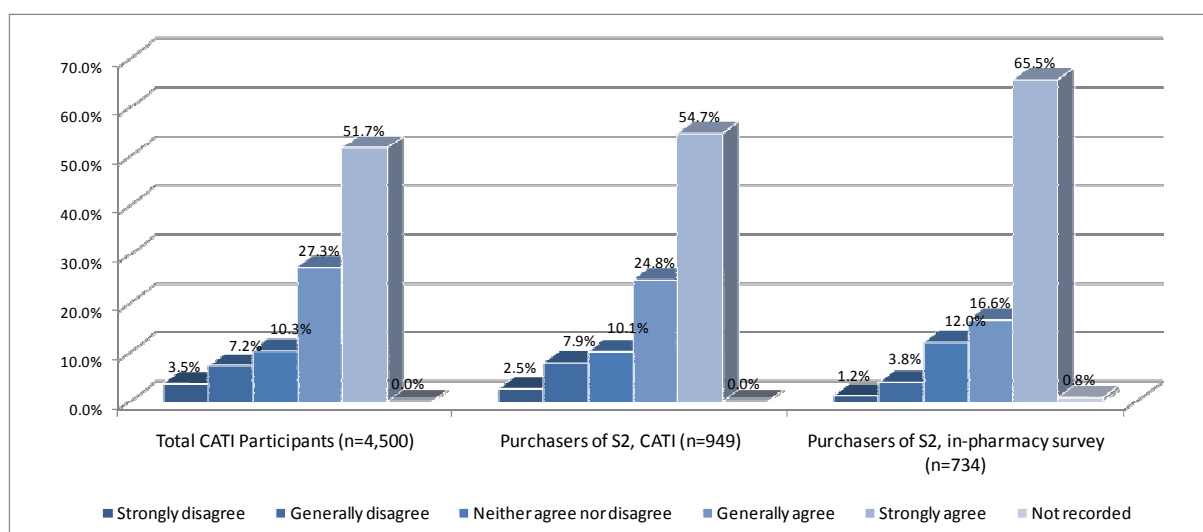


Table 18 presents total participant and purchaser of S2 responses to the question of whether they believe that advice should always be available for products for S2 conditions in the future. These data are also presented graphically in Figure 20. Support for continued availability of advice for products 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.

Table 18: 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

Response category	CATI survey				In-pharmacy survey, S2 purchasers (n=734)	
	Total participants (n=4,500)		Known S2 purchasers (n=949)			
	No.	%	No.	%	No.	%
Strongly disagree	159	3.5%	24	2.5%	9	1.2%
Generally disagree	324	7.2%	75	7.9%	28	3.8%
Neither agree nor disagree	463	10.3%	96	10.1%	88	12.0%
Generally agree	1,227	27.3%	235	24.8%	122	16.6%
Strongly agree	2,327	51.7%	519	54.7%	481	65.5%
Not recorded	n/a	n/a	n/a	n/a	6	0.8%

Figure 20: 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, or an estimated 3.15 million Australians, 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%.

This research found that only 1.3% of the survey population did not purchase an S2 medicine despite seeking to do so. This figure may be under-representative as it is based on several assumptions. It assumes that all purchasers of non-S2 medicines or unknown products were not seeking to use an S2 medicine, and that all non-purchasers with an S2 condition who stated that they did not need medicines or treatments or that they preferred alternative or no medicines/treatments were not seeking to use. Neither the CATI or in-pharmacy surveys directly asked consumers what they had been seeking to purchase, if anything, thus making a more definitive answer to the population seeking to use S2 medicines difficult.

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. 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 whether they

perceive cost of S2 medicines as high or with difficulty accessing pharmacy, but is associated with 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 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. When surveyed in pharmacy, purchasers of S2 medicines most commonly cited difficulties getting the S2 medicine arising from difficulties getting to the pharmacy due to lack of transport, poor health or disability, young children or dependents, or distance. Similar to CATI results though, <5% of S2 purchasers cited each of these difficulties with access as a problem, with 79.6% not stating any factors making access to S2 medicines difficult. 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. 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.

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 differences in whether consumers minded talking to pharmacy staff between these jurisdictions were 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. Interestingly, pharmacists and pharmacy assistants most often cited having to talk to pharmacy staff as a factor potentially affecting consumer access to S2 medicines, supporting the findings in the CATI survey. 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.

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.

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 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) <div style="display: flex; justify-content: space-between;"> <div>Familiar with product</div> <div>Pharmacy knows me</div> <div>Advice not offered</div> <div>Other (list)</div> </div>
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	<p>The next two questions are on a rating scale where 1=<i>strongly disagree</i> and 5=<i>strongly agree</i>.</p> <p>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?</p>	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 Heart disease Stomach ulcers Diabetes	Arthritis Asthma Pregnancy 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> <div>Majority behind the counter</div> <div>Some behind the counter</div> <div>Majority front of store</div> </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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APPENDIX E RESPONSE CATEGORIES FOR OPEN-ENDED SURVEY QUESTIONS

Categorisation of Reasons for Difficulty Accessing S2s

Responses listed to questions in CATI survey regarding reasons for difficulty getting to pharmacy (Q7, Q9, Q13), and in-pharmacy surveys (consumer survey Q12a, pharmacist survey Q4 and pharmacy assistant survey Q2) regarding reasons for difficulty getting to the pharmacy and/or getting the S2 product were categorised into the areas listed below.

- Distance to pharmacy
- Inconvenient opening hours
- Poor health or disability
- Young children or dependents
- Difficult to access (i.e. no car; difficulty parking)
- Language barriers
- Having to discuss condition and/or answer pharmacy questions
- Cost
- Product not available
- Busy pharmacy
- Pharmacist won't supply
- Person buying on behalf of others (may not be able to answer pharmacy questions)
- Other
- None stated

Categorisation of Facilitators of Access for S2s

Responses listed by pharmacists (Q5) and pharmacy assistants (Q3) in their respective surveys to the question '*Can you think of anything that makes getting S2 medicines easy for your customers?*', and by in-pharmacy consumers surveyed in Round 3 to the question '*Can you think of anything that makes getting this product easy for you?*' (Q12b), were categorised into areas listed below.

- Availability of advice or free advice
- Trusted, qualified and/or helpful staff
- Personalised service (i.e. know their customers)
- Easily accessible / convenient location
- Ability for consumers to self select
- Additional services provided (e.g. home delivery; phone advice)
- High staff to customer ratio
- Clear signage
- Long opening hours
- Speed of service
- Large range of alternatives
- Access to interpreter
- Competitive product prices
- Other
- None stated

Categorisation of pharmacy advice and perceived customer benefits of advice

Pharmacy advice or discussions recalled were listed as closed-response questions in the CATI (Q11) and in-pharmacy consumer surveys (Q10), with responses based on input from Reference Group and survey pilots. A final open-ended question asking the consumer to recount any additional pharmacy advice or discussions was used to capture information not listed in the closed responses. Responses to this open ended question in the CATI survey were categorised as follows:

- Lifestyle advice or alternative therapy options
- User profile (e.g. age; any known allergies)
- Advised to seek or when to seek medical advice

- Other

Responses to this open ended question in the in-pharmacy consumer surveys were categorised as follows:

- Safe purchase environment
- Trusted, qualified and/or helpful staff
- Overall health, lifestyle or other therapy options
- Patient safety
- Advised when to seek medical or other advice
- Provision of advice without necessitating visit to doctor
- Full product knowledge (i.e. product ingredients)
- Other

Responses from pharmacist and pharmacy assistant surveys to the question '*What benefits do you believe consumers derive from pharmacy advice about S2 medicines or associated conditions?*' were categorised as per the closed response question regarding recollection of content of pharmacy advice from in-pharmacy consumer survey (Q10) and the open-ended response categories to this question as outlined above.

Categorisation of reasons for not purchasing planned S2 product

The CATI survey (Q10) and the in-pharmacy consumer survey (Q6) contained open-ended questions asking reasons for any non-purchase of product consumers had planned to buy. These responses were categorised for both surveys into the following:

- Advised on better choice of product
- Product not available
- Purchased generic or cheaper alternative
- Purchased at supermarket
- Other

Categorisation of reasons for consumer preference for purchasing S2s at convenience store

If consumers participating in the CATI survey responded that they prefer to buy medicines and treatments at other places like convenience stores when possible (Q13), they were asked to give reasons. These were categorised as follows:

- Distance – closer to home/work
- More convenient or don't need to make a special trip
- Able to self select
- Cheaper
- Other

APPENDIX F PURCHASERS OF S2 MEDICINE AS A PROPORTION OF THOSE REPORTING S2 CONDITION (CATI)

Table 19: No. and Percentage of purchasers of S2 (n=947)* reporting S2 condition in last 12 months in themselves, partner or dependents (n=4,344) by state/territory, metropolitan/non-metropolitan location, gender, age, and annual household income

State	Number	% of state
ACT	14	19.2%
NSW	340	23.2%
NT	12	28.6%
QLD	171	21.0%
SA	91	26.5%
TAS	20	19.6%
VIC	219	20.3%
WA	80	18.9%
Chi-squared = 11.6033, p=0.1144		

Age	Number	% of age category
18-24	85	17.7%
25-34	222	25.9%
35-44	218	26.2%
45-54	165	19.1%
55-64	129	20.7%
65-74	87	19.4%
75+	41	16.9%
Chi-squared = 31.9049, p<0.001		

Location	Number	% of metro/other
Metropolitan	607	21.9%
Non-metropolitan	340	21.6%
Chi-squared = 0.0303, p=0.8617		

Income	Number	% of income category
<\$30K	164	19.6%
\$30K-\$80K	366	22.0%
\$80K+	367	24.0%
Undisclosed	50	15.8%
Chi-squared = 13.306, p<0.01		

Gender	Number	% of gender
Female	581	25.9%
Male	366	17.4%
Chi-squared = 46.1534, p<0.0001		

* Note that this excludes 2 S2 purchasers who did not report an S2 condition

APPENDIX G S2 PURCHASERS AND NON-PURCHASERS BY POTENTIAL FACTORS AFFECTING ACCESS (CATI)

Cost too much

Purchase	Agree	Not agree	% agree
Non-purchaser, not seeking	255	290	46.8%
Possible.S2	757	829	47.7%
S2	464	479	49.2%
Non-purchaser, Seeking	21	37	36.2%

Chi-squared =4.1, P-value=0.25 (Not significant)

Note: Not agree=disagree+don't know

Mind talking to pharmacist

Purchase	Not Yes	Yes	% yes
Non-purchaser, not seeking	355	190	34.9%
Possible.S2	1,472	114	7.2%
S2	880	63	6.7%
Non-purchaser, Seeking	44	14	24.1%

Chi-squared =333.9, P-value=0.0000 (Highly significant)

Note: Not Yes=No+don't know

Getting to a pharmacy is difficult

Purchase	Agree	Not agree	% Agree
Non-purchaser, not seeking	36	509	6.6%
Possible.S2	71	1,515	4.5%
S2	43	900	4.6%
Non-purchaser, Seeking	4	54	6.9%

Chi-squared =4.7, P-value=0.19 (Not significant)

Note: Not.agree=disagree+don't know

APPENDIX H DESIRE TO TALK TO PHARMACY STAFF ABOUT CONDITION BY GENDER, AGE AND STATE (CATI)

n=4,490, excluding 10 on-line purchasers

Mind talking

Gender	Not Yes	Yes	% yes
Female	2,068	217	9.5%
Male	1,921	284	12.9%

Chi-squared =12.6, *P-value*=0.0004 (Highly significant)

Note: Not Yes=No+don't know

Mind talking

Age Group	Not Yes	Yes	% yes
18-24	425	83	16.3%
25-34	774	100	11.4%
35-44	760	87	10.3%
45-54	803	82	9.3%
55-64	577	71	11.0%
65-74	411	54	11.6%
75+	239	24	9.1%

Chi-squared =18.9, *P-value*=0.004 (Highly significant)

Note: Not Yes=No+don't know

Mind talking

State	Not Yes	Yes	% yes
ACT	63	12	16.0%
NSW	1,364	156	10.3%
NT	40	2	4.8%
QLD	743	90	10.8%
SA	321	32	9.1%
TAS	101	7	6.5%
VIC	972	152	13.5%
WA	385	50	11.5%

Chi-squared =15.1, *P-value*=0.034 (Significant)

Note: Not Yes=No+don't know

APPENDIX I BELIEF THAT S2 MEDICINES COST TOO MUCH BY ANNUAL HOUSEHOLD INCOME (CATI)

n=4,490, excluding 10 on-line purchasers

Cost too much			
Income	Agree	Not Agree	% agree
<\$30K	474	409	53.7%
\$30K-\$80K	859	846	50.4%
\$80K+	655	903	42.0%
Undisclosed	165	179	48.0%

Chi-square=37.4, P-value=0.0000 (Highly significant)

Note: Not.agree=disagree+don't know

APPENDIX J DIFFICULTY GETTING TO PHARMACY BY LOCATION, AGE AND GENDER IN CATI POPULATION (CATI)

n=4,490, excluding 10 on-line purchasers

Getting to a pharmacy is difficult

Location	Agree	Not Agree	% agree
Metropolitan	103	2,777	3.6%
Non metropolitan	138	1,471	8.6%

Chi-squared=49.8, *P-value*=0.0000 (Highly significant)

Note: Not.agree=disagree+don't know

Getting to a pharmacy is difficult

Age Group	Agree	Not Agree	% agree
18-24	15	493	3.0%
25-34	48	826	5.5%
35-44	54	793	6.4%
45-54	40	845	4.5%
55-64	36	612	5.6%
65-74	20	445	4.3%
75+	28	235	10.6%

Chi-squared=24.3, *P-value*=0.0004 (Highly significant)

Note: Not.agree=disagree+don't know

Getting to a pharmacy is difficult

Gender	Agree	Not Agree	% agree
Female	136	2,149	6.0%
Male	105	2,100	4.8%

Chi-squared=2.1, *P-value*=0.09 (Not significant)

Note: Not.agree=disagree+don't know

APPENDIX K S2 PURCHASERS SEEKING ADVICE BY AGE, GENDER, STATE, LOCATION, UNDERLYING MEDICAL CONDITIONS AND PRODUCT FAMILIARITY (CATI)

Advice Sought by Age

	No	Yes	% yes
18-24	24	61	71.8%
25-34	63	158	71.5%
35-44	69	149	68.4%
45-54	59	106	64.2%
55-64	46	81	63.8%
65-74	32	55	63.2%
75+	24	18	42.9%

Chi-squared= 15.6126, *p-value* = 0.01599

Advice Sought by Gender

	No	Yes	% yes
Female	180	399	68.9%
Male	137	229	62.6%

Chi-squared= 3.7685, *p-value* = 0.05223

Advice Sought by State

	No	Yes	% yes
ACT	4	10	71.4%
NSW	120	222	64.9%
NT	4	8	66.7%
QLD	58	112	65.9%
SA	34	55	61.8%
TAS	5	15	75.0%
VIC	65	154	70.3%
WA	27	52	65.8%

Chi-squared= 3.5482, *p-value* = 0.8301

Advice Sought by Location

	No	Yes	% yes
Metropolitan	218	387	64.0%
Non metropolitan	99	241	70.9%

Chi-squared=3.3646, *p-value* = 0.03669

Advice Sought by Any Underlying Medical Condition

	No	Yes	% yes
Condition	162	319	66.3%
No condition	155	309	66.6%

Chi-squared= 0.0004, *p-value* = 0.9837

Advice Sought by Familiarity

	No	Yes	% yes
Familiar - no	38	161	80.9%
Familiar - yes	279	467	62.6%

Chi-squared = 22.7961, *p-value* = 0.000002

APPENDIX L S2 PURCHASERS SEEKING ADVICE BY AGE, GENDER, STATE, LOCATION, UNDERLYING MEDICAL CONDITIONS, PRODUCT FAMILIARITY AND WHO PURCHASED FOR (IN-PHARMACY SURVEY)

Advice Seeking by Age

	No	Yes	% yes
18-24	38	22	36.7%
25-34	92	45	32.8%
35-44	110	48	30.4%
45-54	106	41	27.9%
55-64	78	32	29.1%
65-74	56	12	17.6%
75+	31	10	24.4%

Chi-squared= 7.5034, p-value = 0.2768

Advice Seeking by Gender

	No	Yes	% yes
Female	346	146	29.7%
Male	163	64	28.2%

Chi-squared= 0.1624, p-value = 0.6870

Advice Seeking by State

	No	Yes	% yes
ACT	7	5	41.7%
NSW	171	62	26.6%
NT	6	2	25.0%
QLD	112	52	31.7%
SA	41	19	31.7%
TAS	7	5	41.7%
VIC	128	52	28.9%
WA	39	13	25.0%

Chi-squared= 3.7632, p-value = 0.8066

Advice Seeking by Location

	No	Yes	% yes
Metropolitan	297	124	29.5%
Non metropolitan	214	86	28.7%

Chi-squared= 0.0466, p-value = 0.8292

Advice Seeking by Any Underlying Medical Condition

	No	Yes	% yes
Condition	200	75	27.3%
No condition	311	135	30.3%

Chi-squared= 0.7559, p-value = 0.3846

Advice Seeking by Familiarity

	No	Yes	% yes
Familiar - no	75	118	61.1%
Familiar - yes	436	89	17.0%

Chi-squared= 129.5833, p-value = 0.0

Advice Seeking by Self

	No	Yes	% yes
Self - False	148	64	30.2%
Self - True	359	144	28.6%

Chi-squared= 0.0889, p-value =0.7655

Note: Excludes respondents who did not recall or were unsure of response, and those where a response was not recorded

APPENDIX M S2 PURCHASERS RECEIVING ADVICE BY AGE, GENDER, STATE, LOCATION, UNDERLYING MEDICAL CONDITIONS AND PRODUCT FAMILIARITY (CATI)

Advice Received by Age

	No	Yes	% yes
18-24	25	58	69.9%
25-34	55	165	75.0%
35-44	63	154	71.0%
45-54	67	98	59.4%
55-64	44	81	64.8%
65-74	36	49	57.6%
75+	19	23	54.8%

Chi-squared= 19.0299, p-value = 0.004113

Advice Received by Gender

	No	Yes	% yes
Female	183	394	68.3%
Male	126	234	65.0%

Chi-squared = 0.9384, p-value = 0.3327

Advice Received by State

	No	Yes	% yes
ACT	1	12	92.3%
NSW	121	217	64.2%
NT	3	9	75.0%
QLD	59	111	65.3%
SA	28	61	68.5%
TAS	5	14	73.7%
VIC	67	150	69.1%
WA	25	54	68.4%

Chi-squared= 6.5243, p-value = 0.48

Advice Received by Location

	No	Yes	% yes
Metropolitan	210	391	65.1%
Non metropolitan	99	237	70.5%

Chi-squared= 2.6829, p-value = 0.1014

Advice Received by Any Underlying Medical Condition

	No	Yes	% yes
Condition	156	321	67.3%
No condition	153	307	66.7%

Chi-squared= 0.0125, p-value = 0.9111

Advice Received by Familiarity

	No	Yes	% yes
Familiar - no	41	157	79.3%
Familiar - yes	268	471	63.7%

Chi-squared= 16.4053, p-value = 5.114e-05

Note: Excludes respondents who did not recall or were unsure of response, and those where a response was not recorded

APPENDIX N S2 PURCHASERS RECEIVING ADVICE BY AGE, GENDER, STATE, LOCATION, UNDERLYING MEDICAL CONDITIONS, PRODUCT FAMILIARITY AND WHO PURCHASED FOR (IN-PHARMACY SURVEY)

Advice Receiving by Age

	No	Yes	% yes
18-24	15	44	74.6%
25-34	45	93	67.4%
35-44	56	107	65.6%
45-54	55	92	62.6%
55-64	39	73	65.2%
65-74	38	29	43.3%
75+	27	16	37.2%

Chi-squared=25.8232, p-value = 0.0002

Advice Receiving by Gender

	No	Yes	% yes
Female	189	309	62.0%
Male	84	145	63.3%

Chi-squared= 0.3708, p-value = 0.5426

Advice Receiving by State

	No	Yes	% yes
ACT	4	8	66.7%
NSW	102	138	57.5%
NT	1	7	87.5%
QLD	56	109	66.1%
SA	23	38	62.3%
TAS	7	5	41.7%
VIC	64	114	64.0%
WA	18	35	66.0%

Chi-squared= 7.5280, p-value = 0.3761

Advice Receiving by Location

	No	Yes	% yes
Metropolitan	159	270	62.9%
Non metropolitan	116	184	61.3%

Chi-squared= 0.1281, p-value = 0.7204

Advice Receiving by Any Underlying Medical Condition

	No	Yes	% yes
Condition	123	158	56.2%
No Condition	152	296	66.1%

Chi-squared= 7.2689, p-value = 0.0070

Advice Receiving by Familiarity

	No	Yes	% yes
Familiar - no	21	174	89.2%
Familiar - yes	254	277	52.2%

Chi-squared= 94.2131, p-value = 0

Advice Receiving by who product for

	No	Yes	% yes
Self - False	86	131	60.4%
Self - True	188	318	62.8%

Chi-squared= 0.9162, p-value = 0.3385

Note: excludes respondents who did not recall or were unsure of response, and those where a response was not recorded

APPENDIX O UNDERLYING MEDICAL CONDITIONS BY AGE IN S2 PURCHASERS SURVEYED IN PHARMACY

Age	Underlying medical condition, in-pharmacy survey (n=734)		
	Yes	No	% experiencing
18-24	52	8	86.7%
25-34	106	32	76.8%
35-44	131	32	80.4%
45-54	93	55	62.8%
55-64	39	73	34.8%
65-74	21	48	30.4%
75+	9	35	20.5%
Total	451	283	734

APPENDIX P TABULATION OF CATI SURVEY DATA

Q1. Have you, your partner, children or other dependents had any of the following conditions in the past 12 months?				
Condition	Yes	% total	No	% total
Q1-1 Pain such as headache, backache, muscle or joint pain, period pain or dental pain	3,820	84.9%	680	15.1%
Q1-2 Cough, cold or flu	3,267	72.6%	1,233	27.4%
Q1-3 Allergies or hay fever	1,960	43.6%	2,540	56.4%
Q1-4 Sore or itchy eyes	1,741	38.7%	2,759	61.3%
Q1-5 Sore throat or mouth	2,599	57.8%	1,901	42.2%
Q1-6 Indigestion or stomach cramps	1,696	37.7%	2,804	62.3%
Q1-7 Vomiting or diarrhoea	1,617	35.9%	2,883	64.1%
Q1-8 Haemorrhoids	416	9.2%	4,084	90.8%
Q1-9 Fungal infections such as tinea, athlete's foot, ringworm, jock itch	1,031	22.9%	3,469	77.1%
Q1-10 Warts	560	12.4%	3,940	87.6%
Q1-11 Worms	193	4.3%	4,307	95.7%
Q1-12 Hair loss	713	15.8%	3,787	84.2%
Q1-13 Anaemia due to low iron	560	12.4%	3,940	87.6%

If Yes to Q1 n = 4,344

Q2. 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.

Yes	% total	% total pop	No	% total	% total pop	Total	Not Asked	Total Pop
3,448	79.4%	76.6%	896	20.6%	19.9%	4,344	156	4,500

If Q1 = No (156) or Q2 = No (896): n = 1,052

Q3. 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.

Yes	% total	% total pop	No	% total	% total pop	Total	Not Asked	Total Pop
330	31.4%	7.3%	722	68.6%	16.0%	1,052	3,448	4,500

Q4. 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).

Yes	% total	% total pop	No	% total	% total pop	Total	Not Asked	Total Pop
3,563	94.3%	79.2%	215	5.7%	4.8%	3,778	722	4,500

Q4b Product category (where product name known)			
	Yes	% of those who answered	% total population
S2	949	26.6%	21.1%
Unscheduled/S2	1,035	29.0%	23.0%
S2/S3	462	13.0%	10.3%
Unscheduled/S2/S3	110	3.1%	2.4%
Unscheduled	460	12.9%	10.2%
S3	413	11.6%	9.2%
Unknown product	77	2.2%	1.7%
Other (S3/S4, S4 or S8)	57	1.6%	1.3%
Total	3,563	100.0%	79.2%
Not Asked/not answered	937		
Total	4,500		

Q5 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).			
	Yes	% of those who answered	% total Population
1. Familiar product	3,066	81.2%	68.1%
2. New product or not recently used	681	18.0%	15.1%
3. Don't know / NA	31	0.8%	0.7%
Total	3,778	100.0%	84.0%
Not Asked/not answered	722		16.0%
Total	4,500		100.0%

Q6. 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')								
Pharmacy	% total	% total pop	Online	% total	% total pop	Total	Not Asked	Total Pop
3,768	99.7%	83.7%	10	0.3%	0.2%	3,778	722	4,500

Q7 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. n = 10 (not asked = 4490)						
	True	% of those who answered	% total population	False	% of those who answered	% total population
Q7-1 Purchasing on-line is more convenient for me	6	60.0%	0.1%	4	40.0%	0.1%
Q7-2 It is difficult for me to get to a pharmacy. <i>If answer is "true", respondents were also asked the reason, see *.</i>	2	20.0%	0.0%	8	80.0%	0.2%
Q7-3 I did not want to talk about my ailments or medical conditions in the pharmacy	0	0.0%	0.0%	10	100.0%	0.2%
Q7-4 I did not want to receive pharmacy advice	2	20.0%	0.0%	8	80.0%	0.2%
Q7-5 I knew which product I wanted	10	100.0%	0.2%		0.0%	0.0%
Q7-6 The product is cheaper if I purchase on-line	8	80.0%	0.2%	2	20.0%	0.0%

* One respondent answered "young children or dependent" and the other answered "difficult to access due to no car or parking"

Q8. Did you receive any advice or discussions from the pharmacist prior to your purchase being delivered?								
Yes	% total	% total pop	No	% total	% total pop	Total	Not Asked	Total Pop
3	30%		7	70%		10	4,490	4,500

Q9 – Round 1 (T/F only) 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. n = 1,220 (not asked = 281)						
	True	% of those who were asked	% R1 population	False	% of those who were asked	% R1 population
Q9-1 I (or the intended user) had run out of this product at home	885	72.5%	59.0%	335	27.5%	22.3%
Q9-2 The pharmacy is the only place I know of to get the product I wanted	786	64.4%	52.4%	434	35.6%	28.9%
Q9-3 I went to the pharmacy because I wanted advice about the condition	414	33.9%	27.6%	806	66.1%	53.7%
Q9-4 I went to the pharmacy because I wanted advice about whether a medicine or treatment was needed for this condition	347	28.4%	23.1%	873	71.6%	58.2%
Q9-5 I went because I saw the product advertised or was recommended it	391	32.0%	26.0%	829	68.0%	55.2%
Q9-6 I wanted advice about whether this product was ok for me, or the intended user, to use	462	37.9%	30.8%	758	62.1%	50.5%
Q9-7 I wanted advice about the best product for me or the intended user	520	42.6%	34.6%	700	57.4%	46.6%
Q9-8 I wanted advice about how to use this product the right way	371	30.4%	24.7%	849	69.6%	56.6%
Q9-9 I wanted reassurance that I was doing the right thing	452	37.0%	30.1%	768	63.0%	51.2%
Q9-10 When I have bought medicines or treatments before, advice from the pharmacy was helpful	1,126	92.3%	75.0%	94	7.7%	6.3%
Q9-11 The pharmacist knows my background (or that of the intended user) and what products are already being taken	598	49.0%	39.8%	622	51.0%	41.4%
Q9-12 The doctor told me or the intended user to go to the pharmacy to get the product	449	36.8%	29.9%	771	63.2%	51.4%
Q9-13 Non-prescription medicines and treatments cost too much	669	54.8%	44.6%	551	45.2%	36.7%
Q9-14 Getting to a pharmacy is difficult for me TRUE SEE BELOW TABLE Q9-14b	71	5.8%	4.7%	1,149	94.2%	76.5%

Q9 ROUND 1: 14b. Answered TRUE to 'Getting to a pharmacy is difficult for me' (n = 71) Can you tell me why it is difficult?			
Total ROUND 1 = 1501	True	% of those who answered	% R1 population
1. Distance to pharmacy	37	52.1%	2.5%
2. Inconvenient opening hours	19	26.8%	1.3%
3. Poor health or disability	11	15.5%	0.7%
4. Young children or dependents	3	4.2%	0.2%
5. Difficult to access (eg no car; difficulty parking)	7	9.9%	0.5%
6. Having to discuss condition and/or answer pharmacy questions	0	0.0%	0.0%
7. Have to talk about condition with junior staff	0	0.0%	0.0%
8. Cost	0	0.0%	0.0%
9. Product not available	0	0.0%	0.0%
10. Busy pharmacy	1	1.4%	0.1%
11. Pharmacist won't supply	0	0.0%	0.0%
12. Other	1	0.0%	0.0%
13. No reason given	0	0.0%	0.0%

Q9 – Round 2&3 (RATING SCALE) 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 and 5=very important.															
Total R2 & R3 = 2,999 Total asked = 2,548 Total not asked = 451	1	% asked	% R2&R3	2	%	% R2&R3	3	%	% R2&R3	4	%	% R2&R3	5	%	% R2&R3
Q9-1 I (or the intended user) had run out of this product at home	475	18.6%	15.8%	207	8.1%	6.9%	384	15.1%	12.8%	437	17.2%	14.6%	1,045	41.0%	34.8%
Q9-2 The pharmacy is the only place I know of to get the product I wanted	554	21.7%	18.5%	200	7.8%	6.7%	309	12.1%	10.3%	352	13.8%	11.7%	1,133	44.5%	37.8%
Q9-3 I went to the pharmacy because I wanted advice about the condition	1,101	43.2%	36.7%	294	11.5%	9.8%	287	11.3%	9.6%	285	11.2%	9.5%	581	22.8%	19.4%
Q9-4 I went to the pharmacy because I wanted advice about whether a medicine or treatment was needed for this condition	1,248	49.0%	41.6%	313	12.3%	10.4%	276	10.8%	9.2%	237	9.3%	7.9%	474	18.6%	15.8%
Q9-5 I went because I saw the product advertised or was recommended it	1,406	55.2%	46.9%	257	10.1%	8.6%	297	11.7%	9.9%	235	9.2%	7.8%	353	13.9%	11.8%
Q9-6 I wanted advice about whether this product was ok for me, or the intended user, to use	1,123	44.1%	37.4%	215	8.4%	7.2%	277	10.9%	9.2%	367	14.4%	12.2%	566	22.2%	18.9%
Q9-7 I wanted advice about the best product for me or the intended user	1,013	39.8%	33.8%	207	8.1%	6.9%	288	11.3%	9.6%	374	14.7%	12.5%	666	26.1%	22.2%
Q9-8 I wanted advice about how to use this product the right way	1,258	49.4%	41.9%	269	10.6%	9.0%	273	10.7%	9.1%	251	9.9%	8.4%	497	19.5%	16.6%
Q9-9 I wanted reassurance that I was doing the right thing	1,217	47.8%	40.6%	224	8.8%	7.5%	290	11.4%	9.7%	269	10.6%	9.0%	548	21.5%	18.3%
Q9-10 When I have bought medicines or treatments before, advice from the pharmacy was helpful	167	6.6%	5.6%	83	3.3%	2.8%	339	13.3%	11.3%	629	24.7%	21.0%	1,330	52.2%	44.3%
Q9-11 The pharmacist knows my background (or that of the intended user) and what products are already being taken	1,000	39.2%	33.3%	244	9.6%	8.1%	274	10.8%	9.1%	252	9.9%	8.4%	778	30.5%	25.9%
Q9-12 The doctor told me or the intended user to go to the pharmacy to get the product	1,152	45.2%	38.4%	172	6.8%	5.7%	250	9.8%	8.3%	286	11.2%	9.5%	688	27.0%	22.9%
Q9-13 I don't mind speaking to pharmacy staff about my condition, or that of intended user	354	13.9%	11.8%	141	5.5%	4.7%	403	15.8%	13.4%	555	21.8%	18.5%	1,095	43.0%	36.5%

Q10 The next questions are about buying medicines in the pharmacy and pharmacy discussions and advice. They require a yes or no answer.											
	True	% of those who were asked	% total pop	False	% of those who were asked	% total pop	Don't recall	% of those who were asked	% total pop	Total asked	Not Asked
Q10-1 Were you offered advice or assistance at the pharmacy	3,128	83.0%	69.5%	619	16.4%	13.8%	21	0.6%	0.5%	3,768	732
Q10-2 Did you want advice from pharmacy	2,363	62.7%	52.5%	1,389	36.9%	30.9%	16	0.4%	0.4%	3,768	732
Q10-3 Did you mind talking about your condition or that of the intended user in the pharmacy	263	7.0%	5.8%	3,481	92.4%	77.4%	24	0.6%	0.5%	3,768	732
10- 4Was the pharmacist familiar with you and your medical conditions, or those of the intended user	1,702	45.2%	37.8%	2,040	54.1%	45.3%	26	0.7%	0.6%	3,768	732
10- 7 Did you know which product you wanted	3,220	85.5%	71.6%	540	14.3%	12.0%	8	0.2%	0.2%	3,768	732
10- 8 Did you end up purchasing the product you went in for	3,104	96.4%	69.0%	108	3.4%	2.4%	8	0.2%	0.2%	3,220	1280
ROUND 2 & 3 ONLY											
Q10-5 Is getting to a pharmacy difficult for you (ROUND 2 and 3)	122 See table below	4.8%	4.1%	2,424	95.1%	80.8%	2	0.1%	0.1%	2,548	451
Q10-6 Do you think non-prescription medicines and treatments cost too much for you (ROUND 2 and 3)	1,164	45.7%	38.8%	1,330	52.2%	44.3%	54	2.1%	1.8%	2,548	451

Q10-5b ROUND 2 & 3. Answered TRUE to getting to a pharmacy is difficult for me (n=122)
Can you tell me why it is difficult?

Total ROUND 2 & 3 = 2,999 (122 answered 4,378 not answered)	True	% of those who answered n = 122	% R2&3 population n = 2,999
1. Distance to pharmacy	58	47.5%	1.9%
2. Inconvenient opening hours	18	14.8%	0.6%
3. Poor health or disability	23	18.9%	0.8%
4. Young children or dependents	8	6.6%	0.3%
5. Difficult to access (eg no car; difficulty parking)	17	13.9%	0.6%
6. Having to discuss condition and/or answer pharmacy questions	0	0.0%	0.0%
7. Have to talk about condition with junior staff	0	0.0%	0.0%
8. Cost	0	0.0%	0.0%
9. Product not available	1	0.8%	0.0%
10. Busy pharmacy	2	1.6%	0.1%
11. Pharmacist won't supply	0	0.0%	0.0%
12. Other	3	2.5%	0.1%
13. No reason given	0	0.0%	0.0%

Q10-9: Answered NO to Q10-8 Did you purchase the product you went in for?
Can you tell me why not?

	True	% of those who answered n = 108	% of whole population n = 4500
1 Advised on better product choice	39	36.1%	0.9%
2. Product not available	15	13.9%	0.3%
3. Purchased cheaper alternative	43	39.8%	1.0%
4. Purchased at supermarket	2	1.9%	0.0%
5. Other	10	9.3%	0.2%

Q10-10: Did you have a discussion or get advice from the pharmacist, pharmacy assistant, both or neither

	True	% of those who answered	% Whole population
1. Pharmacist	687	18.2%	15.3%
2. Pharmacy assistant	808	21.4%	18.0%
3.Both	920	24.4%	20.4%
4. Neither or No-one	1,311	34.8%	29.1%
5. Don't Recall	42	1.1%	0.9%
Total	3,768	100.0%	83.7%
Not Asked	732		16.3%
Total	4,500		100.0%

Q11a: Answered YES to received advice from pharmacist, pharmacy assistant, both, or do not recall who from (Q10-10)
The next few questions also require a Yes or No answer. Think about the main condition you went to the pharmacy about last time you bought a non-prescription product

Total Answered = 2,460	Yes	% of those who ans'd	% whole pop	No	% of those who ans'd	% whole pop	Don't Recall	% of those who ans'd	% whole pop	N/A	% of those who ans'd	% whole pop
Q11-1 Did pharmacy discussions or advice reassure you that you were doing the right thing	2,209	89.8%	49.1%	205	8.3%	4.6%	17	0.7%	0.4%	29	1.2%	0.6%
Q11-2 Did you remember pharmacy advice when you started using the product	2,128	86.5%	47.3%	243	9.9%	5.4%	22	0.9%	0.5%	67	2.7%	1.5%
Q11-3 Did you think that without advice you might have used or purchased the wrong product or one that didn't work as well	1,101	44.8%	24.5%	1,285	52.2%	28.6%	34	1.4%	0.8%	40	1.6%	0.9%
Q11-4 Do you think that without advice you might have made mistakes using the product	851	34.6%	18.9%	1,558	63.3%	34.6%	16	0.7%	0.4%	35	1.4%	0.8%

Q11b: And did the pharmacist or pharmacy assistant talk to you about any of the following?

	Yes	% of those who ans'd	% whole pop	No	% of those who ans'd	% whole pop	Don't Recall	% of those who ans'd	% whole pop	N/A	% of those who ans'd	% whole pop
Q11-5 Symptoms being experienced	1,794	65.9%	36.0%	800	32.5%	17.8%	28	1.1%	0.6%	12	0.5%	0.3%
Q11-6 Other products used	1,620	52.9%	28.9%	1,113	45.2%	24.7%	28	1.1%	0.6%	17	0.7%	0.4%
Q11-7 Other medical conditions you or the intended user may have	1,302	78.3%	42.8%	471	19.1%	10.5%	24	1.0%	0.5%	40	1.6%	0.9%
Q11-8 The best choice of product for you	1,925	69.7%	38.1%	709	28.8%	15.8%	19	0.8%	0.4%	18	0.7%	0.4%
Q11-9 Cheaper alternatives	1,714	70.8%	38.7%	640	26.0%	14.2%	69	2.8%	1.5%	9	0.4%	0.2%
Q11-10 Whether the product has been used before	1,742	59.0%	32.3%	945	38.4%	21.0%	38	1.5%	0.8%	25	1.0%	0.6%
Q11-11 Possible side effects	1,452	77.3%	42.3%	524	21.3%	11.6%	20	0.8%	0.4%	14	0.6%	0.3%
Q11-12 How to use the product/how long to use it for	1,902	6.2%	3.4%	2,280	92.7%	50.7%	22	0.9%	0.5%	5	0.2%	0.1%
Q11-13 Is there anything else that you recall the pharmacy discussing with you	153			2,280			22			5		

Q11-13b Answered Yes to anything else you recall the pharmacy discussing with you
Responses recorded

	True	% of those who answered n = 153	% total population n = 4,500
1. Lifestyle or alternative therapy advice	19	12.4%	0.4%
2. User profile (eg age, allergies)	18	11.8%	0.4%
3. Advised to seek medical advice, or when to return	56	36.6%	1.2%
4. Other	60	39.2%	1.3%
Total	153	100.0%	3.4%
Not Asked	4,347		96.6%
Total	4,500		100.0%

Q12 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?

	True	% of those who answered n = 3,771	% total population n = 4,500
1. Not at all satisfied	36	1.0%	0.8%
2. Not really satisfied	42	1.1%	0.9%
3. Somewhat satisfied	371	9.8%	8.2%
4. Quite satisfied	1,168	31.0%	26.0%
5. Very satisfied	1,796	47.6%	39.9%
6. No advice	349	9.3%	7.8%
7. Don't recall	9	0.2%	0.2%
Total	3,771	100.0%	83.8%
Not Asked	729		16.2%
Total	4,500		100.0%

Q13 – Round 1 (T/F only). 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.

Asked = 277 Not Asked = 1,224	True	% of those who were asked n = 277	% R1 pop n = 1,501	False	% of those who were asked n = 277	% R1 pop n = 1,501
Q13-1 I have not needed any of these medicines or treatments	226	81.6%	15.1%	51	18.4%	3.4%
Q13-2 I don't really know what medicines or treatments are available without a prescription	154	55.6%	10.3%	123	44.4%	8.2%
Q13-3 Someone else has been to the pharmacy for me to purchase medicine or treatment	47	17.0%	3.1%	230	83.0%	15.3%
Q13-4 I prefer not to use medicines or treatments if possible	227	81.9%	15.1%	50	18.1%	3.3%
Q13-5 I prefer to use alternative medicines or treatments when possible	127	45.8%	8.5%	150	54.2%	10.0%
Q13-6 Non-prescription medicines and treatments cost too much for me	118	42.6%	7.9%	159	57.4%	10.6%
Q13-7 Getting to a pharmacy is difficult for me. <i>If answer is true, ask: Can you tell me why it is difficult</i>	16	5.8%	1.1%	261	94.2%	17.4%
Q13-8 I only go to the pharmacy if my doctor tells me to	172	62.1%	11.5%	105	37.9%	7.0%
Q13-9 I went to the pharmacy but they told me to seek more medical advice	33	11.9%	2.2%	244	88.1%	16.3%
Q13-10 I went to the pharmacy but they told me I did not need medicine or treatment	16	5.8%	1.1%	261	94.2%	17.4%
Q13-11 I have only bought medicines or treatments from the pharmacy that needed a doctor's prescription in the last year	188	67.9%	12.5%	89	32.1%	5.9%
Q13-12 If I have products at home, I sometimes use them without going back to the pharmacy or doctor	143	51.6%	9.5%	134	48.4%	8.9%
Q13-13 I do not want to always speak to pharmacy staff about my condition	94	33.9%	6.3%	183	66.1%	12.2%
Q13-14 I have previously purchased medicines or treatments from a pharmacy without a prescription and was not happy with pharmacy service or advice	13	4.7%	0.9%	264	95.3%	17.6%
Q13-15 I have previously purchased medicines or treatments from a pharmacy without a prescription and was not happy with the product	24	8.7%	1.6%	253	91.3%	16.9%
Q13-16 I could not get the product I wanted from a pharmacy.	30	10.8%	2.0%	247	89.2%	16.5%
Q13-17 In the last 12 months I have purchased non-prescription medicines at on-line pharmacies.	5	1.8%	0.3%	272	98.2%	18.1%
Q13-18 I prefer to buy medicines and treatments at other places like convenience stores when I can.	82	29.6%	5.5%	195	70.4%	13.0%

Q13 – Round 2&3 (RATING SCALE). 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 and 5=very important..

Asked = 445 Not Asked = 2,554	1	% asked	% R2 & R3	2	% asked	% R2 & R3	3	% asked	% R2 & R3	4	% asked	% R2 & R3	5	% asked	% R2 & R3
Q13-1 I have not needed any of these medicines or treatments	164	36.9%	5.5%	22	4.9%	0.7%	42	9.4%	1.4%	29	6.5%	1.0%	188	42.2%	6.3%
Q13-2 I don't really know what medicines or treatments are available without a prescription	198	44.5%	6.6%	38	8.5%	1.3%	71	16.0%	2.4%	51	11.5%	1.7%	87	19.6%	2.9%
Q13-3 Someone else has been to the pharmacy for me to purchase medicine or treatment	294	66.1%	9.8%	26	5.8%	0.9%	31	7.0%	1.0%	19	4.3%	0.6%	75	16.9%	2.5%
Q13-4 I prefer not to use medicines or treatments if possible	107	24.0%	3.6%	28	6.3%	0.9%	57	12.8%	1.9%	56	12.6%	1.9%	197	44.3%	6.6%
Q13-5 I prefer to use alternative medicines or treatments when possible	209	47.0%	7.0%	41	9.2%	1.4%	63	14.2%	2.1%	43	9.7%	1.4%	89	20.0%	3.0%
Q13-6 Non-prescription medicines and treatments cost too much for me	211	47.4%	7.0%	32	7.2%	1.1%	83	18.7%	2.8%	27	6.1%	0.9%	92	20.7%	3.1%
Q13-7 Getting to a pharmacy is difficult for me. <i>If answer is 2-5 (ie slightly to very important), ask: Can you tell me why it is difficult? Record answer.</i>	401	90.1%	13.4%	12	2.7%	0.4%	11	2.5%	0.4%	7	1.6%	0.2%	14	3.1%	0.5%
Q13-8 I only go to the pharmacy if my doctor tells me to	144	32.4%	4.8%	18	4.0%	0.6%	48	10.8%	1.6%	46	10.3%	1.5%	189	42.5%	6.3%
Q13-9 I went to the pharmacy but they told me to seek more medical advice	346	77.8%	11.5%	22	4.9%	0.7%	20	4.5%	0.7%	14	3.1%	0.5%	43	9.7%	1.4%
Q13-10 I went to the pharmacy but they told me I did not need medicine /treatment	381	85.6%	12.7%	17	3.8%	0.6%	16	3.6%	0.5%	11	2.5%	0.4%	20	4.5%	0.7%
Q13-11 I have only bought medicines or treatments from the pharmacy that needed a doctor's prescription in the last year	123	27.6%	4.1%	9	2.0%	0.3%	29	6.5%	1.0%	32	7.2%	1.1%	252	56.6%	8.4%
Q13-12 If I have products at home, I sometimes use them without going back to the pharmacy or doctor	209	47.0%	7.0%	23	5.2%	0.8%	70	15.7%	2.3%	45	10.1%	1.5%	98	22.0%	3.3%
Q13-13 I do not want to always speak to pharmacy staff about my condition	267	60.0%	8.9%	34	7.6%	1.1%	59	13.3%	2.0%	32	7.2%	1.1%	53	11.9%	1.8%
Q13-14 I have previously purchased medicines or treatments from a pharmacy without a prescription and was not happy with pharmacy svc/ advice	357	80.2%	11.9%	29	6.5%	1.0%	25	5.6%	0.8%	8	1.8%	0.3%	26	5.8%	0.9%
Q13-15 I have previously purchased medicines or treatments from a pharmacy without a prescription and was not happy with the product	357	80.2%	11.9%	33	7.4%	1.1%	26	5.8%	0.9%	9	2.0%	0.3%	20	4.5%	0.7%
Q13-16 I could not get the product I wanted from a pharmacy. <i>If answer is 2-5 (ie slightly to very important), ask: Can you tell me the name of the product you wanted or what it was for? Record answer</i>	374	84.0%	12.5%	15	3.4%	0.5%	22	4.9%	0.7%	9	2.0%	0.3%	25	5.6%	0.8%
Q13-17 In the last 12 months I have purchased non-prescription medicines at on-line pharmacies.	423	95.1%	14.1%	9	2.0%	0.3%	2	0.4%	0.1%	3	0.7%	0.1%	8	1.8%	0.3%
Q13-18 I prefer to buy medicines and treatments at other places like convenience stores when I can. <i>If answer is 2-5 (ie slightly to very important), ask: Can you tell me why you prefer to buy medicines and treatments at other places?</i>	287	64.5%	9.6%	17	3.8%	0.6%	42	9.4%	1.4%	33	7.4%	1.1%	66	14.8%	2.2%

Q13-7b : If answered TRUE (Round 1) or 2-5 (Round 2/3) to: Getting to a pharmacy is difficult for me.
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").

(60 answered 4440 not answered)	True	% of those who answered n = 60	% total population n = 4,500
1. Distance to pharmacy	19	31.7%	0.4%
2. Inconvenient opening hours	14	23.3%	0.3%
3. Poor health or disability	14	23.3%	0.3%
4. Young children or dependents	0	0.0%	0.0%
5. Difficult to access (eg no car; difficulty parking)	8	13.3%	0.2%
6. Having to discuss condition and/or answer pharmacy questions	0	0.0%	0.0%
7. Have to talk about condition with junior staff	0	0.0%	0.0%
8. Cost	0	0.0%	0.0%
9. Product not available	0	0.0%	0.0%
10. Busy pharmacy	1	1.7%	0.0%
11. Pharmacist won't supply	0	0.0%	0.0%
12. Other	3	5.0%	0.1%
13. No reason given	2	3.3%	0.0%

Q13-16b : If answered TRUE (Round 1) or 2-5 (Round 2/3) to: I could not get the product I wanted from a pharmacy.
Can you tell me the name of the product you wanted or what it was for? Record answer

(101 answered 4,399 not answered)	True	% of those who answered n = 101	% total population n = 4,500
1. S2	6	5.9%	0.1%
2. Unscheduled / herbal / alternative medicine	19	18.8%	0.4%
3. Cannot recall	55	54.5%	1.2%
4. Other	21	20.8%	0.5%
Total	101	100%	2.2%

Q13-18b : If answered TRUE (Round 1) or 2-5 (Round 2/3) to: I prefer to buy medicines and treatments at other places like convenience stores when I can.

Can you tell me why you prefer to buy medicines and treatments at other places?

(190 answered 4,310 not answered)	True	% of those who answered n = 190	% total population n = 4,500
1. Distance (closer)	12	6.3%	0.3%
2. Convenience / saves special trip	109	57.4%	2.4%
3. Able to self select	2	1.1%	0.0%
4. Cost (cheaper)	56	29.5%	1.2%
5. Other	11	5.8%	0.2%
Total	190	100.0%	4.2%

Q13-18c : If answered TRUE (Round 1) or 2-5 (Round 2/3) to: I prefer to buy medicines and treatments at other places like convenience stores when I can.
Do you then go to a pharmacy for advice regarding the condition or product? Your answer may be 'no' / 'sometimes' / 'always'.

(240 answered 4260 not asked)	True	% of those who answered n =240	% total population n = 4,500
1. No	177	73.8%	3.9%
2. Sometimes	52	21.7%	1.2%
3. Always	11	4.6%	0.2%
Total	240	100.0%	5.3%

Q14 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 1=strongly disagree and 5=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

	True	% total population n = 4,500
1. Strongly disagree	1,582	35.2%
2. Generally disagree	793	17.6%
3. Neither agree nor disagree	525	11.7%
4. Generally agree	760	16.9%
5. Strongly agree	840	18.7%
Total	4,500	100%

Q15 The second statement is: In the future I would like advice to always be available for products for these conditions

	True	% total population n = 4,500
1. Strongly disagree	159	3.5%
2. Generally disagree	324	7.2%
3. Neither agree nor disagree	463	10.3%
4. Generally agree	1,227	27.3%
5. Strongly agree	2,327	51.7%
Total	4,500	100%

Q16 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'

	Yes	% total pop	No	% total pop	Don't know	% total pop	Total
Q16-1 High blood pressure	1,019	22.6%	3,440	76.4%	41	0.9%	4,500
Q16-2 Diabetes	352	7.8%	4,128	91.7%	20	0.4%	4,500
Q16-3 Heart disease	294	6.5%	4,167	92.6%	39	0.9%	4,500
Q16-4 Arthritis	1,049	23.3%	3,428	76.2%	23	0.5%	4,500
Q16-5 Stomach ulcers	189	4.2%	4,287	95.3%	24	0.5%	4,500
Q16-6 Asthma	807	17.9%	3,678	81.7%	15	0.3%	4,500
Q16-7 Pregnancy	103	2.3%	4,388	97.5%	9	0.2%	4,500
Q16-7 Any of these medical conditions	2,244	49.9%	2,256	50.1%	0	0.0%	4,500

Q17 Are you able to tell me your household income category		
	True	% total population n = 4,500
<\$30,000	886	19.7%
\$30,000 - \$80,000	1,710	38.0%
>\$80,000	1,560	34.7%
Not disclosed	344	7.6%
Total	4,500	100%

APPENDIX Q TABULATION OF IN-PHARMACY SURVEY DATA

Consumer Survey

Questions 1-3 (n=734)		Yes	% total	No	% total
1. Did you come in about any of the following things today?	704			30	
2. Did you purchase a product today for any of these?	734		100%	0	
3. Can you look and tell me if the product has these exact words PHARMACY MEDICINE on the top of the pack.	734				

Question 4: Is the product for you or for someone else? (n = 728)								
Self	% ans'd	% total	Someone else	% ans'd	% total	Both	% ans'd	% total
451	62.0%	61.4%	218	30.0%	29.7%	59	8.0%	21.7%

Question 5: Did you come in today with a particular product in mind, or to get advice, or both? (n = 721)								
Product in mind	% ans'd	% total	To get advice	% ans'd	% total	Both	% ans'd	% total
511	70.9%	69.6%	105	14.6%	14.3%	105	14.6%	14.3%

Question 6: Did you end up purchasing this product? (n=620)					
Yes	% ans'd	% total	No	% ans'd	% total
590	95.2%	80.4%	30	4.8%	4.1%

Question 7: 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? (n=731)									
Familiar with product	% ans'd	% total	New or rarely used item	% ans'd	% total	Don't know	% ans'd	% total	
534	73.1%	72.8%	184	25.2%	25.1%	13	1.8%	1.8%	

Question 8: Did you get any advice or discussion from pharmacy staff about this product(s) or condition today? (n=729)					
Yes	% ans'd	% total	No	% ans'd	% total
454	62.3%	61.9%	275	37.7%	37.5%

Question 8b: Answered NO to getting advice or discussion from pharmacy staff. Can you tell me why not (n = 276)											
Familiar with product	% ans'd	% total	Pharmacy knows me	% ans'd	% total	Advice not offered	% ans'd	% total	Other	% ans'd	% total
229	83.0%	31.2%	17	6.2%	2.3%	6	2.2%	0.8%	24	8.7%	83.0%

Question 9: Who did you have a discussion with today? (n = 730)											
Pharmacist	% answ'd	% total	Pharm assistant	% answ'd	% total	Both	% answ'd	% total	None	% answ'd	% total
157	21.5%	21.4%	284	38.9%	38.7%	37	5.1%	5.0%	252	34.5%	34.3%

Q10. Was the discussion or advice about any of the following (tick all that apply)?		
	Yes	% total
Q10-1 Your symptoms (or those of intended user)	272	37.1%
Q10-2 Other products being used	180	24.5%
Q10-3 Other medical conditions / Contraindications	144	19.6%
Q10-4 Best choice of product	192	26.2%
Q10-5 Cheaper alternatives	79	10.8%
Q10-6 Previous use of the product	166	22.6%
Q10-7 Possible side effects	114	15.5%
Q10-8 Correct dosage, usage, storage	229	31.2%
Q10-9 Reassurance	98	13.4%
Q10-10 Safe purchase environment	1	0.1%
Q10-11 Trusted qualified helpful staff	1	0.1%
Q10-12 Overall health, lifestyle or other intervention discussion or	4	0.5%
Q10-13 Patient Safety	0	0.0%
Q10-14 Advised when to seek medical other advice	0	0.0%
Q10-15 Medical advice	0	0.0%
Q10-16 Full product knowledge	0	0.0%
Q10-17 Other	20	2.7%

Question 11: Overall, how satisfied are you with the level of advice you received today, where 1=not at all satisfied and 5=very satisfied (n=633)														
1	% ans'd	% total	2	% ans'd	% total	3	% ans'd	% total	4	% ans'd	% total	5	% ans'd	% total
0	0.0%	0.0%	4	0.6%	0.5%	36	5.7%	4.9%	101	16.0%	13.8%	492	77.7%	67.0%

Q12a What, if anything, made it difficult for you to get to the pharmacy or get this product today?		
	Number	% total (n=734)
Distance to pharmacy	24	3.3%
Inconvenient opening hours	21	2.9%
Poor health or disability	34	4.6%
Young children or dependents	26	3.5%
Difficult access / no car	36	4.9%
Language barriers	0	1.1%
Have to discuss condition and/or answer pharmacy questions	4	0.6%
Cost	3	0.4%
Product not available at pharmacy	0	0.0%
Busy pharmacy	1	0.1%
Pharmacist won't supply	0	0.0%
Person buying on behalf of others may not be able to answer qu's re user	0	0.0%
Having to self select - too much choice!	0	0.0%
Other	37	5.0%
None stated	584	79.6%

Q12b (ROUND 3 only): What, if anything, made it easy for you to get to the pharmacy or get this product today		
	Yes	% total (n=235)
Advice available / free	28	11.9%
Trusted qualified helpful staff	27	11.5%
Personalised service (ie know their customers)	11	4.7%
Easily accessible / Convenient location	60	25.5%
Ability to self select	5	2.1%
Additional services (ie home delivery, phone advice)	4	1.7%
High staff to customer ratio	2	0.9%
Clear signage or store layout	3	1.3%
Extended opening hours	1	0.4%
Speed of service ⁴	1	0.4%
Large range of alternatives	1	0.4%
Access to interpreter	0	0.0%
Competitive product prices	8	3.4%
Other	31	14.2%
None stated	99	42.1%

Q13 The next two questions are on a rating scale where 1=strongly disagree and 5=strongly agree.														
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? (n=731)														
1	% ans'd	% total	2	% ans'd	% total	3	% ans'd	% total	4	% ans'd	% total	5	% ans'd	% total
340	46.5%	46.5%	123	16.8%	16.8%	112	15.3%	15.3%	51	7.0%	7.0%	105	14.4%	14.4%

Q14 In the future, would you like advice to always be available for the condition or products you have purchased today? (n=728)														
1	% ans'd	% total	2	% ans'd	% total	3	% ans'd	% total	4	% ans'd	% total	5	% ans'd	% total
9	0.1%	1.2%	28	0.4%	3.8%	88	1.2%	12.0%	122	1.7%	16.6%	481	6.6%	65.5%

Question 15: Do you think you have been provided with enough information about this product or condition? (n = 727)

Yes	% ans'd	% total	No	% ans'd	% total	Undecided	% ans'd	% total
702	96.6%	95.6%	4	0.6%	0.5%	21	2.9%	2.9%

Q16 Does the intended user of the product have any of the following other medical conditions?

Condition	Yes	% total
High blood pressure	145	19.8%
Heart disease	41	5.6%
Stomach ulcers	17	2.3%
Diabetes	40	5.4%
Arthritis	116	15.8%
Asthma	95	12.9%
Pregnancy	10	1.4%
Don't know	14	1.9%
None	451	61.4%

Q17 What is your age group?

	Yes	% total
18-24	60	8.2%
23-34	138	18.8%
35-44	163	22.2%
45-54	148	20.2%
55-64	112	15.3%
65-74	69	9.4%
75 or over	44	6.0%
total	734	100%

Male	% total	Female	% total	unanswered	Total
230	31.3%	502	68.4%	2	732

Pharmacist Survey

Q1 (n=150) Are you able to tell us the number of S2 products (in units) sold in your pharmacy yesterday?

Yes	% total	No	% total
57	38.0%	93	62.0%

Q2 (n = 148) Where do you store S2 products in the pharmacy?

Majority behind the counter	% answ'd	% total	Some behind the counter	% answ'd	% total	Majority front of store	% answ'd	% total	Not ans'd	total
104	70.3%	69.3%	25	16.9%	16.7%	19	12.8%	12.7%	2	1.4%

**Q2b If answer is YES to products stored behind the counter
What are your reasons for storing S2 products behind the counter?**

	Yes	% answ'd	% total
Legislative requirement	53	38.4%	35.8%
Easier to manage or provide advice	70	50.7%	47.3%
Pseudo-ephedrine behind counter	0	0.0%	0.0%
Other	15	10.9%	10.1%
total	138		

Q3 What benefits do you believe consumers derive from pharmacy advice about S2 medicines or associated conditions?	Yes	% total
Symptoms	13	8.7%
Other products being used / drug interactions	52	34.7%
Other medical conditions / Contraindications	30	20.0%
Best choice of product	75	50.0%
Cheaper alternatives	3	2.0%
Previous use of product	0	0.0%
Possible side effects	10	6.7%
Correct dosage, usage, storage	84	56.0%
Reassurance	4	2.7%
Safe purchase environment	6	4.0%
Trusted qualified helpful staff	40	26.7%
Overall health, lifestyle or other interventions discussion or advice	29	19.3%
Patient safety	38	25.3%
Advised when to seek medical or other advice	7	4.7%
Medical advice without visit to doctor	5	3.3%
Full product knowledge (ie product ingredients)	15	10.0%
Other	5	3.3%
None stated	0	0.0%

Q4 Can you think of anything that makes it difficult for your customers to get S2 medicines?	Yes	% total
Distance to pharmacy	2	1.3%
Inconvenient opening hours	12	8.0%
Poor health or disability	1	0.7%
Young children or dependents	0	0.0%
Difficult access / no car	6	4.0%
Language barriers	12	8.0%
Have to discuss condition and/or answer pharmacy questions	50	33.3%
Cost	4	2.7%
Product not available at pharmacy	6	4.0%
Busy pharmacy	18	12.0%
Pharmacist won't supply	2	1.3%
Person buying on behalf of others may not be able to answer qu's re user	13	8.7%
Having to self select - too much choice!	2	1.3%
Other	18	12.0%
None stated	46	30.7%

Q5 Can you think of anything that makes getting S2 medicines easy for your customers?	Yes	% total
Advice available / free	40	26.7%
Trusted qualified helpful staff	67	44.7%
Personalised service (ie know their customers)	10	6.7%
Easily accessible / Convenient location	28	18.7%
Ability to self select	19	12.7%
Additional services (eg home delivery, phone advice)	10	6.7%
High staff to customer ratio	11	7.3%
Clear signage or store layout	22	14.7%
Extended opening hours	44	29.3%
Speed of service	4	2.7%
Large range of alternatives	17	11.3%
Access to interpreter	5	3.3%
Competitive product prices	6	4.0%
Other	16	10.7%
None stated	14	9.3%

Pharmacy Assistant Survey

Q1 What benefits do you believe consumers derive from pharmacy advice about S2 medicines or associated conditions?	Yes	% total
Symptoms	8	5.3%
Other products being used / drug interactions	51	34.0%
Other medical conditions / Contraindications	43	28.7%
Best choice of product	61	40.7%
Cheaper alternatives	3	2.0%
Previous use of product	1	0.7%
Possible side effects	14	9.3%
Correct dosage, usage, storage	75	50.0%
Reassurance	4	2.7%
Safe purchase environment	1	0.7%
Trusted qualified helpful staff	35	23.3%
Overall health, lifestyle or other interventions discussion or advice	32	21.3%
Patient safety	20	13.3%
Advised when to seek medical or other advice	1	0.7%
Medical advice without visit to doctor	3	2.0%
Full product knowledge (ie product ingredients)	24	16.0%
Other	2	1.3%
None stated	20	13.3%

Q2 Can you think of anything that makes it difficult for your customers to get S2 medicines?	Yes	% total
Distance to pharmacy	2	1.3%
Inconvenient opening hours	8	5.3%
Poor health or disability	3	2.0%
Young children or dependents	0	0.0%
Difficult access / no car	7	4.7%
Language barriers	10	6.7%
Have to discuss condition and/or answer pharmacy questions	50	33.3%
Cost	0	0.0%
Product not available at pharmacy	4	2.7%
Busy pharmacy	10	6.7%
Pharmacist won't supply	3	2.0%
Person buying on behalf of others may not be able to answer qu's re user	14	9.3%
Having to self select - too much choice!	2	1.3%
Other	21	14.0%
None stated	54	36.0%

Q3 Can you think of anything that makes getting S2 medicines easy for your customers?	Yes	% total
Advice available / free	48	32.0%
Trusted qualified helpful staff	55	36.7%
Personalised service (ie know their customers)	14	9.3%
Easily accessible / Convenient location	15	10.0%
Self selection	23	15.3%
Additional services (ie home delivery, phone advice)	13	8.7%
High staff to customer ratio	11	7.3%
Clear signage or store layout	21	14.0%
Extended opening hours	19	12.7%
Speed of service	4	2.7%
Large range of alternatives	19	12.7%
Access to interpreter	2	1.3%
Competitive product prices	4	2.7%
Other	14	9.3%
None stated	38	25.3%

APPENDIX R POSSIBLE S2 MEDICINES REPORTED BY CATI PARTICIPANTS

Product name	What product was purchased for	No. respondents in CATI (n=4,500)
S2/Unscheduled (n=1,035)		
Panadol	Pain relief / headache	500
Nurofen	Pain relief / headache	215
Paracetamol	Pain relief / headache	27
Ibuprofen	Pain relief	23
Iron tablet/supplement	Anaemia	22
Aspirin	Pain relief	20
Lamisil	Fungal infection	20
Cough medicine	Cough	17
Advil	Pain relief	16
Herron	Pain relief	15
Aspirin / Cartia	Blood thinning	13
Mylanta	Indigestion / heartburn	10
Zantac	Indigestion	10
Other (<10 respondents)		127
S2/S3 (n=462)		
Cold and Flu	Cold / flu	72
Panadeine	Pain relief	51
Dimetapp	Cold / flu	49
Mersyndol	Pain relief	43
Nurofen Plus	Pain relief	41
Voltaren	Pain relief	41
Benadryl	Cold / flu	21
Panamax	Pain relief	17
Demazin	Cold / flu	16
Sudafed	Cold / flu	14
Other (<10 respondents)		97
S2/S3/Unscheduled (n=110)		
Sudafed	Cough / cold	21
Voltaren	Pain relief	16
Robitussin	Cough	13
Other (<10 respondents)		60

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