

# PHARMACY GUILD OF AUSTRALIA

---

## THE 2016 HEALTHY FUTURES REPORT PART 2

Openness, Mood and Perceptions  
towards Dose Administration Aids



The Pharmacy  
Guild of Australia

**mccrindle**  
FORECASTS • STRATEGY • RESEARCH

**APP**  
**2016**

GOLD COAST  
CONVENTION  
& EXHIBITION  
CENTRE  
17-20 MARCH

*Australian Pharmacy Professional Conference & Trade Exhibition*

 **amneal**  
PHARMACEUTICALS

RESEARCH SPONSOR

## CONTENTS

|   |    |
|---|----|
| Contents.....   | 2  |
| Research objectives .....   | 3  |
| Research methodology.....   | 4  |
| 2016 Healthy futures report – Part 2: Openness, mood and perceptions towards dose administration aids ..... | 5  |
| Executive summary .....   | 5  |
| Results.....  | 7  |
| Chronic therapy management among older Australians.....   | 7  |
| Methods of remembering to take ongoing chronic therapy medication.....                                      | 8  |
| Prescription medication management for chronic therapy .....  | 9  |
| Plastic pill box evaluation.....  | 10 |
| Dose administration aid evaluation.....   | 11 |
| Perceptions regarding dose administration aids.....   | 11 |
| Openness to pharmacist pre-packed prescription medication.....  | 13 |
| Deterrents to using dose administration aids .....  | 14 |
| Demographics overview.....  | 18 |
| Gender and age.....   | 18 |
| State.....  | 20 |
| Education.....  | 20 |
| Employment status .....   | 21 |
| Household type .....  | 21 |
| Income.....   | 22 |

## RESEARCH OBJECTIVES

In January 2016, the Pharmacy Guild of Australia commissioned McCrindle to undertake research into Australian attitudes, behaviours and expectations regarding their future health and medicine management. The research was supported by Amneal Pharmaceuticals.

A range of topics were explored amongst 1,027 Australians across all ages of the general public above the age of 18. These included where Australians go to for health and medical advice, their perspectives on eHealth and electronic/online medicine records keeping, the role of pharmacists in prescribing chronic therapy prescription medicines, and adherence to medication regimes including attitudes towards missed doses. The results from this survey have been compiled into the **Healthy Futures Report: eHealth, Dr Google and the New Generations Report – Part 1**.

In addition to testing the above topics among the general Australian public, 523 Australians above the age of 50 who take ongoing medications for at least one chronic therapy condition were asked to provide their views on chronic therapy management, medication management, and the use of dose administration aids. The results from this survey have been compiled into **The Healthy Futures Report: eHealth, Dr Google and the New Generations Report – Part 2**.

These results will be shared by social researcher Mark McCrindle and Kos Sclavos at APP 2016 Conference from 17-20 March at the Gold Coast, Australia.

## RESEARCH METHODOLOGY

The *2016 Health Futures Report – Part 2: Openness, Mood and Perceptions towards Dose Administrations Aids* is the analysis of data gained through a quantitative survey launched to a national panel of Australians aged over 50, in field from 25<sup>th</sup> January to 29<sup>th</sup> January, 2016.

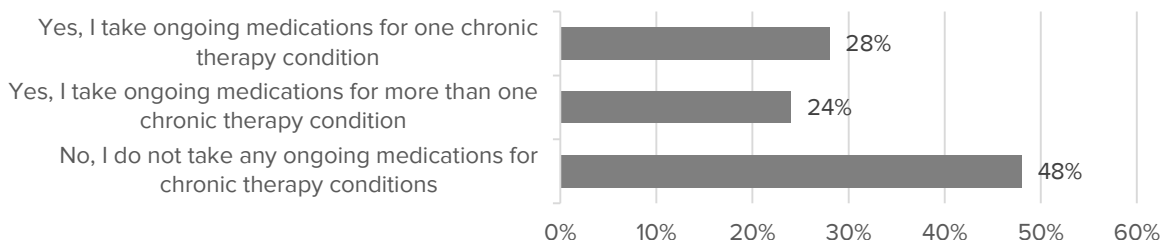
This was the second survey that has contributed towards the Healthy Futures Report following on from the initial component eHealth, Dr Google and the New Generations. This second component Openness, Mood and Perceptions towards Dose Administration Aids was targeted towards Australians aged 50+ who take medicines for chronic illness.

### Survey 2: 523 Australians aged 50+ who take medicines for chronic illness

The *Chronic Therapy Management of Older Australians* section within this report draws from data gained through a survey of 523 Australians aged 50 or older who take ongoing medications for at least one chronic therapy condition. These individuals were derived from a sample of 1,013 Australians aged 50 or older who were asked the following question:

**Q. In the last 12 months, have you taken any prescription medication for chronic therapy conditions?**

Chronic therapy conditions include high cholesterol, diabetes, cardiovascular disease, epilepsy, etc.



Individuals who selected 'No' were immediately screened out from the survey, with 523 respondents aged 50+ remaining. Information gained through this survey to older Australians who take prescription medication for chronic therapy conditions is presented in **light blue** and **olive green** graphs.

# 2016 HEALTHY FUTURES REPORT – PART 2: OPENNESS, MOOD AND PERCEPTIONS TOWARDS DOSE ADMINISTRATION AIDS

## EXECUTIVE SUMMARY

### Chronic therapy medications

More than half of Australians (52%) aged 50 or older report taking ongoing prescription medication for chronic therapy conditions such as high cholesterol, diabetes, cardiovascular disease, or epilepsy. Nearly 1 in 4 (24%) Australians aged 50 or older take ongoing medications for more than one chronic therapy condition which increases the complexity for users and reveals an opportunity for pharmacists to recommend dose administration aids.

Chronic therapy users were asked how they remember to take their medications and 83% of Australians aged 50+ who take medication for ongoing chronic conditions identified habitual routines as their method of remembering to take their medications. The importance placed on autonomy and independence is evident through the reliance on habitual practices.

### Prescription medicine management

When asked how they take their prescription medications, 2 in 3 (67%) Australians aged 50+ who take ongoing medication for chronic therapy conditions indicated that they use the original bottle or packaging that the medicine comes in.

Just over 1 in 4 (26%) use plastic pill boxes to manage their medication(s), and only 1 in 6 (16%) use dose administration aids.

### Evaluation of administration methods

The majority of users of the plastic pill box identified that they find this system of medicine management easy to use. Keeping the medication clean (91% - combining extremely and very easy) was seen as the greatest strength of the plastic pill box followed by ease of knowing how to take it (90% - combining extremely and very easy).

The majority of users of the dose administration aids similarly found this system of medication management easy to use. The most helpful aspect of the dose administration aid was found to be the ease of knowing how to take medications (91% - combining extremely and very easy) followed by the ease of dispensing the medication or keeping it clean (87% - combining extremely and very easy).

## Dose administration aids

1 in 2 (51%) Australians that currently take prescribed medication/s for ongoing chronic conditions but don't use dose administration aids, stated that dose administration aids would be helpful to them. The most useful component of dose administration aids identified by these respondents was the visible and clear packaging which would allow them to see what to take and when, aiding the identification of their medicines with a clear plan for administration.

There was considerable openness to having a pharmacist pre-pack prescription medications. 2 in 5 (40%) Australians aged 50 or older who take ongoing prescription medication for chronic therapy conditions, who don't use dose administration aids, indicated they are open to using dose administration aids prepacked by their pharmacist.

The primary deterrent identified by those who have chronic therapy conditions to using dose administration aids is the strong belief identified by nearly 3 in 4 (74%) Australians aged 50+ that they are capable and able to manage their medications autonomously. This was followed by deterrents such as cost of approximately \$6 per week (40%), the time taken to pick up medications every two weeks (19%) and being limited to using only one pharmacist to pick up medications (14%).

The top motivating factor for transitioning to the use a dose administration aids would be if individuals could no longer manage to organise their medications themselves as identified by nearly 3 in 4 (72%) Australians aged 50+ who take chronic therapy medications, not currently using dose administrations aids. This was followed by the continual forgetfulness to take medications (50%) and then if it would not cost them anything (46%). Nearly 1 in 3 (32%) acknowledged that they would transition to dose administration aids if it was recommended by their doctor and over 1 in 5 (21%) would transition if they had more than 4 prescribed chronic therapy medications.

Over 1 in 7 (15%) of those who don't use dose administrations aids would transition if their pharmacist recommended they adopt the use of dose administration aids.

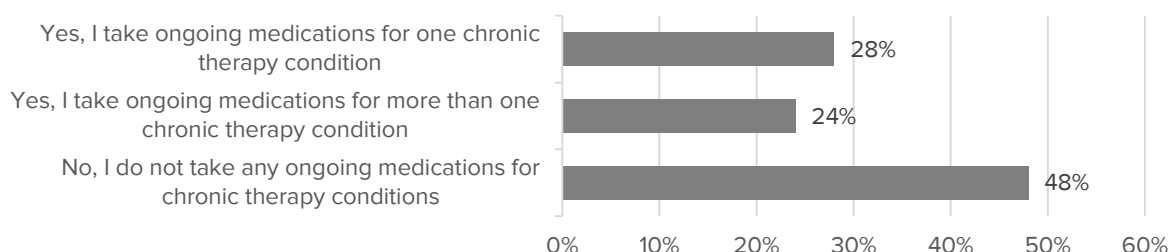
## RESULTS

### CHRONIC THERAPY MANAGEMENT AMONG OLDER AUSTRALIANS

The below is the screener survey through which 1,013 Australians aged 50 or older were made eligible to respond to Survey 2.

**Q. In the last 12 months, have you taken any prescription medication for chronic therapy conditions?**  
**Chronic therapy conditions include high cholesterol, diabetes, cardiovascular disease, epilepsy, etc.**

(n = 1,013)



More than half of Australians (52%) aged 50 or older report taking ongoing prescription medication for chronic therapy conditions such as high cholesterol, diabetes, cardiovascular disease, or epilepsy.

An astounding 1 in 4 Australians aged 50 or older (24%) take ongoing medications for more than one chronic therapy condition.

The age groups (in ten-year age brackets) that made up those who take ongoing medications for at least one chronic therapy condition are shown below:

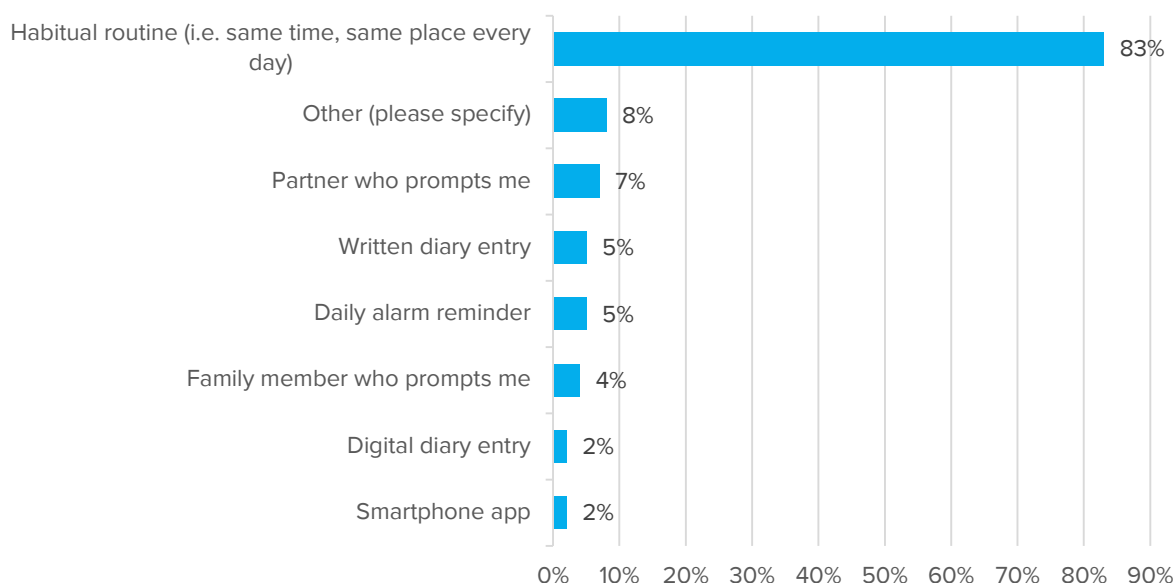
| Age   | 50 - 59 | 60 - 69 | 70 - 79 | 80+ |
|---|---------|---------|---------|-----|
| Take medications for ongoing chronic therapy conditions | 44%     | 49%     | 66%     | 64% |



## Methods of remembering to take ongoing chronic therapy medication

**Q. What measures do you use to remind yourself to take ongoing chronic therapy medication? Please select all that apply.**

(n=523)



Australians aged 50+ are most likely to rely on their habitual routine (83%) to take ongoing chronic therapy medication, rather than external prompts.

Responses used less frequently are reminders from partners (7%) or family members (4%) and notices from paper (5%) or digital diaries (5%), alarms (5%), or a smartphone app (2%).

Other ways individuals remember to take medication are through the use of the pill box, a chart, or positioning medication in a visible place such as the fridge or next to the bed.

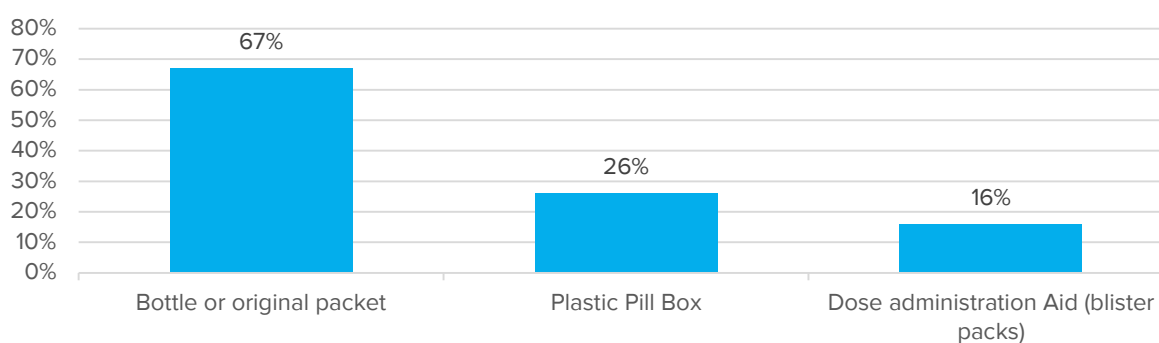
Older Australians are most likely to use habitual routine as a measure to remind themselves to take medication.

| Age              | 50 - 59 | 60 - 69 | 70 - 79 | 80+ |
|------------------|---------|---------|---------|-----|
| Habitual routine | 79%     | 84%     | 86%     | 87% |



## Prescription medication management for chronic therapy

**Q. In which of the following ways do you manage your prescribed medication? Please select all that apply. (n = 523)**



2 in 3 (67%) Australians aged 50+ who use ongoing medication for chronic therapy conditions simply just use the original bottle or packaging that the medicine comes in.

Just over 1 in 4 (26%) use plastic pill boxes to manage their medication(s), and only 1 in 6 (16%) use the dose administration aids provided by their pharmacist.

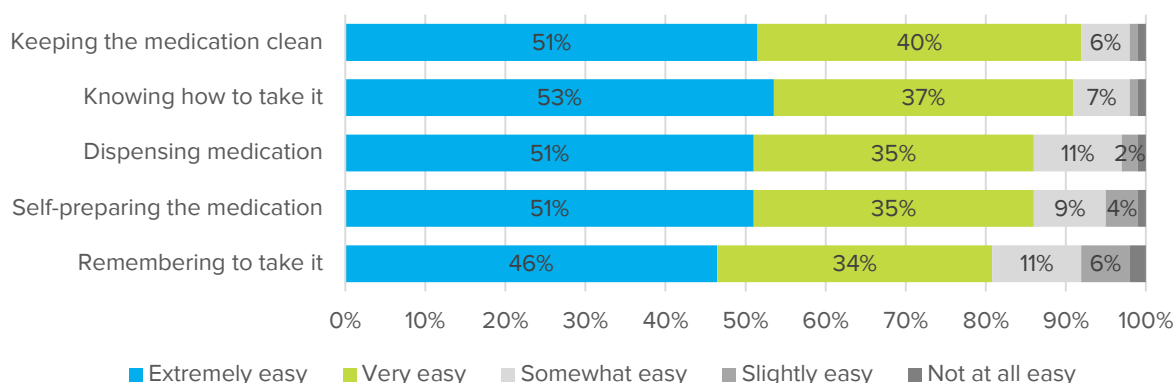
80+ year olds are the most likely age group to be using a dose administration aid or plastic pill box to manage their prescribed medication whilst the younger age groups are more likely to just be using the bottle or original packet.

| Age                       | 50 - 59 | 60 - 69 | 70 - 79 | 80+ |
|---------------------------|---------|---------|---------|-----|
| Bottle or original packet | 69%     | 74%     | 64%     | 50% |
| Plastic pill box          | 25%     | 24%     | 25%     | 37% |
| Dose administration aid   | 15%     | 13%     | 19%     | 22% |

## Plastic pill box evaluation

### Q. How do you rate the ease of using a plastic pill box to manage the following aspects of your medication?

(n = 134)



Users of the plastic pill box (26% of Australians who take ongoing prescription medication for chronic therapy conditions) largely indicate that these are extremely or very easy to use.

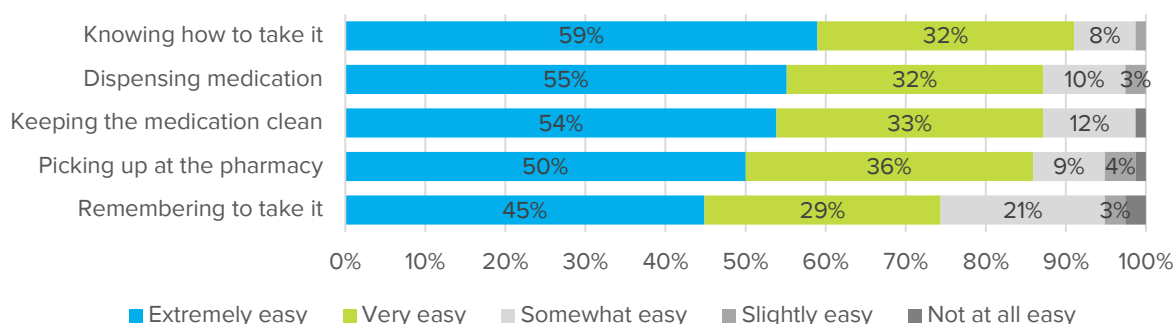
Keeping the medication clean is regarded as the easiest aspect of using a plastic pill box (reported as extremely or very easy by 91%), followed by knowing when to take it (90%), dispensing the medication (86%), self-preparing the medication (86%) and remembering to take it (80%).

Below is the proportion of each age group who rated each area of ease of use as extremely or very easy:

| Age – Extremely and very      | 50 - 59 | 60 - 69 | 70 - 79 | 80+ |
|-------------------------------|---------|---------|---------|-----|
| Self-preparing the medication | 78%     | 89%     | 91%     | 94% |
| Dispensing medication         | 83%     | 84%     | 88%     | 94% |
| Remembering to take it        | 74%     | 84%     | 82%     | 88% |
| Keeping the medication clean  | 89%     | 95%     | 91%     | 94% |
| Knowing how to take it        | 87%     | 92%     | 91%     | 94% |

## Dose administration aid evaluation

**Q. How do you rate the ease of using a dose administration aid (foil blister pack) to manage the following aspects of your medication? (n = 78)**

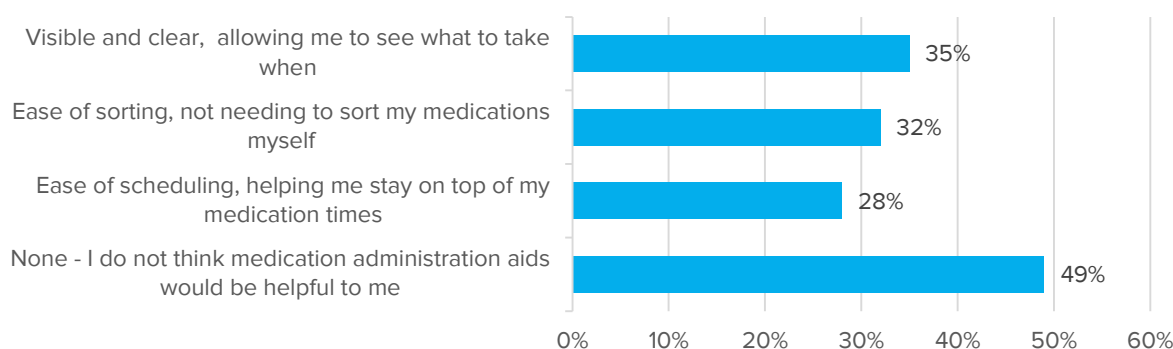


Users of the dose administration aids report that the easiest aspect of using the pack is knowing how to take it, reported as extremely or very easy by 91% of respondents. Following this is the ease of knowing how to dispense or keep medication clean (87% report this as extremely or very easy), picking it up at the pharmacy (86%) and lastly, remembering to take it (74%).

## Perceptions regarding dose administration aids

Respondents that currently do not use dose administration aids (84%) were asked to think about how dose administration aids might be helpful in their medicine management for chronic conditions.

**Q. Thinking about your own medication management, what aspects of using a dose administration aid (blister pack) would be most useful to you? Please select all that apply. (n = 437)**



More than half of Australians aged 50 or older who take ongoing prescription medication for chronic therapy conditions indicated that certain elements of using dose administration aids would be helpful to them (51%).

Visibility to clearly see what they are taking is the most useful factor (35%), followed by the ease of sorting (32%) and scheduling (28%).

Males (35%) were more likely than females (29%) to suggest that the ease of sorting would be a useful aspect of dose administration aids to them. Females were more likely to indicate that dose administration aids would not be helpful to them (51% cf. 46% of males).

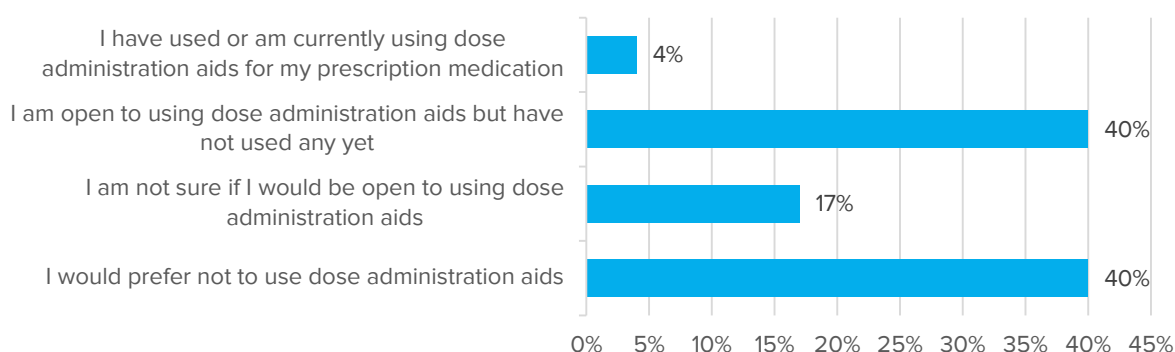
The aspects of dose administration aids that Australians over 50 considered to be useful to them varied across the different age groups.

| Age                | 50 - 59 | 60 - 69 | 70 - 79 | 80+ |
|--------------------|---------|---------|---------|-----|
| Visible and clear  | 37%     | 30%     | 35%     | 37% |
| Ease of sorting    | 37%     | 27%     | 30%     | 34% |
| Ease of scheduling | 32%     | 29%     | 22%     | 29% |
| None               | 41%     | 53%     | 53%     | 51% |

Those who are employed (32%) were more likely than those not currently employed (26%) to consider the ease of scheduling to be a helpful aspect of dose administration aids for them. Respondents living in households with dependent children (38%) were also more likely to suggest that the ease of scheduling would be a helpful aspect for them (27%).

## Openness to pharmacist pre-packed prescription medication

**Q. How open are you to having your pharmacist pre-package your prescription medication in a dose administration aid (blister pack) if they were part funded by the Commonwealth Government? (n = 437)**



2 in 5 Australians aged 50 or older who take ongoing prescription medication for chronic therapy conditions respondents (40%) are open to using dose administration aids prepacked by their pharmacist but have not used any to date.

A further 2 in 5 (40%) report they would rather not use dose administration aids, and a further 1 in 6 (17%) are unsure.

Females are the most resistant to using dose administration aids with 44% of females indicating that they would prefer not to use dose administration aids compared to 35% of males.

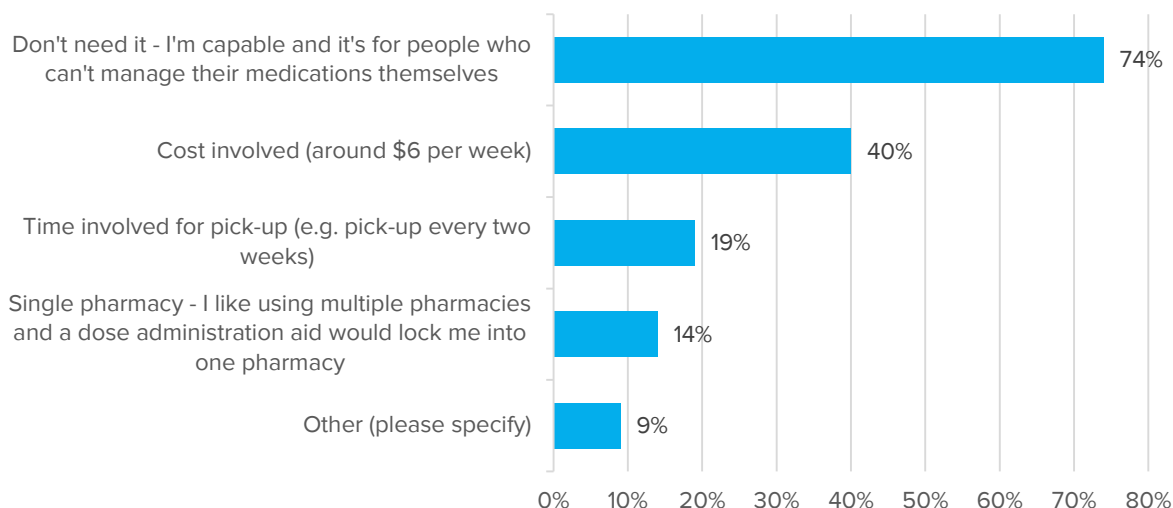
50 – 59 year olds are most open to using dose administration aids whilst 80+ year olds are more likely to indicate that they would prefer not to use dose administration aids, perhaps because they already have systems established for their medication administration that works for them.

| Age   | 50 - 59 | 60 - 69 | 70 - 79 | 80+ |
|---|---------|---------|---------|-----|
| I am open to using dose administration aids but have not used any yet | 45%     | 35%     | 39%     | 34% |
| I would prefer not to use dose administration aids                    | 34%     | 45%     | 37%     | 54% |

Those who are not employed (44%) were more resistant to the idea of using a dose administration aid then those who are employed (31%).

## Deterrents to using dose administration aids

**Q. What things deter you from using a dose administration aid prepackaged by your pharmacist?**  
Please select all that apply. (n = 437)



The largest deterrent among Australians aged 50 who are on chronic therapy medication in moving towards dose administration aids is self-determination and the ability to manage medications themselves (74%).

Following on from this is the deterrent of cost, as indicated by 40% of individuals. The time involved in picking up the medication (19%) and going to a single pharmacy to pick up medications (14%) are less significant factors.

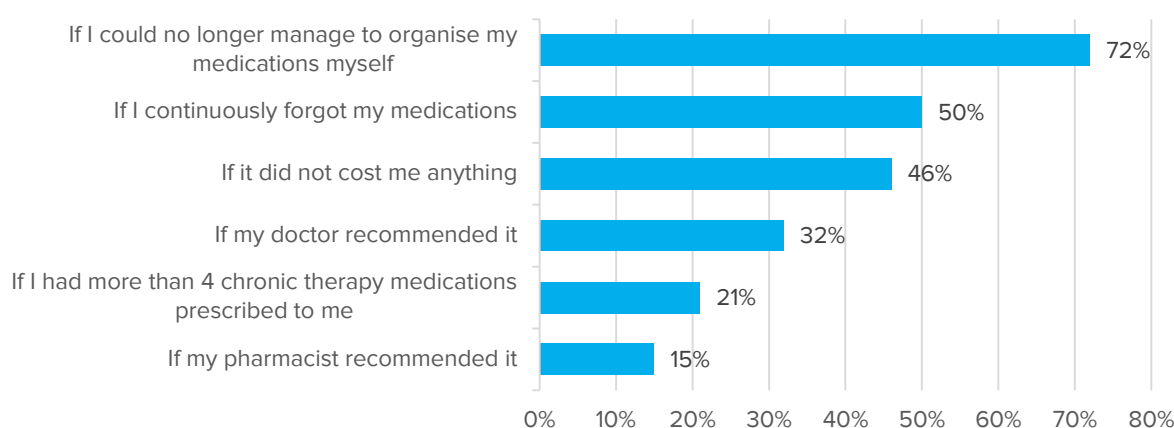
Other deterrents mentioned by older Australians included a range of concerns and these included:

- Excessive cost
- Unnecessary - when only taking one tablet daily, e.g. for heart conditions
- Perception that mistakes could be made by the pharmacist
- Some medications were identified to be unsuitable for this method of management such as puffers/inhalers or injections
- The holidaying lifestyle, as identified by some older Australians who travel away from home regularly.

60+ year olds (64%) were more likely to suggest that at least one of the things that deter them from using a dose administration aid is the fact that they don't need it compared to 50 – 59 year olds (64%).

| Age           | 50 - 59 | 60 - 69 | 70 - 79 | 80+ |
|---------------|---------|---------|---------|-----|
| Don't need it | 64%     | 80%     | 79%     | 80% |

## Q. In what situation would you consider transitioning your medication management to a dose administration aid? (n = 437)



Most Australians aged 50+ taking chronic therapy medications who are not using a dose administration aid would only consider doing so if they were no longer capable of following their medication therapy, either by no longer managing to organise their medication (72%) or continuously forgetting to take it (50%).

Nearly half, however, recognise the convenience of dose administration aids and would consider this new medication administration system if there were no costs associated with doing so (46%).

A further 1 in 3 (32%) would consider doing so if their doctor made the recommendation, and 1 in 5 would do so (21%) if they had more than four chronic therapy medications prescribed to them. Just over 1 in 7 (15%) would consider it based on a pharmacist's recommendation.



Females (76%) are more likely than males (69%) to consider transitioning their medication management to a dose administration aid if they could no longer manage to organise their medications themselves. Males (51%) however are more likely to indicate that they would consider using a dose administration aid if it didn't cost them anything at all (cf. 42% of females).

The different age groups had considerably different perceptions as to the situations in which they would consider using a dose administration aid. These are shown below:

| Age   | 50 - 59 | 60 - 69 | 70 - 79 | 80+ |
|---|---------|---------|---------|-----|
| If I could no longer manage to organise my medications myself     | 64%     | 81%     | 74%     | 71% |
| If I had more than 4 chronic therapy medications prescribed to me | 25%     | 20%     | 17%     | 14% |
| If I continuously forgot my medications                           | 47%     | 55%     | 50%     | 40% |
| If my doctor recommended it                                       | 27%     | 29%     | 34%     | 54% |



***2 in 5 (40%) Australians aged 50 or older who take ongoing prescription medication for chronic therapy conditions, but don't use dose administration aids, indicate that they are open to using dose administration aids prepacked by their pharmacist.***

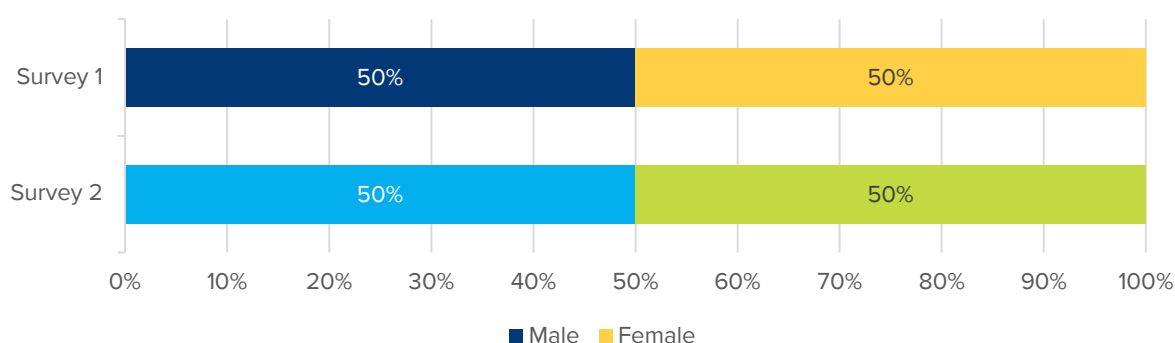
## DEMOGRAPHICS OVERVIEW

The following section provides the demographic characteristics of respondents that took part in each of the two surveys:

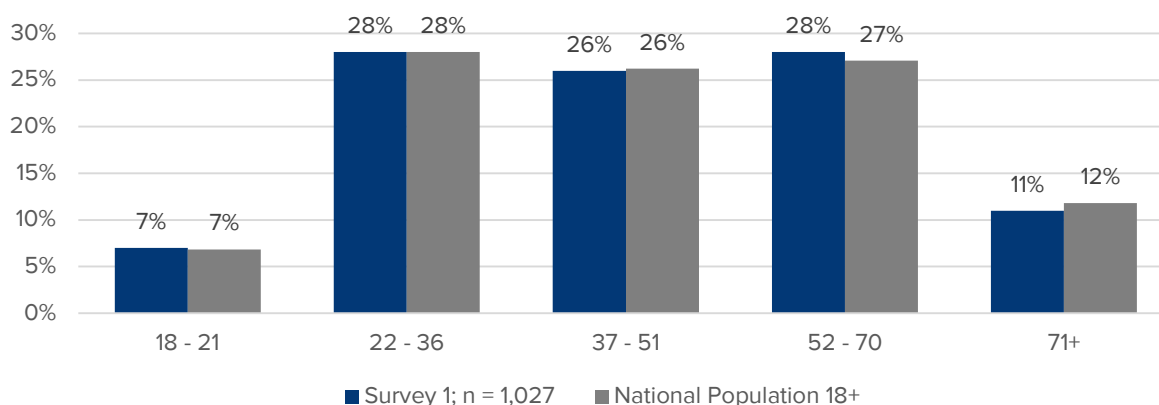
- **Survey 1: 1,027 members of the Australian general public** – Results are displayed above from Survey in the eHealth, Dr Google and the New Generations component of The Healthy Futures Report.
- **Survey 2: 523 Australians aged 50+ who take medicines for chronic illness** – Results are displayed in the Openness, Mood and Perceptions towards Dose Administration Aids component of The Healthy Futures Report.

### Gender and age

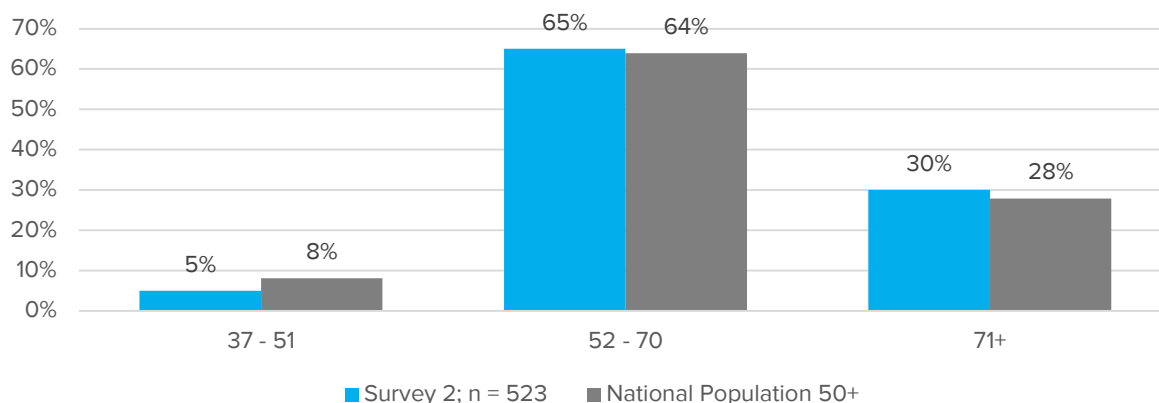
#### Q. Are you male or female?



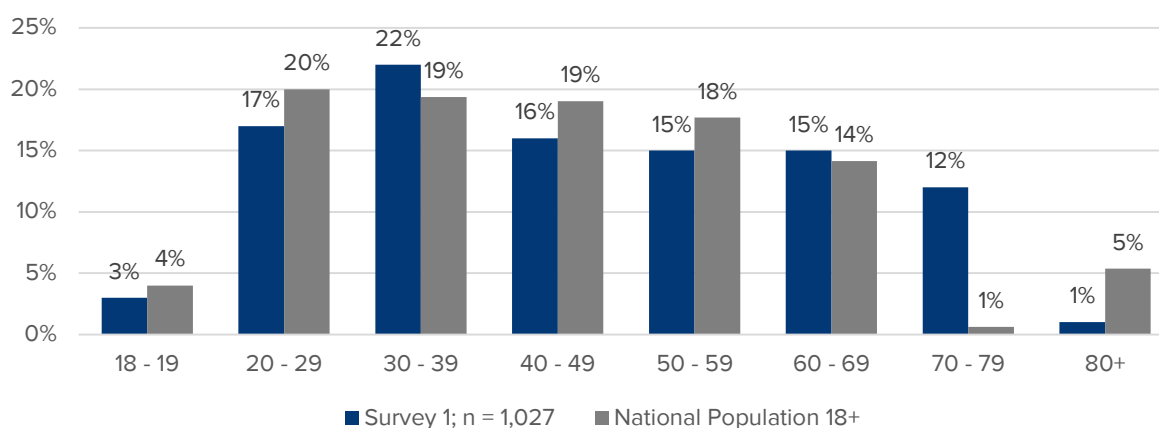
#### Q. What age will you be in 2016? [By generation]



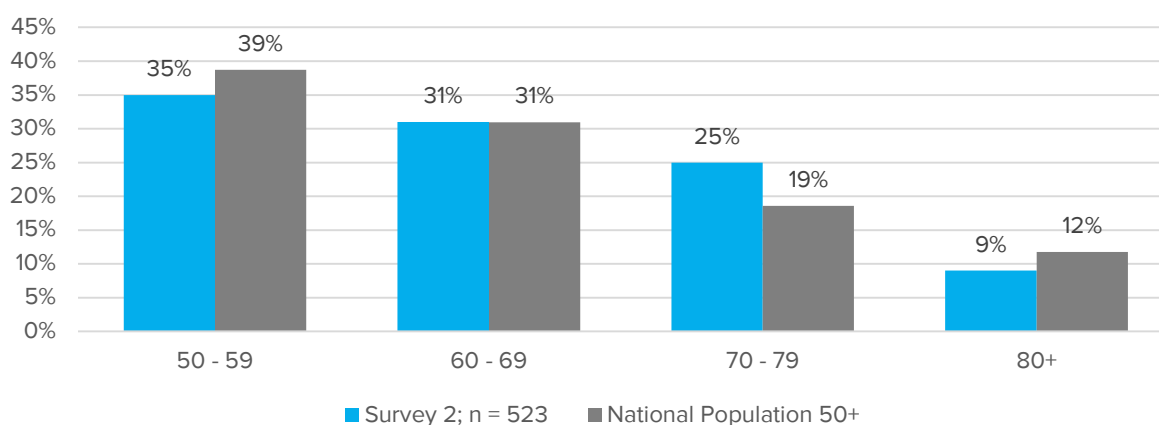
## Q. What age will you be in 2016? [By generation]



## Q. What age will you be in 2016? [By 10 Year Groupings]

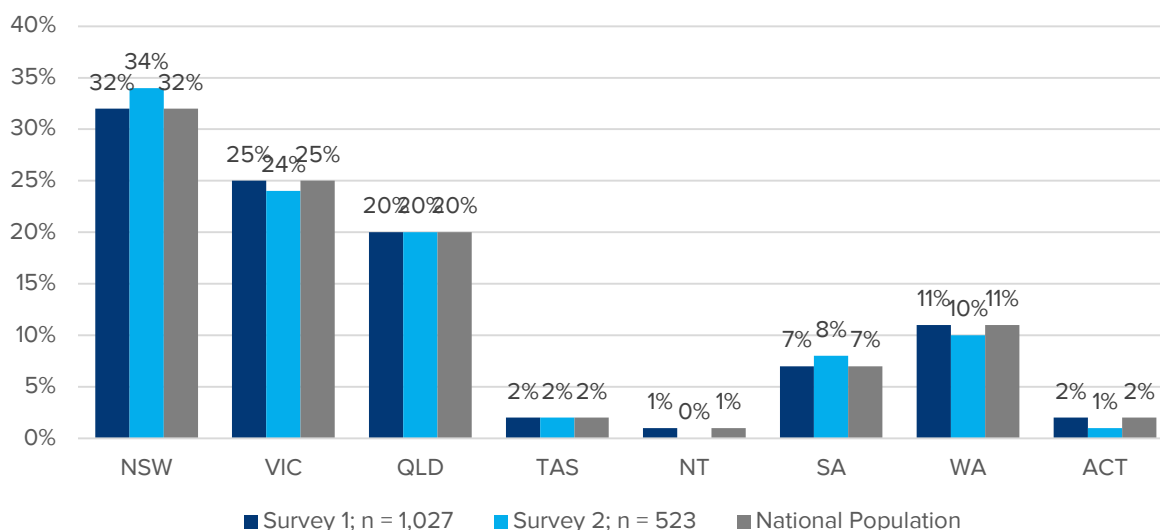


## Q. What age will you be in 2016? [By 10 Year Groupings]



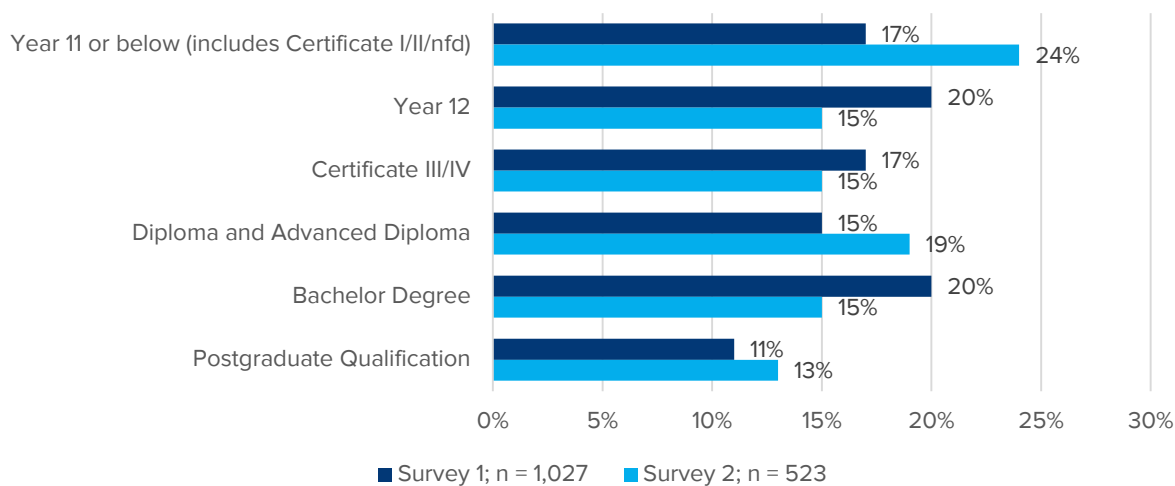
## State

### Q. Where do you usually live?



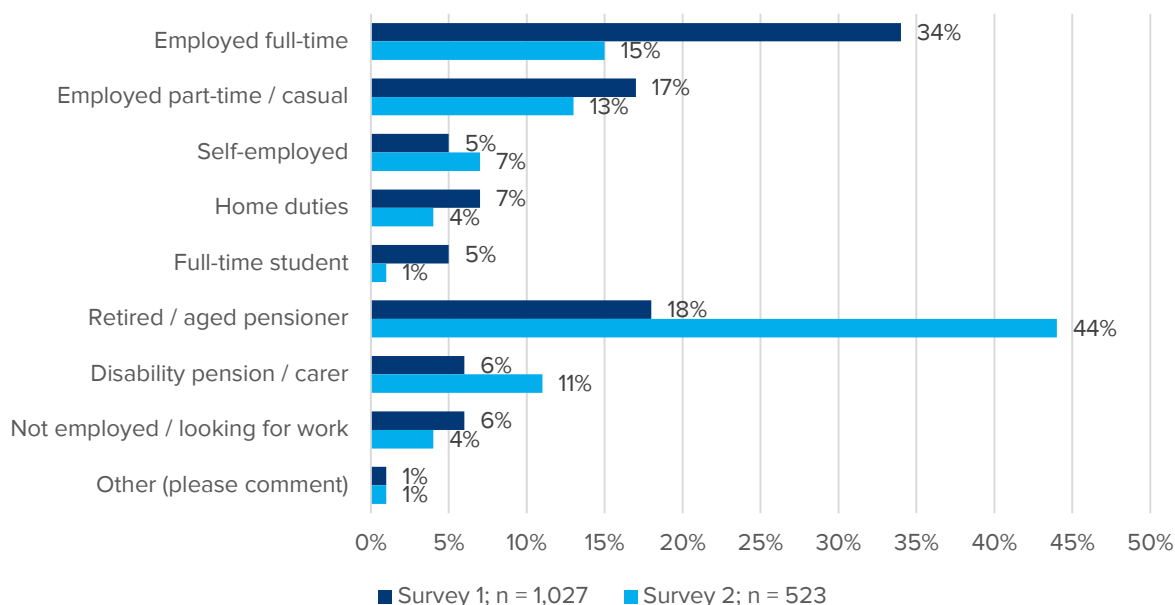
## Education

### Q. What is your highest level of completed education?



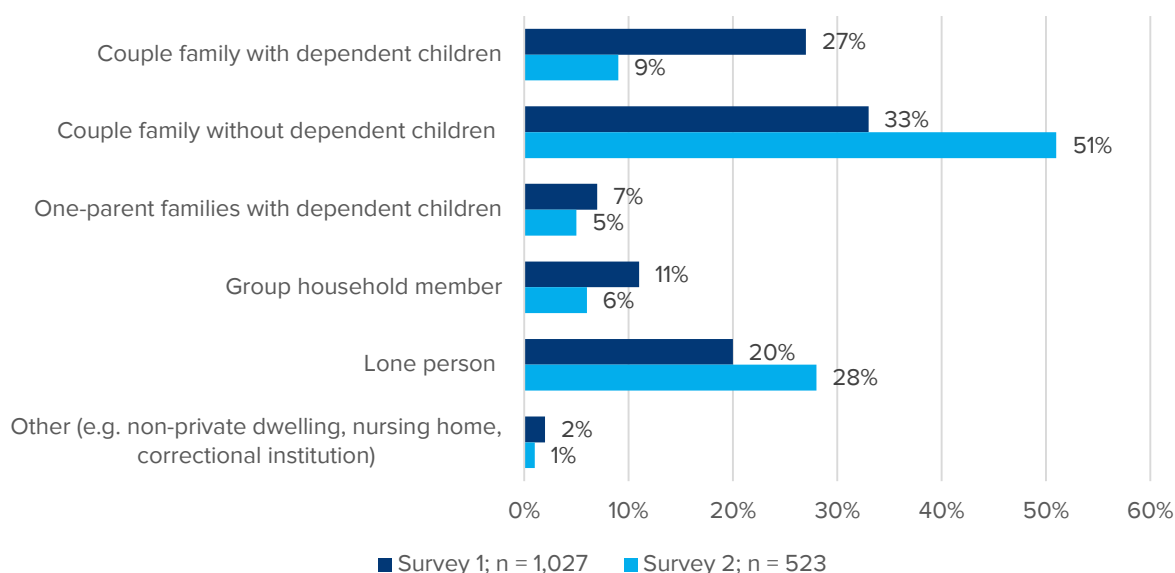
## Employment status

**Q. Which of the following best describes your employment status?**



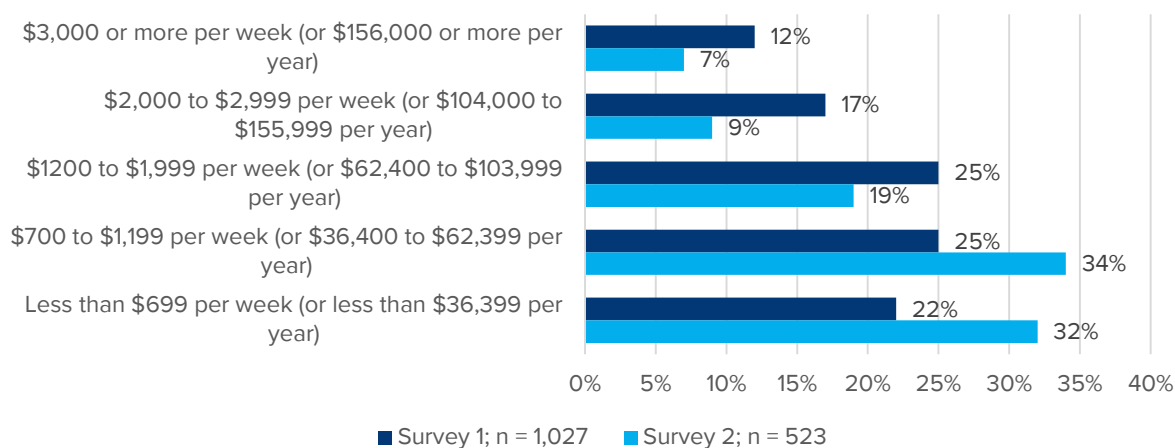
## Household type

**Q. What type of household do you currently live in?**



## Income

**Q. Which of the following best represents your household's combined gross annual income? (i.e. before taxes).**





# mccrindle

FORECASTS • STRATEGY • RESEARCH

---

## FOR FURTHER INFORMATION

**T** +61 2 8824 3422  
**E** [info@mccrindle.com.au](mailto:info@mccrindle.com.au)  
**W** [mccrindle.com.au](http://mccrindle.com.au)

For more great content and research resources please visit our blog:



[blog.mccrindle.com.au](http://blog.mccrindle.com.au)



[twitter.com/  
MarkMcCrindle](https://twitter.com/MarkMcCrindle)



[youtube.com/user/  
mccrindleresearch](https://youtube.com/user/mccrindleresearch)



[facebook.com/  
mccrindleresearch](https://facebook.com/mccrindleresearch)



[linkedin.com/company/  
mccrindle-research](https://linkedin.com/company/mccrindle-research)