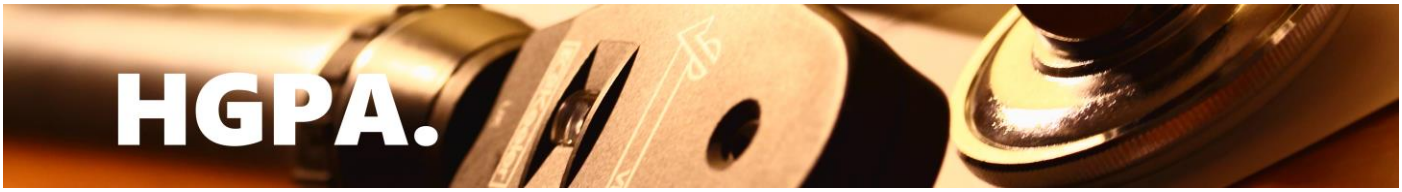


HUNTER GENERAL PRACTITIONERS ASSOCIATION WWW.HUNTERGPA.ORG ENQUIRIES@HUNTERGPA.ORG

AFTER HOURS MEDICAL CARE IN AUSTRALIA

THE RISE OF MEDICAL DEPUTISING SERVICES

A Report by the Hunter General Practitioners Association

March 2016

SUMMARY

Truly urgent care in the after hours period needs solutions that will vary across the nation. In many places, medical deputising services have been an essential part of that solution.

Medical deputising services (MDSs), most commonly utilising a bulk-billed home visit model, have undergone rapid changes in the last few years. The sector is now dominated by large corporate businesses, who are aggressively marketing themselves direct to the public, contrary to the remit of MDSs to only see patients at the request of their usual GP.

By examining national MBS data and regional MBS data from the ACT, Hunter and Tasmania, this paper explores the impact the current business practices of home visit services is having on the health system.

The evidence appears to show that:

- Direct-marketed after hours home visit services are diverting patients from daytime general practice into the after hours period. This substantially increases costs by converting daytime MBS items ($37.05) into "urgent" after hours ones ($129.80).
- There is no clear evidence that direct-marketed home visit services reduce semi- or non-urgent emergency department (ED) attendances. In the ACT and Tasmania, ED presentations increased *more* than expected.
- There is no evidence that direct-marketed home visit service contribute to health systems savings. Even if some patients are diverted from EDs by home visits, any ED cost savings are neutralised by diverting many more patients from daytime general practice into the after hours period, increasing MBS costs.
- Per capita home visits now are double those in France, which the National Association of Medical Deputising Services (NAMDS) previously identified as being an appropriate reference point for home visit utilisation. This plus the preceding points strongly suggests that over-servicing in the home visit sector has already begun.
- As a proportion of all patients having home visits, the frail elderly (>75yo) are decreasing, not increasing.
- When examined at a regional level, the billing of "urgent" after hours MBS items has risen dramatically when compared to the billing of non-urgent MBS items. This calls into question the validity of the billing classifications being used by direct-marketed home visit services.
- In 2010, the total national spend on MBS items 597 and 599[1] was $83,679,883. By 2015 this had risen to $214,850,894. Based on the maximum 2015 demonstrated per capita service capacity of home visit services, this could rise to $546,226,560 per annum

Recommendations:

- Home visit services need better regulation to ensure their activities are aligned with the needs of the nation that is funding them
- A review of successful after hours care models suggests that access to home visit services should be via nurse/GP-based triage, ideally embedded within GP co-operatives with integrated services
- Advertising should only be permitted via general practices
- MBS item numbers should be reviewed to encourage appropriate after hours billing, and fund telephone triage/consultation services

[1]MBS item 597 is defined as "Professional attendance by a general practitioner on not more than 1 patient on the 1 occasion – each attendance in an after-hours period if: (a) the attendance is requested by the patient or a responsible person in, or not more than 2 hours before the start of, the same unbroken urgent after-hours period; (b) the patient's condition requires urgent medical treatment". MBS item 599 is similar to 597, but in unsociable after hours (between 11pm and 7am)

INTRODUCTION

Medical resources are both expensive and scarce. This is particularly the case in the after hours period.

So when medical care is required beyond normal business hours, a careful approach is required to ensure a convergence of:

- Meeting patient clinical need
- Ensuring sustainability for the medical workforce
- Ensuring sustainability for the health system

There are many different after hours services available in different regions in Australia, of which Medical Deputising Services, most frequently utilising a bulk-billed home visit model, are increasingly prominent.

This paper will explore this particular phenomenon by looking at the following questions:

- What is the background to bulk-billed, home visit services?
- Where are bulk-billed, home visit service patients originating from?
- What is the impact of bulk-billed home visit services on semi- and non-urgent hospital emergency department presentations?
- What are the billing practices of bulk-billed home visit services?
- What is the potential future growth of bulk-billed home visit services?

BULK-BILLED HOME VISIT SERVICES - BACKGROUND

ORIGINS

MBS after hours home visit items were designed to support (a) practices who provided their own after hours cover, or (b) medical deputising services that provided cover for subscribing general practices. Access to Medical Deputising Services (MDSs) was typically by patients who rang their practice in the after-hours period, and were then directed by an answering machine message to the relevant service.

To that end, Medical Deputising Services are defined as, *"…an organisation which directly arranges for medical practitioners to provide after hours medical services to patients of Practice Principals during the absence of,* ***and at the request of****, the Practice Principals*".[2]

In that context, especially in rural and remote areas, the MBS rebate for item 597 or 599 ($129.80 for an urgent after-hours home visit before 11pm, and $153.00 for an urgent unsociable hours home visit between 11pm and 7am respectively)[3] seems reasonable in most situations. In fact, for a solo practitioner waking up at 2am to attend a home visit, $153.00 does not seem adequate.

[2] http://www.namds.com/pdf/NAMDS%20MDS%20defn%20April08.pdf
[3] http://remotehealthatlas.nt.gov.au/medicare_cheat_sheet_after_hours.pdf

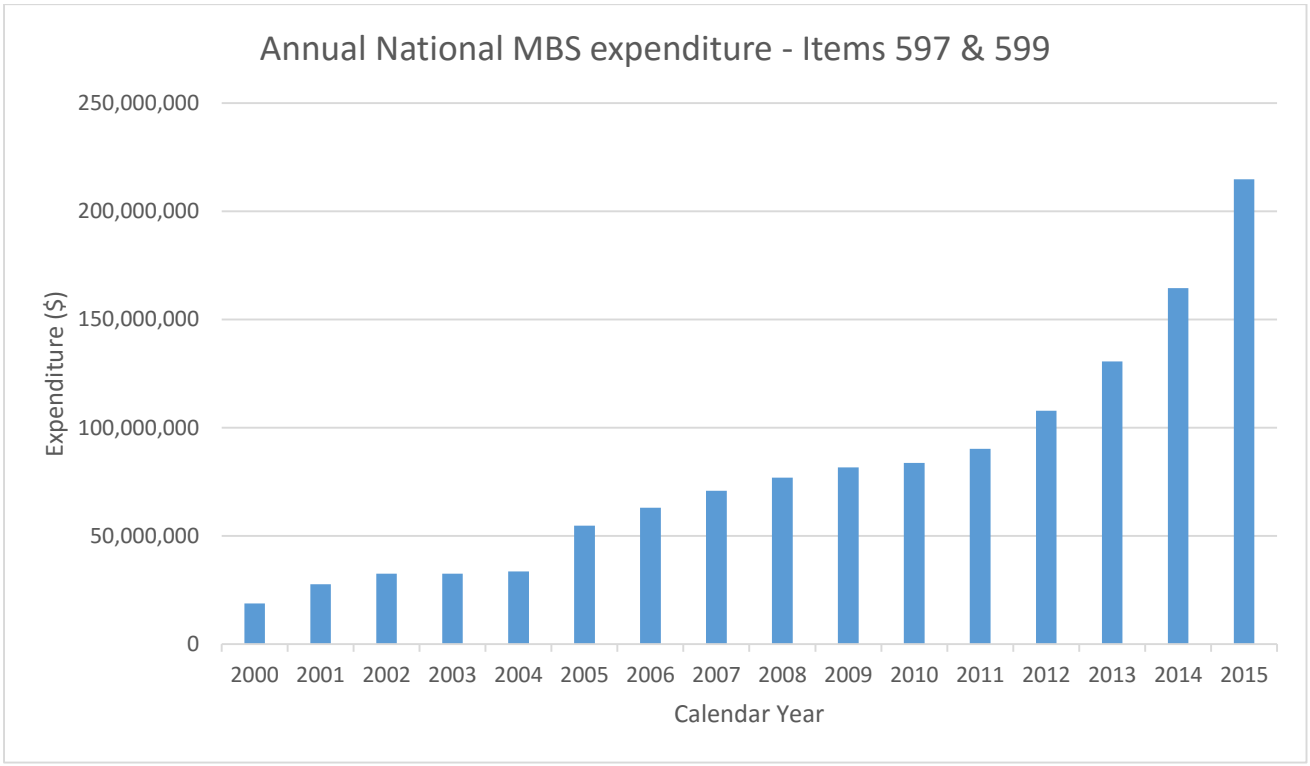
CONTEMPORARY TRENDS

In recent years, there has been a process of rapid consolidation and expansion of Medical Deputising Services that utilise a heavily marketed, direct to patients, bulk-billing, fee-for-service home visit model.[4] In at least one case, this has been driven by a private equity company; Australia's largest home visit service, the National Home Doctor Service (NHDS), is owned by Crescent Capital Partners:

> *"Crescent Capital Partners (Crescent) is a Sydney-based private equity firm investing in middle market companies...Crescent's investment focus is on high growth companies and sectors, or in industries that are undergoing structural change or that lend themselves to consolidation...Crescent has had a strong track record in delivering superior returns to investors through successful exits..."*[5]

Unquestionably, bulk-billed home visit services are highly convenient for patients, who neither have to leave their home, nor pay a visible fee. Certain sectors of the community that would most obviously benefit from such a service are families with very young children, the frail elderly, and the socially disadvantaged.

The peak body for Medical Deputising Services, the National Association for Medical Deputising Services (NAMDS) published a 2010 paper titled "Understanding After Hours Medical Care In Australia".[6] In it, they define "Urgent After Hours Visits" as being <u>any</u> visit provided to a home or aged care facility in the after hours period – of which home visit services provided 600,000 instances of care in 2009. At the time of their 2014 report,[7] these "Urgent After Hours Visits" leapt to 1.51 million services in 2013. Further dramatic increases in services have continued since then.



Annual National MBS expenditure – Items 597 & 599[8]

[4] http://www.australiandoctor.com.au/news/news-review/fears-for-the-future-of-gp-after-hours
[5] http://www.crescentcap.com.au/
[6] http://www.namds.com/assets/files/Understanding%20after%20hours%20medical%20care%20%20in%20Australia%20NAMDS%20paper%202010.pdf
[7] http://www.namds.com/assets/files/After%20Hours%20Medical%20Care%20in%20Australia%20FINAL.pdf
[8] http://medicarestatistics.humanservices.gov.au/statistics/mbs_item.jsp

REACTION

The growth of this sector was noted by the Federal Government's 2014 Review of After Hours Primary Health Care,[9] in which they stated that:

- "*MDSs are recognised as having a critical role in meeting after hours needs, providing valuable support for GPs already working long hours, access to home visits and in many cases good continuity of care.*"

But also that:

- "*MDSs provide an important service to people in need, however it is considered that existing policy, regulatory and financial settings may not encourage judicious or targeted use of such services… A key role of a MDS is to provide after hours medical services to patients of GPs in their absence or at their request.*"

This returns to the definition of a MDS[10], where an MDS is expected to provide services to patients **at the request of** a Practice Principal.

Two of the recommendations of the After Hours Primary Health Care Review were:

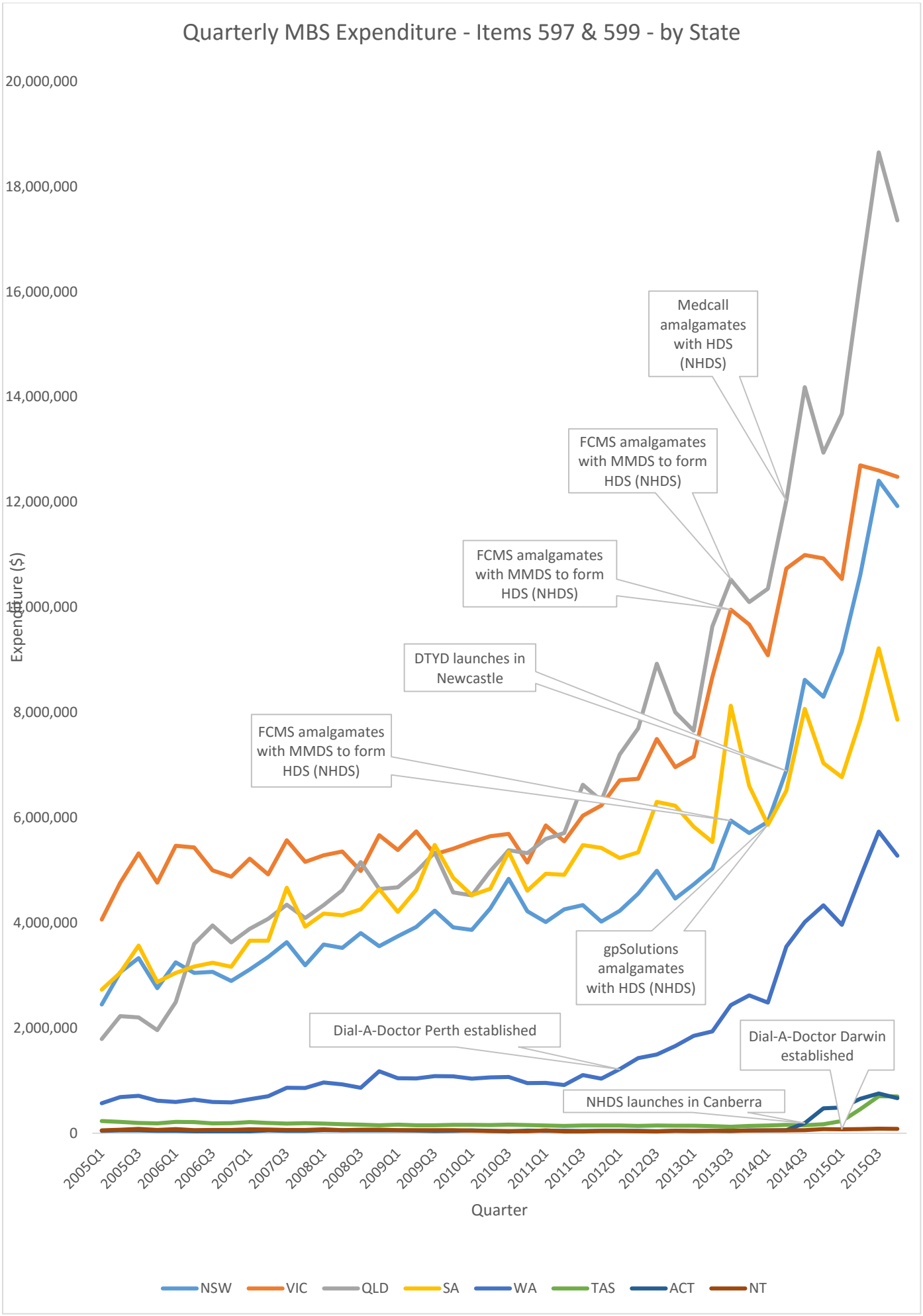
- *"**The Commonwealth work with key stakeholders to urgently examine the rapid escalation in utilisation of after hours MBS items**. The Department of Health should identify the relevant drivers responsible and work with PHNs and local stakeholders to develop optimal utilisation of this resource."*
- *"MDSs play a critical role in after hours care. However, **the rapid increase in deputising service utilisation of MBS items raises questions around the appropriateness of a purely fee-for-service funding model for the sector**. Funding for MDSs should be considered to strike a better balance between infrastructure and activity based funding for a sector with unpredictable and uneven service demand. **MDSs are accredited deputising services and access to after hours should happen via a patient's regular general practice, rather than through direct marketing**."*

With regards to the last point, the AMA position statement on Medical Deputising Services[11] also states that, "***Patients should not have direct access to medical deputising services. Deputising services should not have listed telephone numbers. Patient access should be via the practices of the doctors using the service*** *by means of pre-recorded telephone messages or other means.*"

[9] http://www.health.gov.au/internet/main/publishing.nsf/content/79278C78897D1793CA257E0A0016A804/$File/Review-of-after-hours-primary-health-care.pdf

[10] http://www.namds.com/pdf/NAMDS%20MDS%20defn%20April08.pdf

[11] https://ama.com.au/sites/default/files/documents/out_of_hours_services_criteria_for_medical_deputising_services_2002._revised_2014_draft_05_march_2014_1.pdf


Quarterly MBS Expenditure - Items 597 & 599 - by State
20,000,000
18,000,000
16,000,000
14,000,000
12,000,000
10,000,000
8,000,000
6,000,000
4,000,000
2,000,000
0
Expenditure ($)
Medcall amalgamates with HDS (NHDS)
FCMS amalgamates with MMDS to form HDS (NHDS)
FCMS amalgamates with MMDS to form HDS (NHDS)
DTYD launches in Newcastle
FCMS amalgamates with MMDS to form HDS (NHDS)
gpSolutions amalgamates with HDS (NHDS)
Dial-A-Doctor Perth established
Dial-A-Doctor Darwin established
NHDS launches in Canberra
2005Q1
2005Q3
2006Q1
2006Q3
2007Q1
2007Q3
2008Q1
2008Q3
2009Q1
2009Q3
2010Q1
2010Q3
2011Q1
2011Q3
2012Q1
2012Q3
2013Q1
2013Q3
2014Q1
2014Q3
2015Q1
2015Q3
Quarter
NSW
VIC
QLD
SA
WA
TAS
ACT
NT

Quarterly MBS Expenditure – Items 597 & 599 by State

- *c1970 – Melbourne & Perth - Australian Locum Medical Service established – now trading as gp2home and expanded to Brisbane and Sydney*
- *c1975 – Melbourne & Geelong – Melbourne Medical Deputising Service (MMDS)*
- *c1985 – Sydney, Brisbane, Ipswich, Sunshine Coast – Family Care Medical Services (FCMS) established*
- *c1995 – Adelaide – gpSolutions established*
- *c2000 – Gold Coast – Medcall established*
- *2010 – Cairns – Dial-A-Doctor established*
- *2012 – Perth – Dial-A-Doctor expands*
- *2013, October - FCMS amalgamated with MMDS October 2013 to form the* ***Home Doctor Service (HDS)***
- *2014, Jan – gpSolutions amalgamates with Home Doctor Service (HDS)*
- *2014, May – Medcall amalgamates with Home Doctor Service to form the* ***National Home Doctor Service (NHDS)***
- *2014, May – Newcastle - Doctor to Your Door (DTYD) expands*
- *2014, Aug – NHDS expands to Canberra*
- *2015 – Darwin – Dial-A-Doctor expands*
- *2015, Feb – Hobart – Call the Doctor established*
- *2015, July – Launceston – NHDS expands*

CHARACTERISTICS OF BULK-BILLED HOME VISIT SERVICES

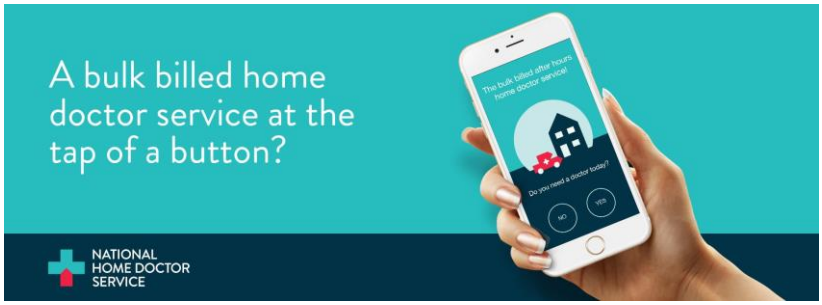
Contemporary Medical Deputising bulk-billed home visit services tend to be characterised by:

- Aggressive and broadly targeted direct marketing to all patients, independent of their usual general practice[12]
- Direct marketing messages that strongly focus on convenience and cost savings/bulk-billing, rather than clinical need[13]

12

From Doctor to Your Door facebook page - https://www.facebook.com/doctortoyourdoor/; from NHDS website http://www.homedoctor.com.au/
From National Home Doctor advertising campaign - https://www.youtube.com/watch?v=1bJkQSDuqfo, https://www.youtube.com/watch?v=a94KRb7zeyM&list=PLJqTsqwjMzazU8aDY11VU814FZTxtBh1-

13



- A receptionist-based "triage" system (as opposed to nurse/GP-based triage)
- A work force mostly composed of junior or overseas-trained doctors, rather than fully qualified GPs[14]

It does not seem coincidental that the recent trend for MDSs to ignore their own remit to, "*provide services…at the request of the Practice Principal*" and instead, via direct marketing, in practice "provide services *regardless* of the request of the Practice Principal" is associated with a vastly increased use of MBS item numbers 597 and 599 (Figure 4).

What is the driver for this? As previously noted, one MDS parent company declares that they have a "*…strong track record in delivering superior returns to investors through successful exits…"* If so, rather than working to primarily meet genuine health needs in a sustainable way, their activities appear consistent with creating short-term, financially lucrative demand.

For most bulk-billed home visit services, where the major source of income is the MBS revenue from completing a home visit, there must be strong financial pressure to (a) see as many patients as possible, and (b) charge the MBS for home visits as "urgent" ($129.80 for "urgent" MBS item 597, vs $74.95 for non-urgent MBS item 5023).

It has been reported that, "*One concerned GP…audited four months of faxes from a local after-hours service and found that just one in 12 required urgent clinical intervention*."[15]

Anecdotally, several practices have reported that patients have openly told to their GPs that they have used bulk-billed home visit services in preference to either attending at their local GP in normal business hours, or utilising the GP's preferred after-hours service provider, for the combination of convenience and cost saving.

Another GP, writing a comment on an Australian medical news website, identified himself as, *"[working] my first shift, on Monday of this week, with a medical deputising service. I'm a new GP, trying to establish a patient base in a private billing practice, and decided to sign up for some after hours work to supplement my income during this setup period."*[16] He then went on to write, "*After my first shift…There is no question. After hours IS being abused…The problem is the misuse of the system by the Australian public. Every single one of the patients I saw for urgent after hours attention had been unwell for over 12 hours. ALL of them could have seen a GP that day if they'd prioritised that medical need over school or work commitments. All but one of them could have safely waited for an appointment with their usual GP in the coming days. I was horrified to see that Nursing Homes are routinely misusing these services to get their 3 monthly medication charts done in the middle of the night!! The problem is that people are using these after hours appointments for problems that could safely wait for a routine appointment with their GP."*

Home visit services point towards the average cost to the government of a home visit as being low compared to the cost of treating category 4 and 5 ED presentations ($131.43 vs $359.98),[17] but what they fail to highlight is the cost to the government of diverting a non-urgent in-hours GP consultation into an "urgent" after hours home visit ($37.05 vs $131.43).[18]

From National Home Doctor advertising campaign - https://www.youtube.com/watch?v=1bJkQSDuqfo, https://www.youtube.com/watch?v=a94KRb7zeyM&list=PLJqTsqwjMzazU8aDY11VU814FZTxtBh1-; http://www.vivant.com.au/national-home-doctor-service/

[14] http://www.medicalobserver.com.au/professional-news/gps-flag-possible-abuse-of-bulk-billing-after-hours-model

[15] http://www.medicalobserver.com.au/professional-news/racgp-responds-to-concerns-over-rise-of-after-hours-services

[16] http://www.medicalrepublic.com.au/is-after-hours-being-abused/

[17] http://www.namds.com/assets/files/After%20Hours%20Medical%20Care%20in%20Australia%20FINAL.pdf (page 21)

[18] MBS item 23 (standard consultation) - $37.05, http://remotehealthatlas.nt.gov.au/medicare_cheat_sheet_mbs.pdf

The NAMDS 2014 report, "*After Hours Medical Care in Australia – NAMDS After Hours Primary Medical Care Summary Paper*.", [19] is notable for being an almost entirely unreferenced document, making it extremely difficult to verify the accuracy of the many claims made. Some of the more problematic contents of that report are explored below:

DEFINING "URGENT" AFTER HOURS

- On page 2, NAMDS describes all after hours visits as 'urgent' and all extended hours GP practice based services and dedicated after hours clinics as 'non-urgent'. This redefinition of the vernacular appears to be focused on providing a financial advantage for MDSs, as the MBS rebate for "urgent" items numbers are much higher than for "non-urgent" ones. (e.g. $129.80 for MBS item 597 vs $74.95 for MBS item 5023).
- In practice, there are clearly and obviously after hours home visits that *are non-urgent*, as well as extended hours service instances of care that *are urgent*. This distinction is made in the relevant MBS item numbers, where item numbers 597 and 599 are defined as being for "urgent" home visits, and item numbers 5023 and 5028 are defined as being for "non urgent" home visits. That is, contrary to the NAMDS position, Medicare believes that there is such a thing as a "non urgent" home visit.
- In the Netherlands, GPs found that just 20% of calls in the after hours period were truly urgent.[20]
- This issue will be explored further under the heading "*Billing practices*".

GOVERNMENT POLICY AS THE DRIVER FOR CHANGE?

- On page 5 and 6, NAMDS claims the RACGP standards "[*eliminated] the necessity of GP Practices to provide 24/7 patient care as this responsibility now fell to Medicare Locals*". This claim is unreferenced. From the RACGP practice standards Criterion 1.1.4 for "Care outside normal opening hours", it is clear that practices need to "*demonstrate reasonable arrangements for access to primary medical care services for their regular patients within and outside normal opening hours*".[21]
- Furthermore, on page 27 NAMDS state that, "*The fundamental basis on which patients in metropolitan Australia are cared for 24/7 was the RACGP standards for General Practice, loosely supported by "regulatory and financial encouragement" via the After Hours PIP. This changed in 2012 with Medicare Locals taking over responsibility and concurrent reductions in RACGP regulatory oversight and regulation*". Again, this is unreferenced. The responsibility for providing after hours care has always been with GPs/practices.

WHAT IS THE BEST MODEL FOR AFTER HOURS CARE?

- The NAMDS report claims that:
    - "*After hours clinics are (at face value) the cheapest method of treating after hours patients (based on comparison of rebates). However they generally require additional grants and funding to be sustainable. They also serve a different set of consumer needs and cannot replace after hours face-to-face home and ACF visits… Data from France indicates that after hours visits are the cheapest form of after hours care available*".
    - "*Specific after hours clinics that only open during after hours periods; these are often "co-located" with an emergency department so that non-urgent ED patients can be diverted to the clinic to*

[19] http://www.namds.com/assets/files/After%20Hours%20Medical%20Care%20in%20Australia%20FINAL.pdf
[20] https://www.stfm.org/fmhub/fm2006/September/Caro565.pdf
[21] http://www.racgp.org.au/your-practice/standards/standards4thedition/practice-services/1-1/care-outside-normal-opening-hours/

reduce hospital burdens. These clinics are generally funded via a GPAH grant and are normally uneconomic without substantial external funding support."

- "*Home visits are the most cost effective way of treating patients after hours (€60), followed by after hours clinic (€71), hospital emergency departments (€104)*"

- In Australia, an urgent home visit (MBS item 597) costs $129.80. An after hours clinic visit (MBS item 5020) costs $49. There are integrated services in Australia that can manage patients with telephone advice, clinic appointments and home visits. In one example, including grant funding, the cost per patient managed is substantially less than a home visit, at $95.[22] Aided by tight integration with local emergency departments, this type of service provides proven savings for the health system that far outweigh the cost of supporting it.
- Overseas, tightly integrated nurse/GP triage systems combined with GP co-operatives have decreased their home visit rates to 10-19% of calls handled,[23] belying the claim that other after hours care models cannot replace home visits.
- The NAMDS report claims, "*In all markets where after hours GP visits are a fundamental element to the Primary health care service portfolio, a centralised, MDS style service is the care model of choice*." This is a statement made without referenced evidence.

WHICH AFTER HOURS SERVICES ARE THE MOST ACCESSIBLE?

- The NAMDS report claims, "*Extended hours clinics do not open throughout the after hours period, focusing instead on the more "sociable" times. Only Medical Deputising Services and ED cover all hours*." This is not the case. GP Access After Hours, for example, runs extended hours clinics but also has a call centre that remains open overnight with an on-call GP.[24]
- Some Medical Deputising Services may remain open overnight, but very strongly discourage calls – Doctor To Your Door (DTYD), for example, charges $400 for a home visit after midnight.[25] MBS data in the Tasmanian/ACT/Hunter regions shows that both the absolute number and the proportion of "unsociable after hours" MBS item 599 (relative to "sociable after hours" MBS item 597) dropped after the introduction of direct-marketed home visit services (chi-square = 3309, P<0.001).

WORKFORCE

- The NAMDS report claims, "*The clinical standards of [overseas trained] doctors working in accredited Medical Deputising Services that meet the NAMDS definition is not regarded as an issue in Australia. This is due to high quality training and induction programmes and the propensity to study for their RACGP Fellowship as part of their AMDSP professional development requirements."* No evidence is provided to support this.
- The NAMDS report claims, *"There have not been any major doctor quality issues with MDS providers. Isolated cases have been raised, but nothing alarming. It is a given that locum medical practitioners are unlikely to be as experienced as GPs within a practice, but the nature of the role does not require as high a level of expertise anyway*." If home visit patients being seen are truly 'urgent' and given that they are being assessed in suboptimal conditions on a home visit, the role should require a higher level of expertise, not less.

[22] GP Access After Hours – a GP co-operative that manages 80,000+ patient per annum with a total budget of $7.6M – http://hunterprimarycare.com.au/wp-content/uploads/2015/11/GP-Access-Cost-Study.pdf
[23] http://www.hindawi.com/journals/ijfm/2013/987834/
[24] http://www.gpaccess.com.au/
[25] http://doctortoyourdoor.com.au/

WHERE ARE HOME VISIT SERVICE PATIENTS ORIGINATING FROM?

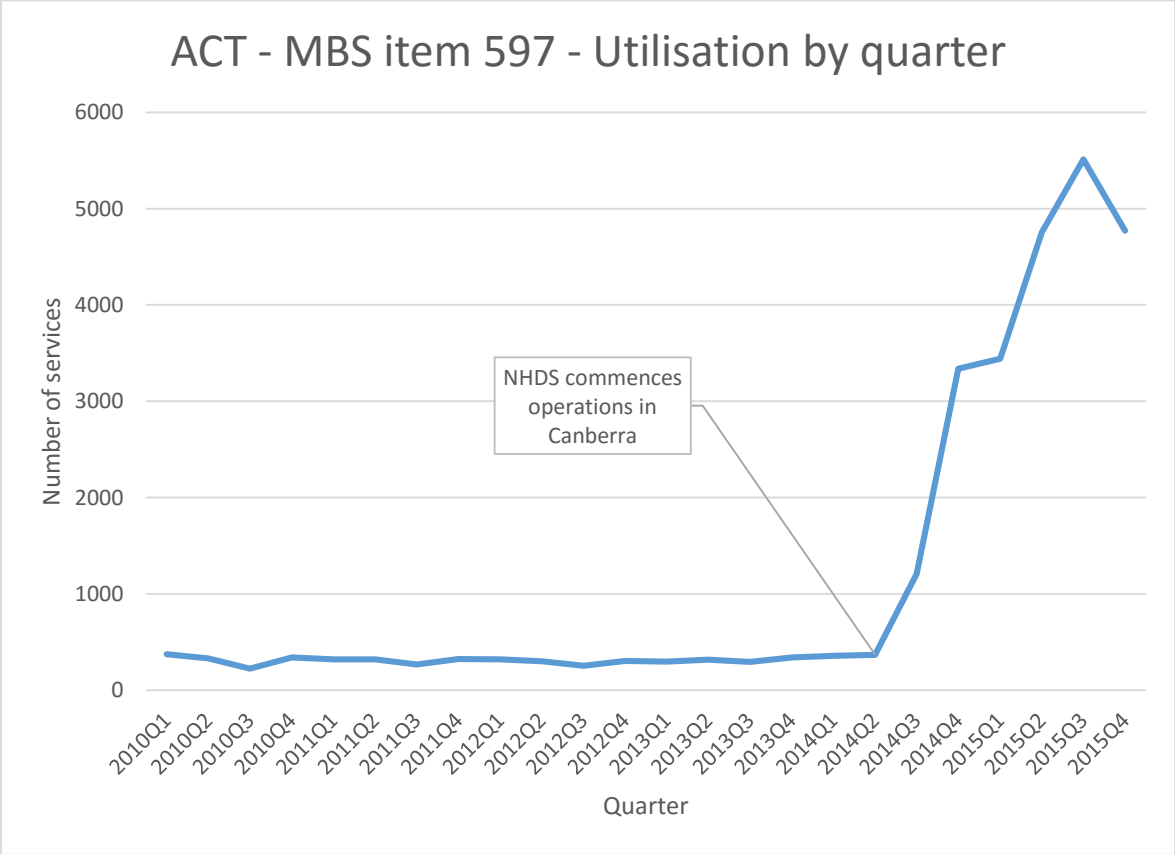
To explore this question, it is necessary to examine MBS data from regions where:

- There is a known date, or dates, when a bulk-billed home visit service commenced operations
- A degree of geographic isolation helps minimise confounding factors
- MBS data is available that conforms to the geographical region

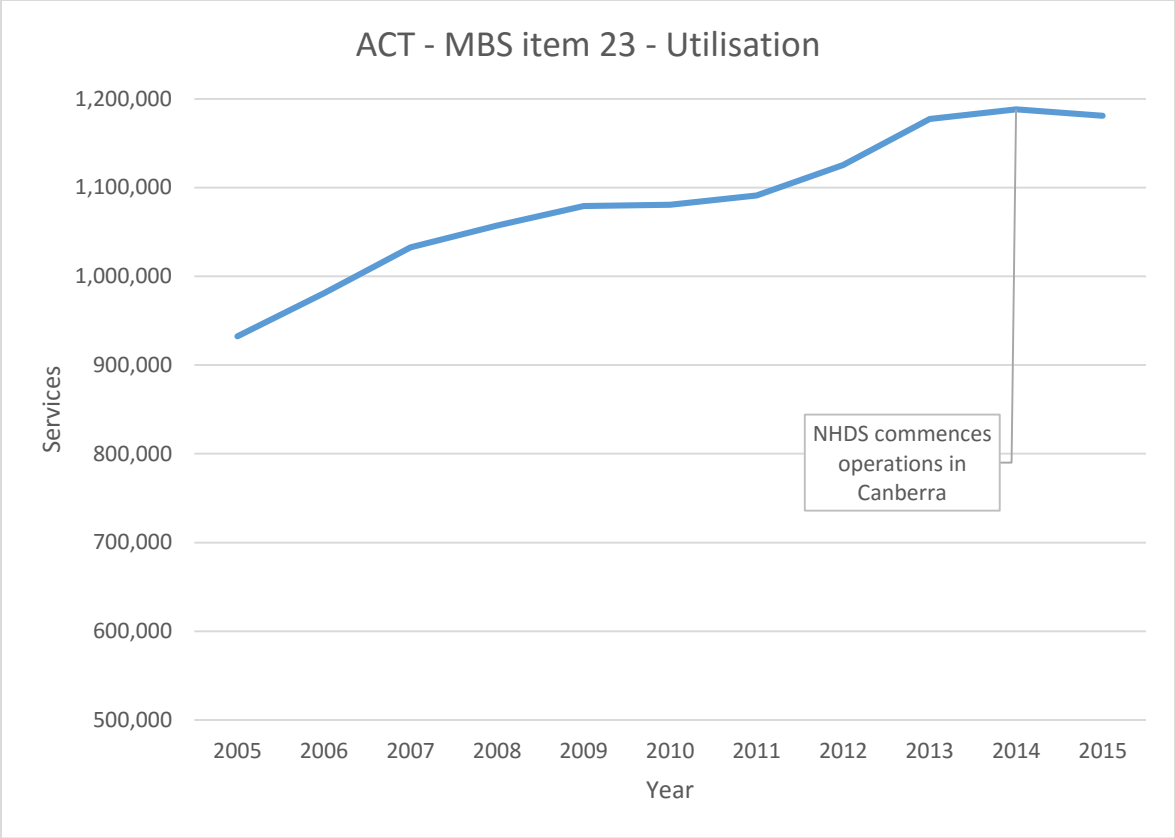
With these factors in mind, there are three regional areas where it was easiest to isolate the effect of a home visit service – the ACT, Newcastle, and Tasmania.

ACT

In Canberra, NHDS commenced operations in August 2014.[26]



[26] http://www.canberratimes.com.au/act-news/afterhours-bulkbilling-service-comes-to-your-front-door-20140818-105e40.html

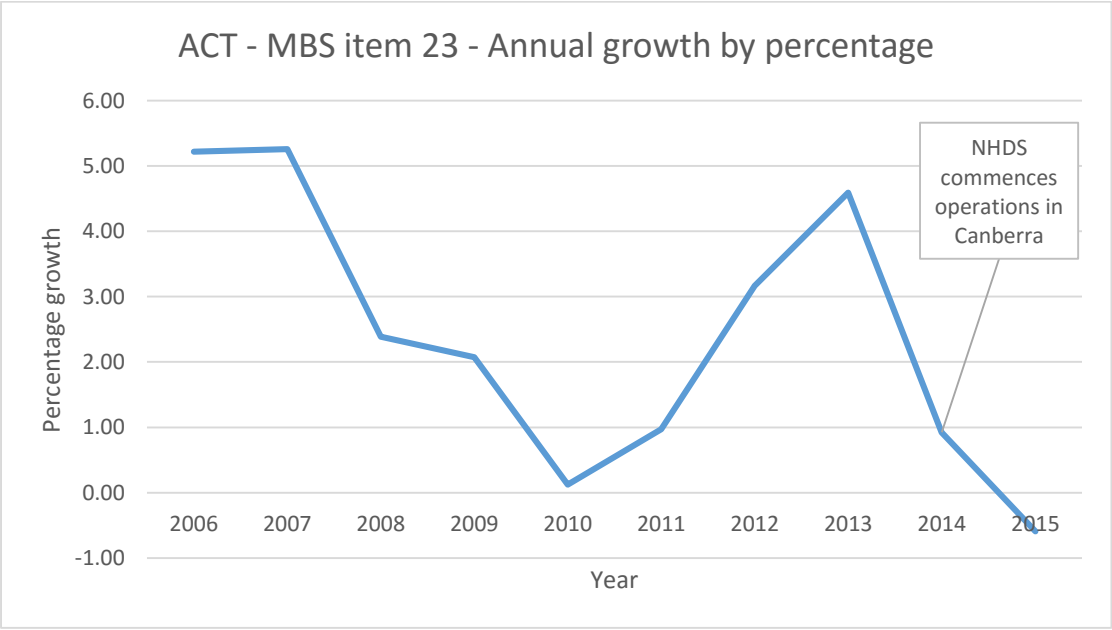


Following the introduction of NHDS in Canberra, there was a substantial increase in MBS item 597 utilisation. The increase in MBS item 597 claims relative to the most common in-hours GP MBS item, MBS item 23 (5-20 minute consultation), is significant (chi-squared = 50,414, P<0.001).

Total annual expenditure in the ACT on MBS item 597 in 2013 was $160,776. In 2015, it was $2,399,156, an increase of $2,238,380.

Utilisation of MBS item 23 steadily rose from 2005 to 2014. Over 9 years, this amounted to an average annual increase of 28,421 MBS item 23 services per annum.

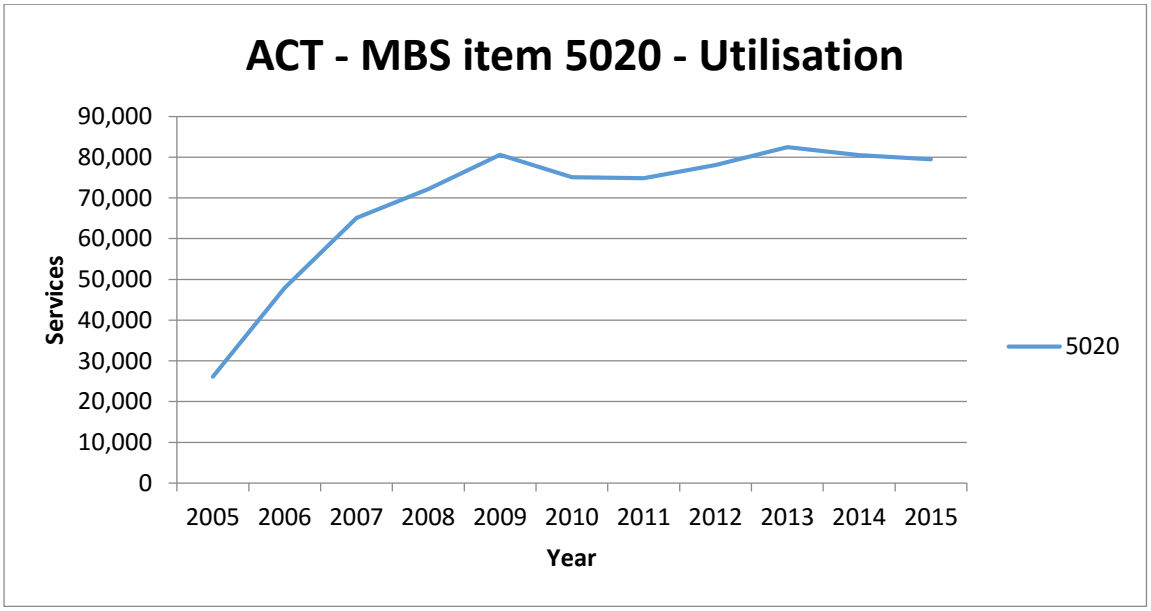
However, in 2015, for the first time in ten years, there was negative growth in the utilisation of MBS item 23.



This absolute drop in MBS 23 services from 2014 to 2015 in the ACT was 7051.

However, the total number of "urgent" after-hours home visit MBS 597 services billed in Canberra during 2015 was 13,915.

An explanation for the drop in MBS 23 services could be due to the expansion of extended hours clinics. If so, we would expect to see an increase in MBS item 5020 (non-urgent after hours level B attendance at consulting rooms) from 2014 to 2015.



There is an increase of item 5020 utilisation, but from 2005 to 2009. This might help explain the flat usage of MBS item 23 from 2009 to 2011. But from 2013 to 2014/2015, the number of MBS item 5020s being utilised actually falls.

There appears to be an association between the introduction of NHDS services, a rise in after-hours MBS item 597 ($129.80), and a fall in in-hours MBS item 23 ($37.05) that is not related to increased utilisation of extended hours clinics.

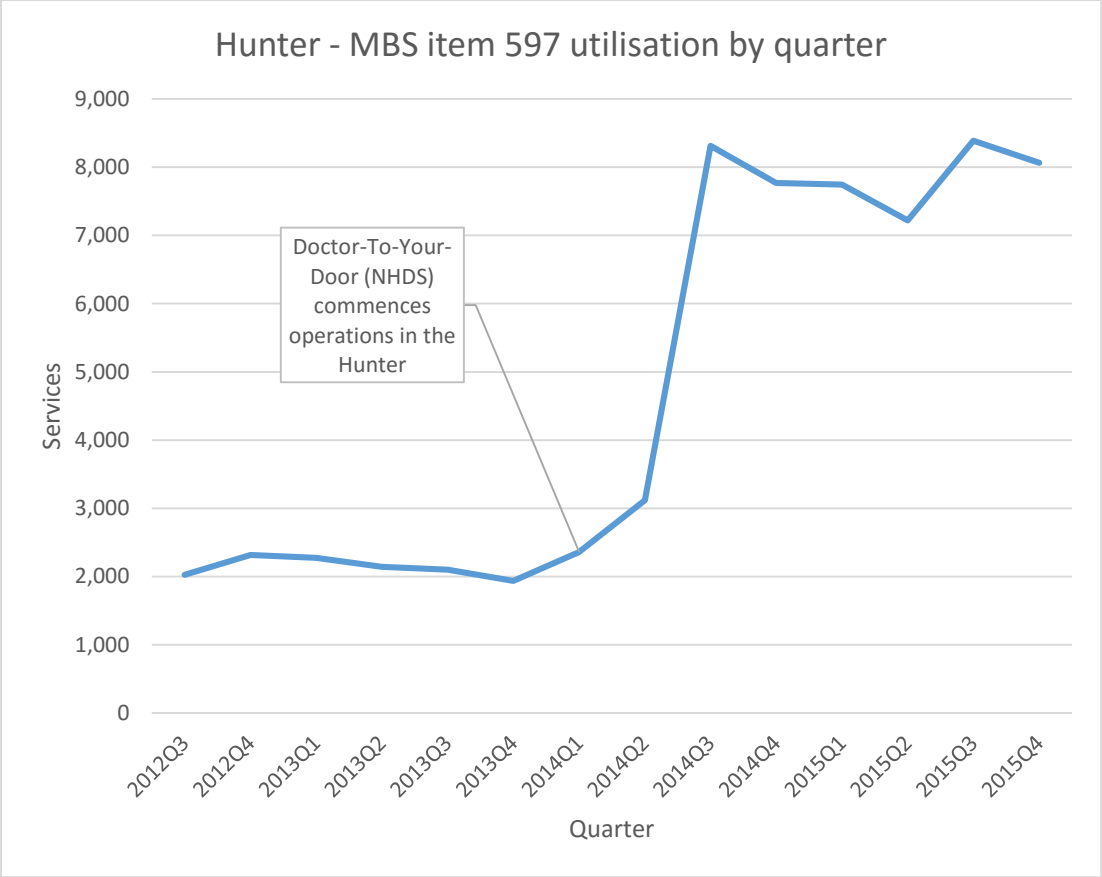
This association could be explained by the hypothesis that bulk-billed home visit services are diverting a significant number of patients from daytime general practice to the after-hours period

Based on the MBS items 597 and 23, the net cost to the MBS in the ACT in 2015 from this possible diversion was $1,977,140.

Newcastle

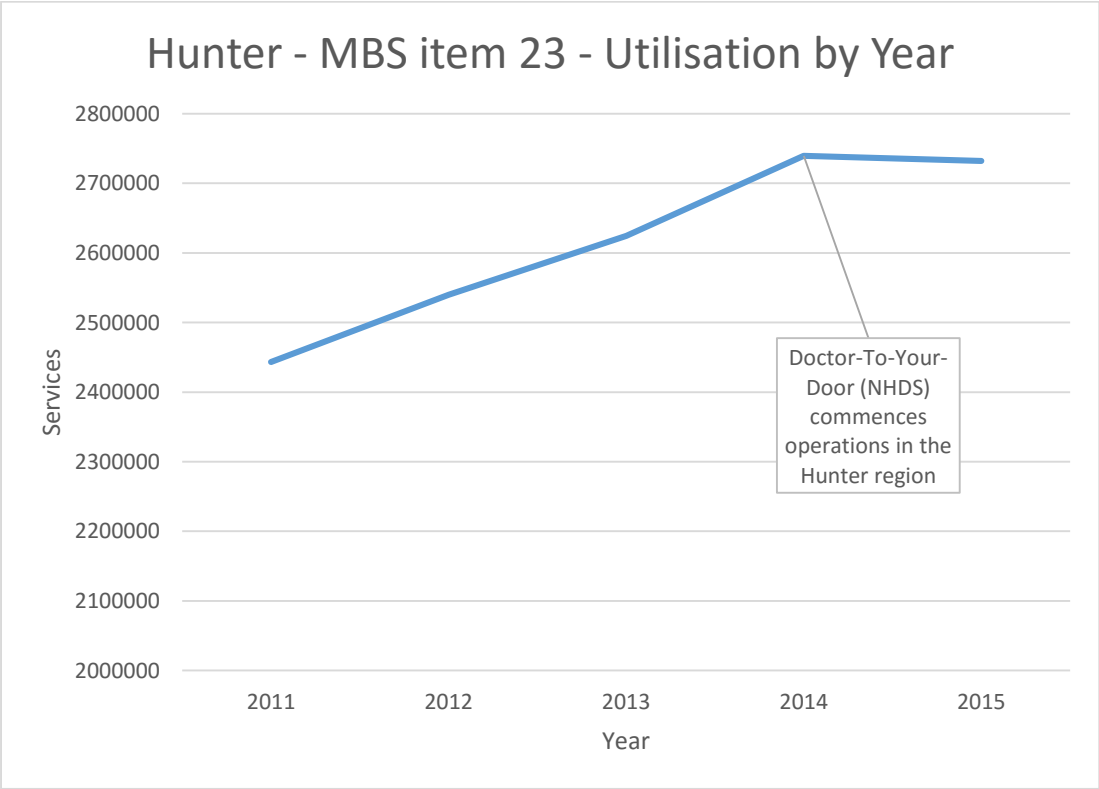
In Newcastle, Doctor To Your Door (DTYD), subsequently taken over by NHDS, commenced operations in May 2014.[27]

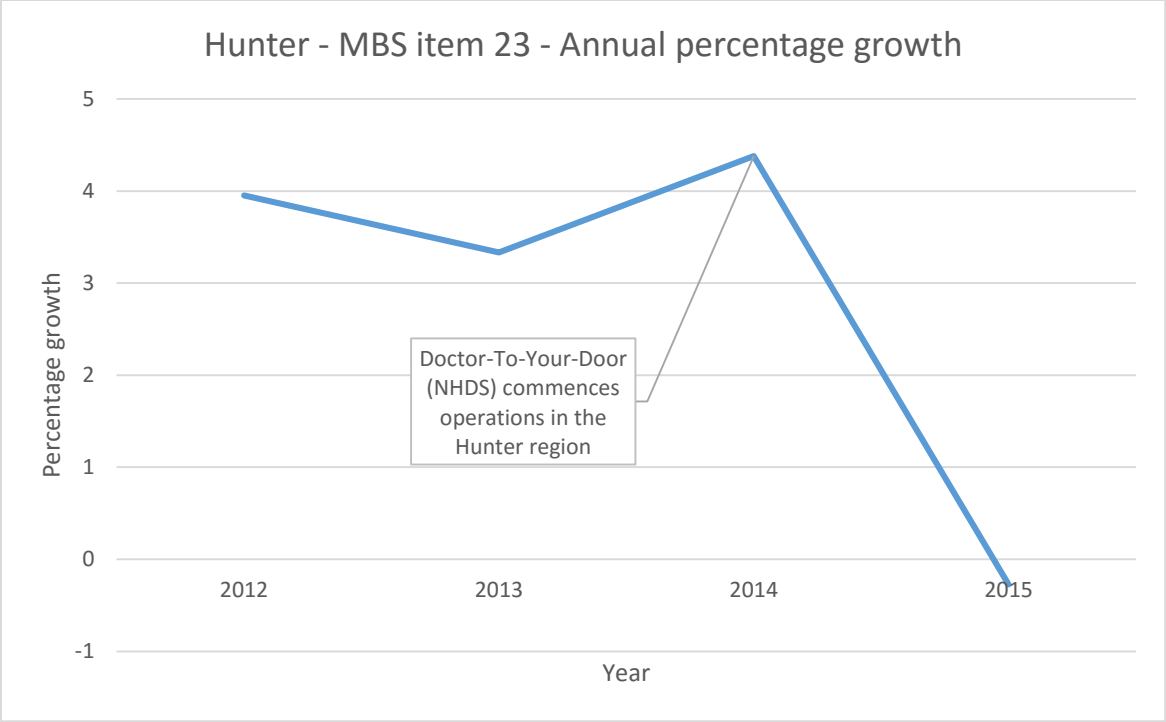
[27] http://www.maitlandmercury.com.au/story/2327500/maitland-after-hours-home-doctor-visits/



There is a marked increase in MBS item 597 utilisation following DTYD/NHDS commencing Newcastle operations. Statistically, this is reflected in a significant difference (chi-square = 21187, P<0.001) in the proportion of MBS item 597s claimed after May 2014, compared to MBS item 23.

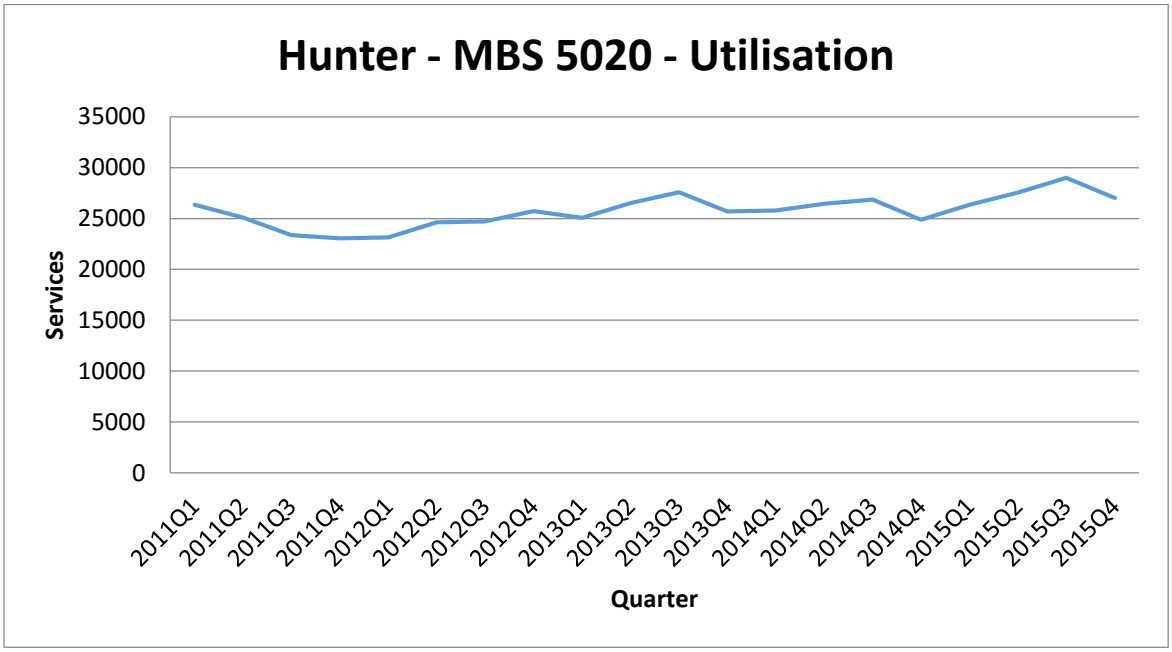
Total annual expenditure on MBS item 597 in the Hunter region increased from $1,069,937 in 2013 to $4,064,278 per annum in 2015, a net increase of $2,994,341.





From 2011 to 2014, there was an average annual increase in MBS item 23 services of 98,731 services per annum. From 2014 to 2015, there was an absolute drop in MBS item 23 services of 7,464 services.

It could be possible that the drop in MBS item 23s was due to an increase in extended hours clinic operations, as would be seen in MBS item 5020 utilisation.



In 2014, the total number of MBS item 5020 services was 103,989. In 2015, this rose to 109,902, an increase of 5913 services, or about a quarter of the total MBS item 597 services in 2015. Based on this, extended hours clinic operations may have had an impact on MBS item 23, but not as much as MBS item 597.

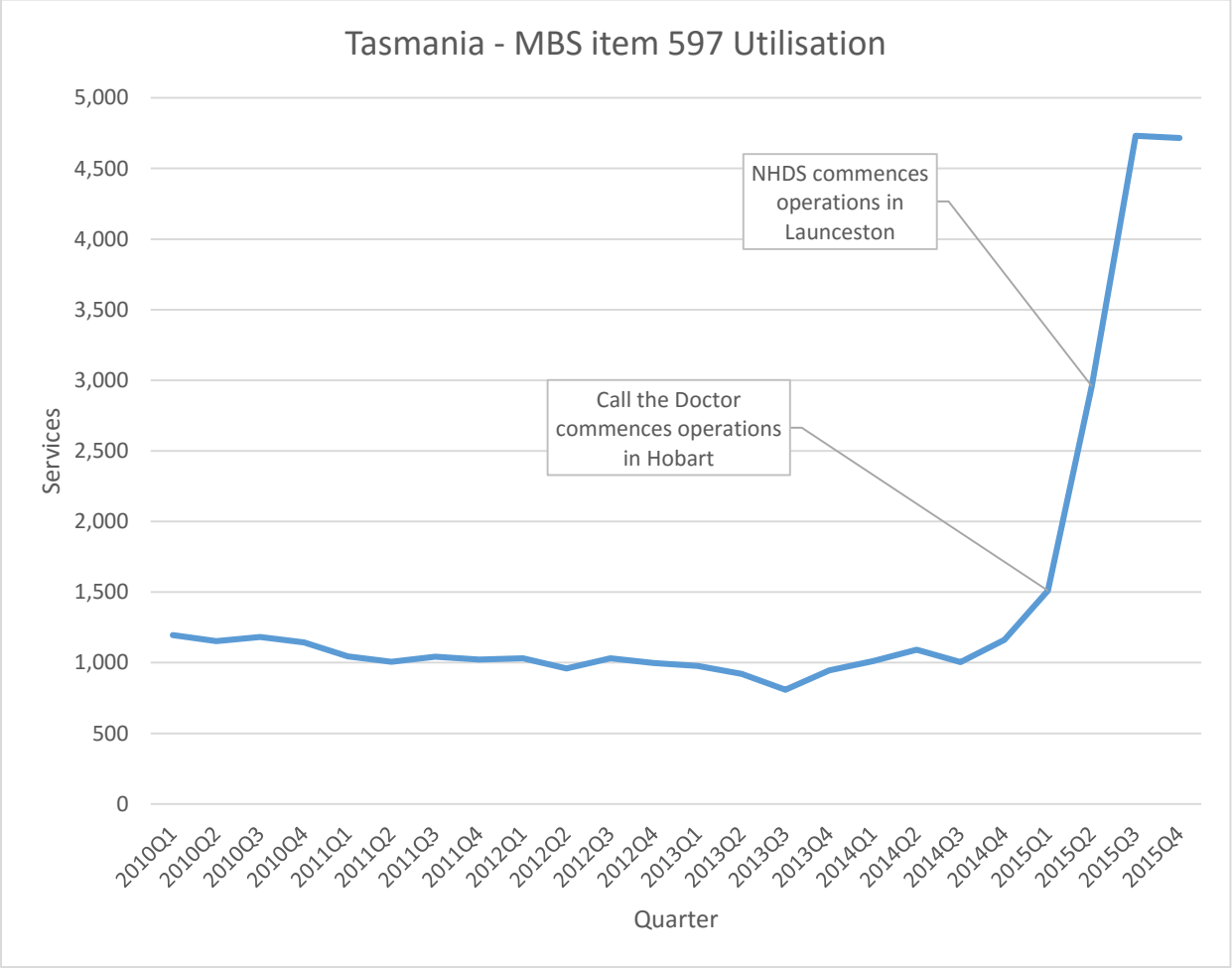
In the Hunter region, as with the ACT/Canberra, there appears to be a link between the introduction of a bulk-billed home doctor service, a rise in after-hours MBS item 597 ($129.80), and a fall in in-hours MBS item 23 ($37.05).

Once again, this could be explained by the hypothesis that bulk-billed home visit services are diverting a significant number of patients from daytime general practice to the after-hours period

Based on these MBS items 597 and 23, the net cost to the MBS in the Hunter in 2015 from this possible diversion was $2,717,800.

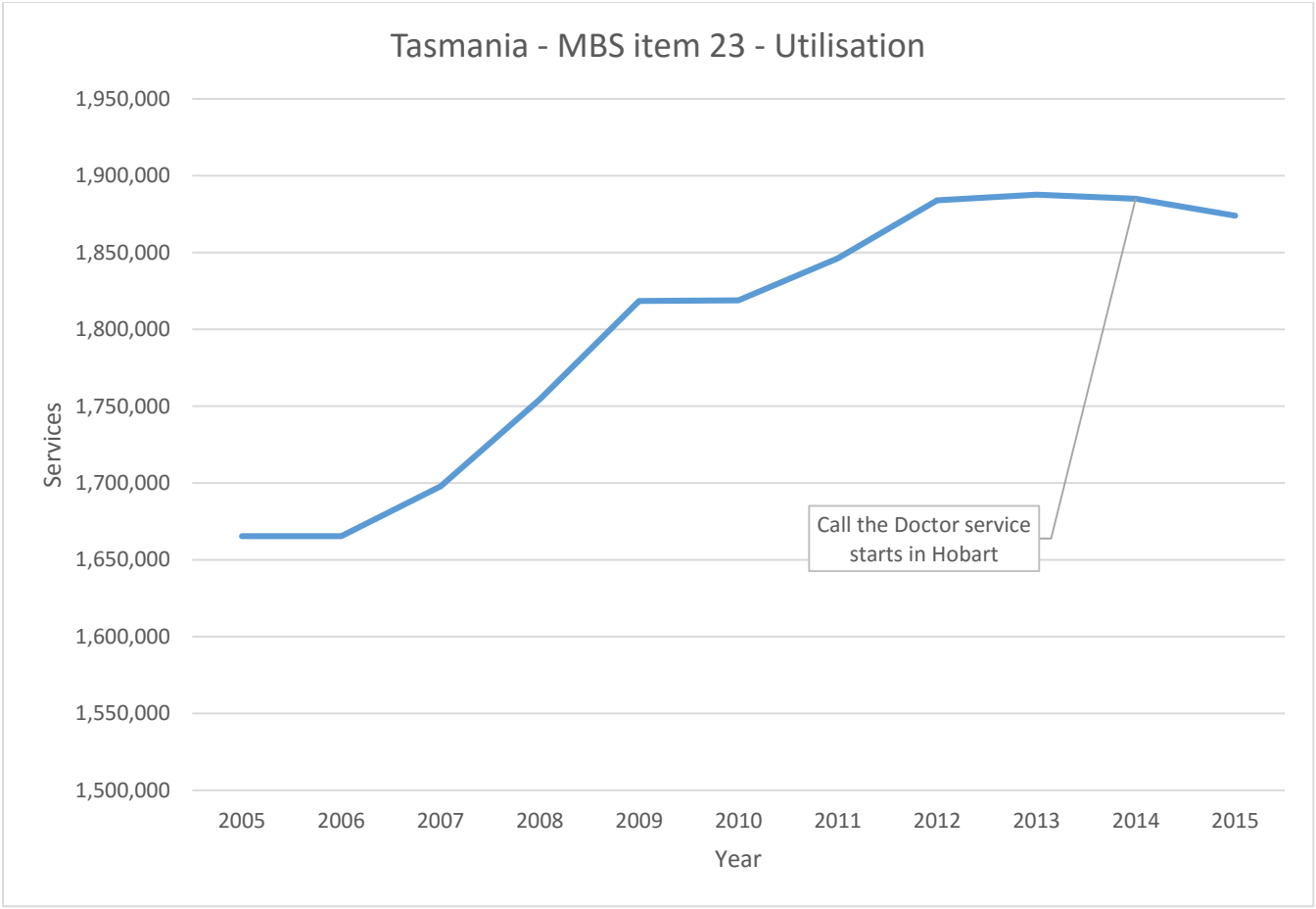
Tasmania

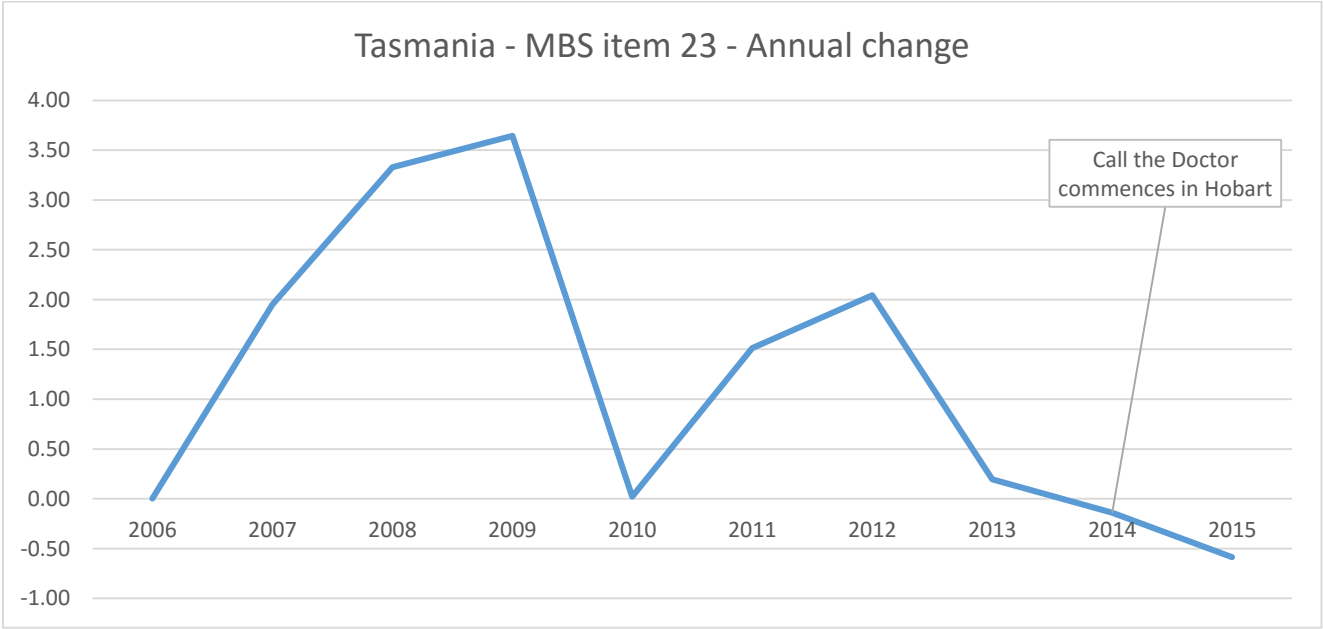
In Tasmania, Call the Doctor commenced operation Hobart in February 2015,[28] and NHDS commenced operations in Launceston in July 2015.[29] The growth of MBS item 597 after July 2015 compared to MBS item 23 was significant (chi-square = 13552, p<0.001).



The cost of MBS item 597 in Tasmania during 2014 was $547,747. After commencement of Call the Doctor and NHDS, this increased to $1,805,808 in 2015. As the services were not mature, growth was rapid during 2015. If item 597 utilisation stabilises at around $600,000 per quarter[30] (unlikely, as NHDS is also expanding to Hobart in February 2016, and Call the Doctor is expanding to Launceston and Burnie later in 2016[31]), this can be expected to increase to at least $2,400,000 in 2016.

[28] http://www.abc.net.au/news/2015-02-15/concerns-over-27house-call27-doctor-service-starting-up-in-ho/6100242
[29] http://www.examiner.com.au/story/3193629/home-doctor-service-launch-poll/
[30] Tasmania expenditure on MBS item 597 was $614,016 in Q3 2015, and $612,197 in Q4 2015
[31] http://www.themercury.com.au/lifestyle/call-the-doctor-service-big-hit-with-concerned-parents/news-story/5d76427160e46630c8fca6d11521c637



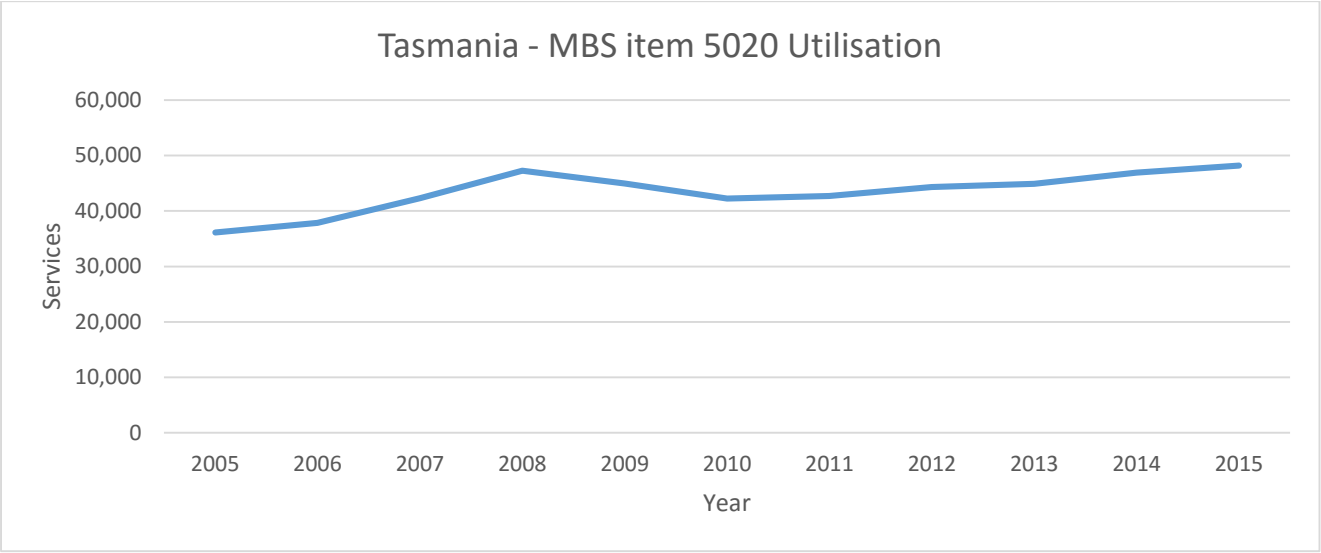


In Tasmania, from 2005 to 2014, there was an average annual increase in MBS item 23 services of 24,394 services per annum. From 2014 to 2015, there was a drop in MBS item 23 services of 11,025 services, representing a saving to the MBS of $408,476.

In 2015, the number of MBS item 597 services in Tasmania, over the preceding average from 2010-2014, was 9768.

The number of annual MBS items in Tasmania begins to fall from 2013 to 2014, before the introduction of Call the Doctor or NHDS, and the total reduction in MBS item 23 from 2014 to 2015 exceeds the number of MBS 597 items.

It is possible that the expansion of extended hours GP clinics may be partially responsible for fall in MBS item 23 utilisation. The next figure examines this.



In Tasmania, the number of item 5020s (non-urgent level B consultation at consulting rooms in the after-hours period) is almost completely unchanged from 2008 to 2015. From 2013 to 2014, there is a modest increase (2,025 services), and from 2014 to 2015 there is another modest increase (1,255 services). This increase is small in comparison to the increase in MBS item 597 services in 2015, but may well have contributed to the fall in MBS item 23 services.

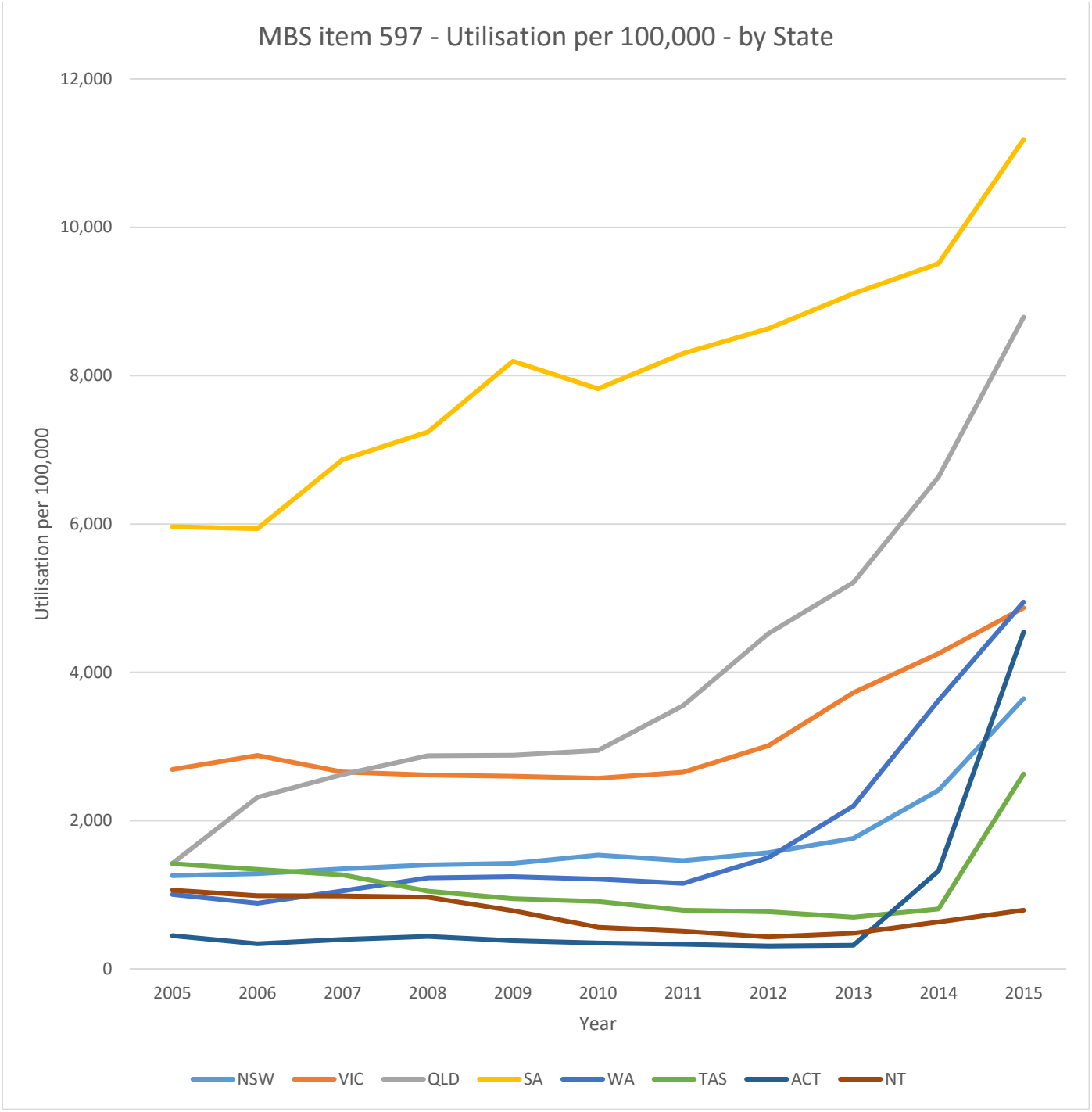
In Tasmania, similar to the ACT/Canberra and the Hunter region, there appears to be a link between the introduction of bulk-billed home doctor services, a rise in after-hours MBS item 597 ($129.80), and a fall in in-hours MBS item 23 ($37.05). Whilst MBS item 23 utilisation was already falling from 2013 to 2014, this trend accelerated following the introduction of Call the Doctor and NHDS.

Once again, this could be explained by the hypothesis that bulk-billed home visit services are diverting a significant number of patients from daytime general practice to the after-hours period

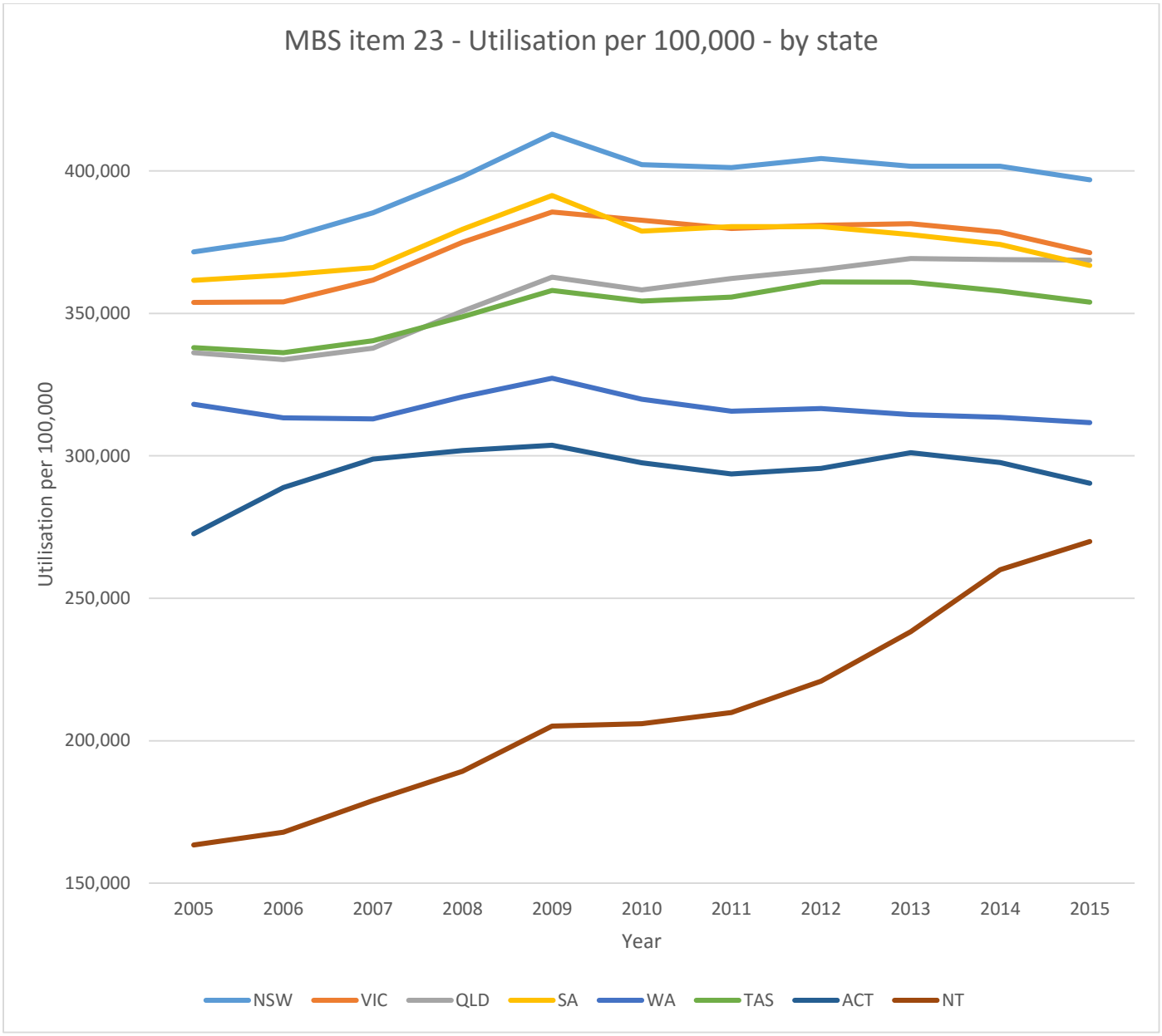
Based on the changes in MBS item 23 and 597 utilisation, the net cost of this possible diversion to the MBS in Tasmania in 2015 was $849,585. Based on Q3 and Q4 2015 MBS item 597 utilisation, this is likely to increase to at least $1,443,777 in 2016.

National Trends

The next two figures look at the state data on MBS item 597 and MBS item 23 utilisation, by services per 100,000 population.



What is striking is the only region that did not record a dramatic increase in MBS item 597 utilisation per capita was the Northern Territory.



Also striking is that the only region that did not experience a drop on MBS item 23 utilisation per capita from 2014 to 2015 was also the Northern Territory. In the NT, the rise in MBS item 23 utilisation remains consistent with increases over previous years, and is beginning to approach ACT utilisation.

The Northern Territory is the only state/territory where, as of the end of 2015, the NHDS had not begun operations.

This State data suggests, similar to the local data reviewed in ACT/Canberra, the Hunter and Tasmania, that bulk-billed home visit services may be diverting patients from daytime general practice into the after hours period.

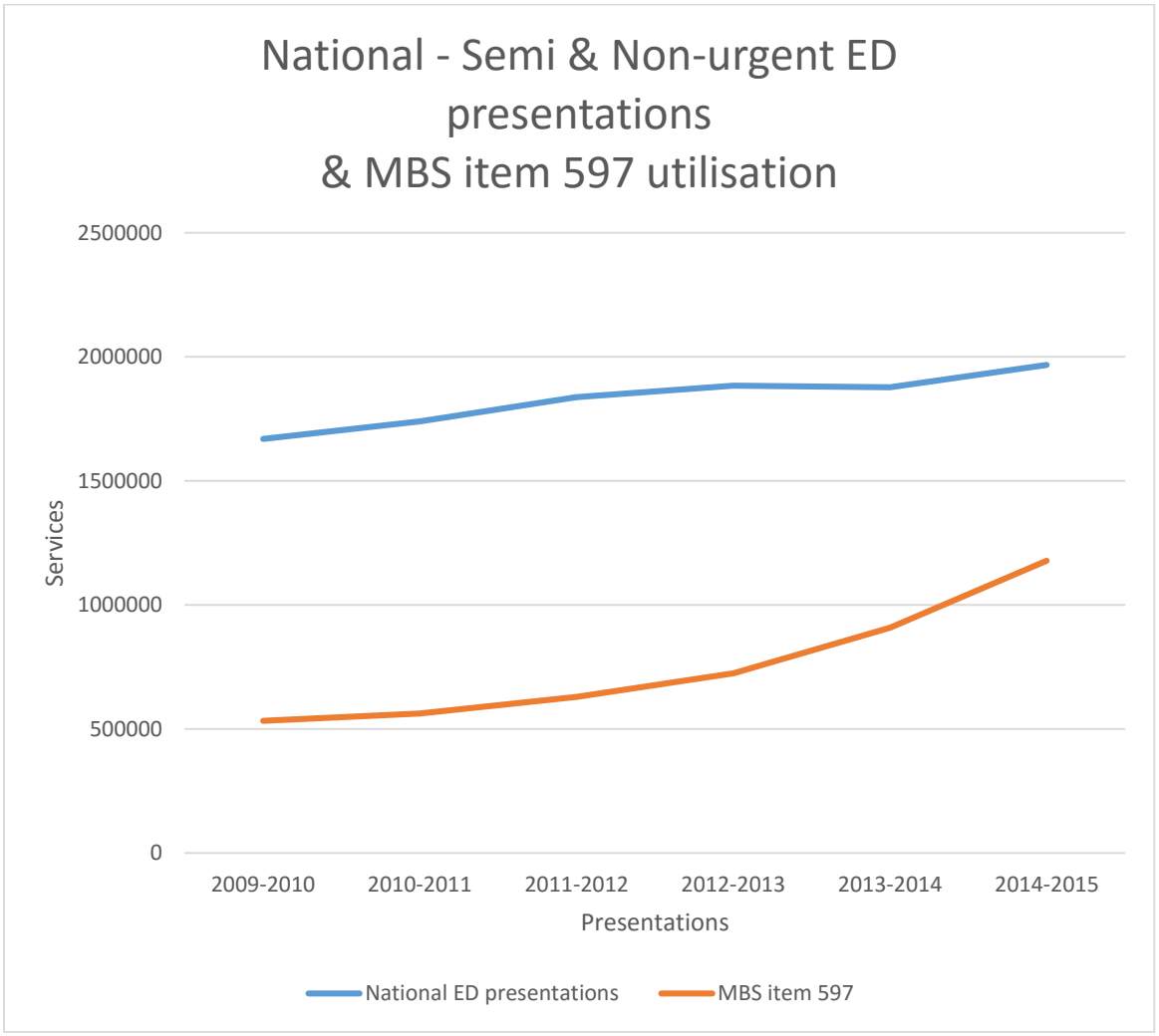
IMPACT ON EMERGENCY DEPARTMENTS[32]

"A spokesperson for Call the Doctor said the service would reduce unnecessary presentations to the Royal Hobart Hospital ED and relieve pressure on paramedics." Australian Doctor, Feb 2015[33]

"NHDS claims slightly more than 50% of the after-hours market, having extended its reach nationally with government support to expand patients' access and reduce hospital presentations." Medical Observer, Feb 2016[34]

"*The National Home Doctor Service has been really successful. There is a real need for this type of service and it eases the congestion in our emergency departments*." CEO, NHDS[35]

Home visit services claim that they reduce the case-load on the emergency department. If there is any impact, it should be on "semi-urgent" or "non-urgent" presentations.



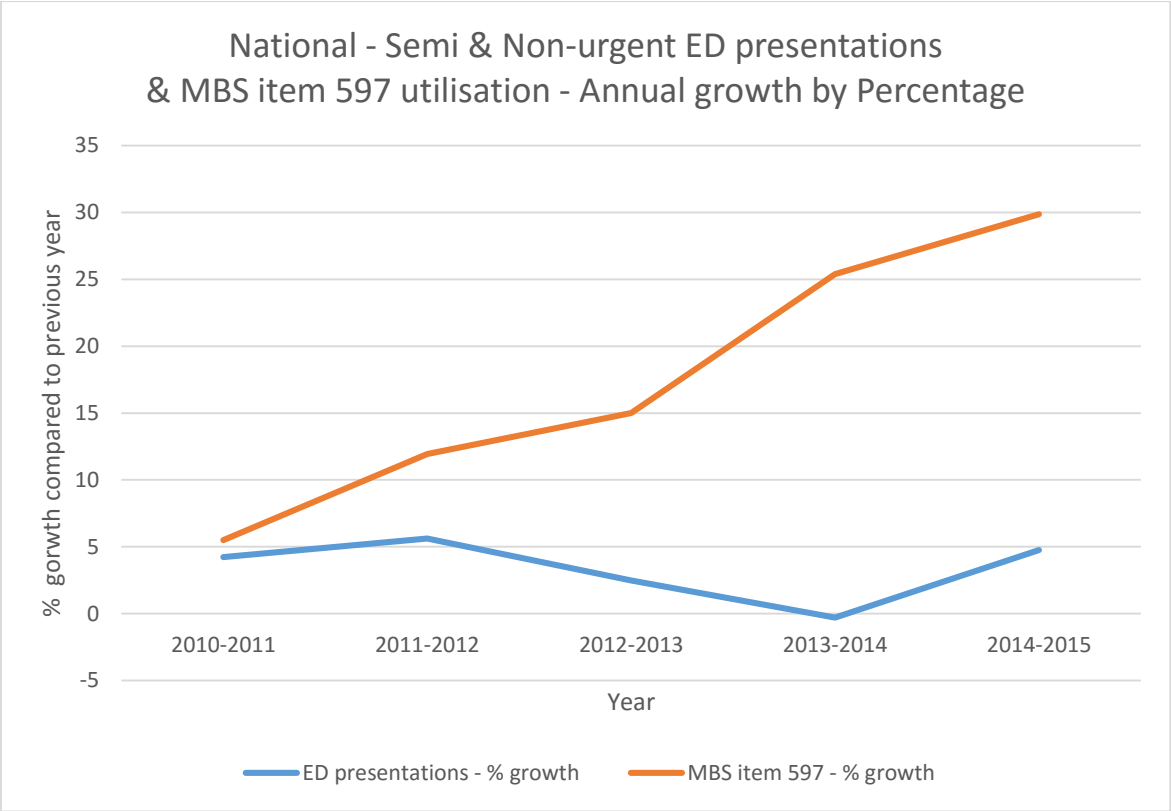
[32] The hospital emergency department presentation data from this section has been sourced from www.myhospitals.gov.au and www.bhi.nsw.gov.au

[33] http://www.australiandoctor.com.au/news/latest-news/gp-home-visit-services-spark-controversy

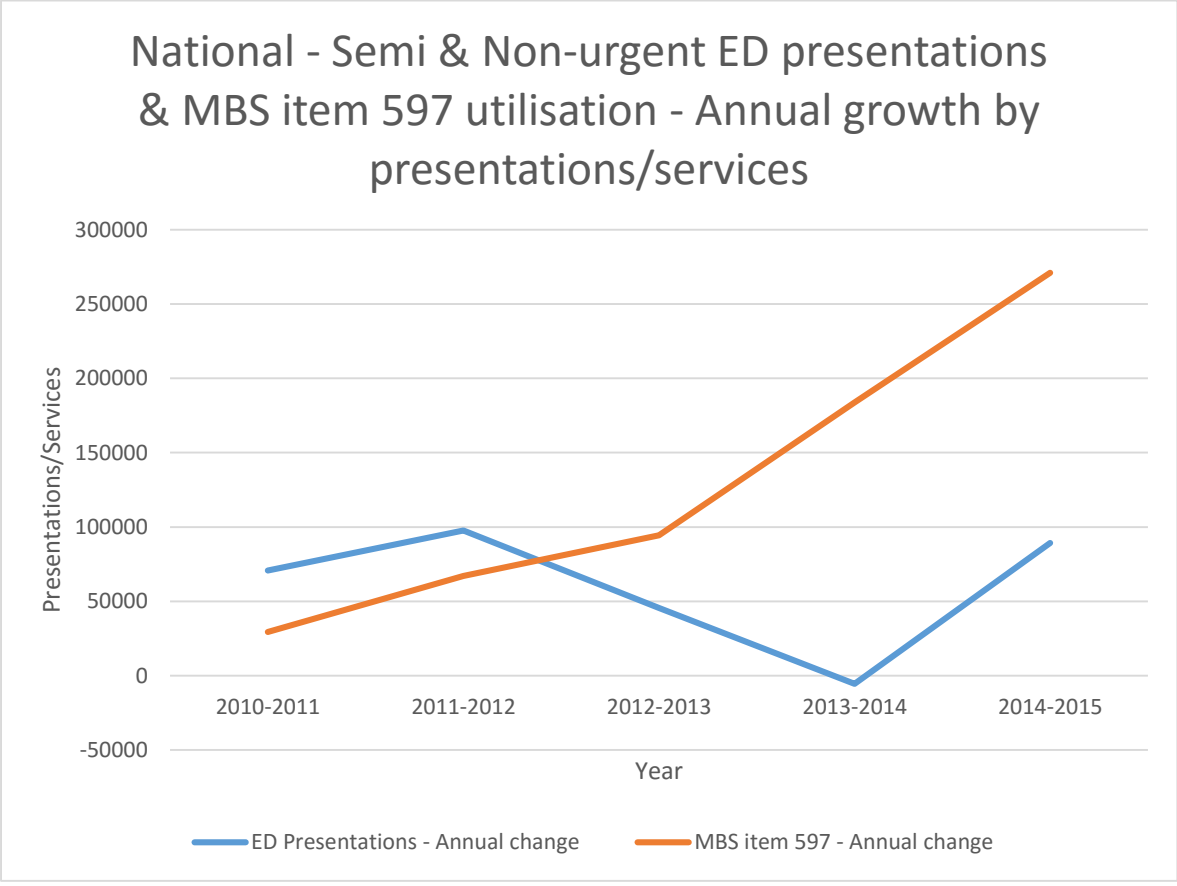
[34] http://www.medicalobserver.com.au/professional-news/home-doctor-service-to-pitch-direct-to-patients

[35] http://www.dailytelegraph.com.au/newslocal/city-east/botany-bay-council-to-hold-a-plebicite-on-council-amalgamations/news-story/f966333c627e6bfb0b90e25fbb664be4

At a national level, semi- and non-urgent ED presentations and MBS item 597 utilisation have both been growing. It is not obvious from the above figure that there has been any impact by home visit services on ED presentations.



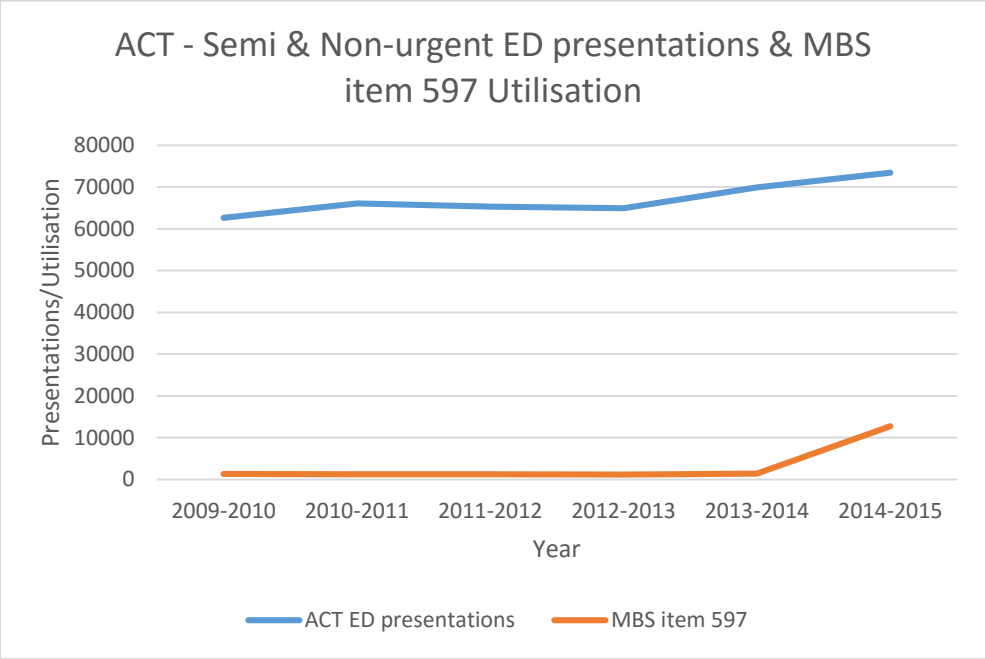
When looking at the percentage growth for both these indicators, there is a slow-down of the increase in ED presentations from 2011-2012 through to 2013-2014, but this is reversed from 2013-2014 to 2014-2015.



The above figure highlights that any improvement to emergency department presentations appears (a) temporary, and (b) far out-stripped by growth in MBS item 597 utilisation.

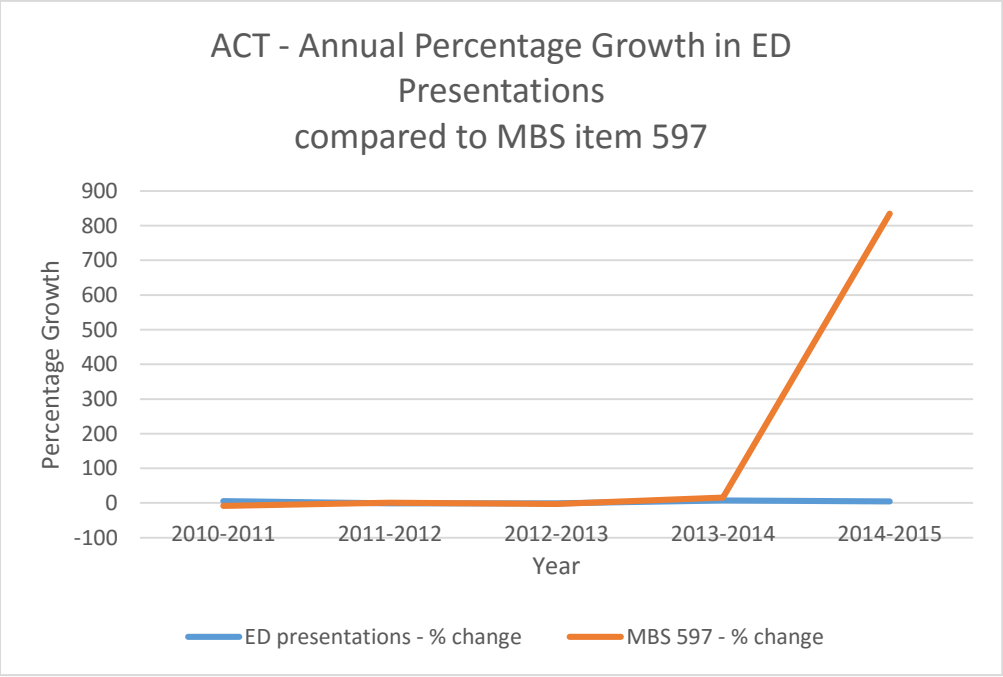
The following sections will review emergency department presentations in the same regions reviewed previously.

ACT



In the ACT, NHDS commenced operations in August 2014.[36] The rise in semi and non-urgent ED presentations in 2014-2015 continues regardless of the rise in MBS item 597 services.

One way to predict potential ED presentations without home-visit services would be to average the percentage growth over preceding years, using the available data points.



[36] http://www.canberratimes.com.au/act-news/afterhours-bulkbilling-service-comes-to-your-front-door-20140818-105e40.html

The average annual percentage growth in ACT ED presentations from 2010-2011 through to 2013-2014 was 2.87%.

Thus, from 2013-2014 to 2014-2015, the expected number of ED semi- and non-urgent presentations could have been:

[Total number of ED presentations in 2013-2014] x 1.0287

= 69894 x 1.0287

= 71,900 presentations

Actual presentations to the ED in 2014-15 were 73,401 i.e. 1,501 more than expected based on the preceding trend. Thus there were *more* ED presentations than expected to ACT ED emergency departments after home-visit services commenced operations.

To reframe this in financial terms:

Additional cost to ED = 1,501 x $359.98[37] = $540,329.98

MBS revenue for home-visit service = 11,379 x $129.80 = $1,476,994.2

Net cost to taxpayer = $2,017,324.18

In other words, following the commencement of home visit services in the ACT, there were increased costs to the ED, as well as increased cost to the MBS.

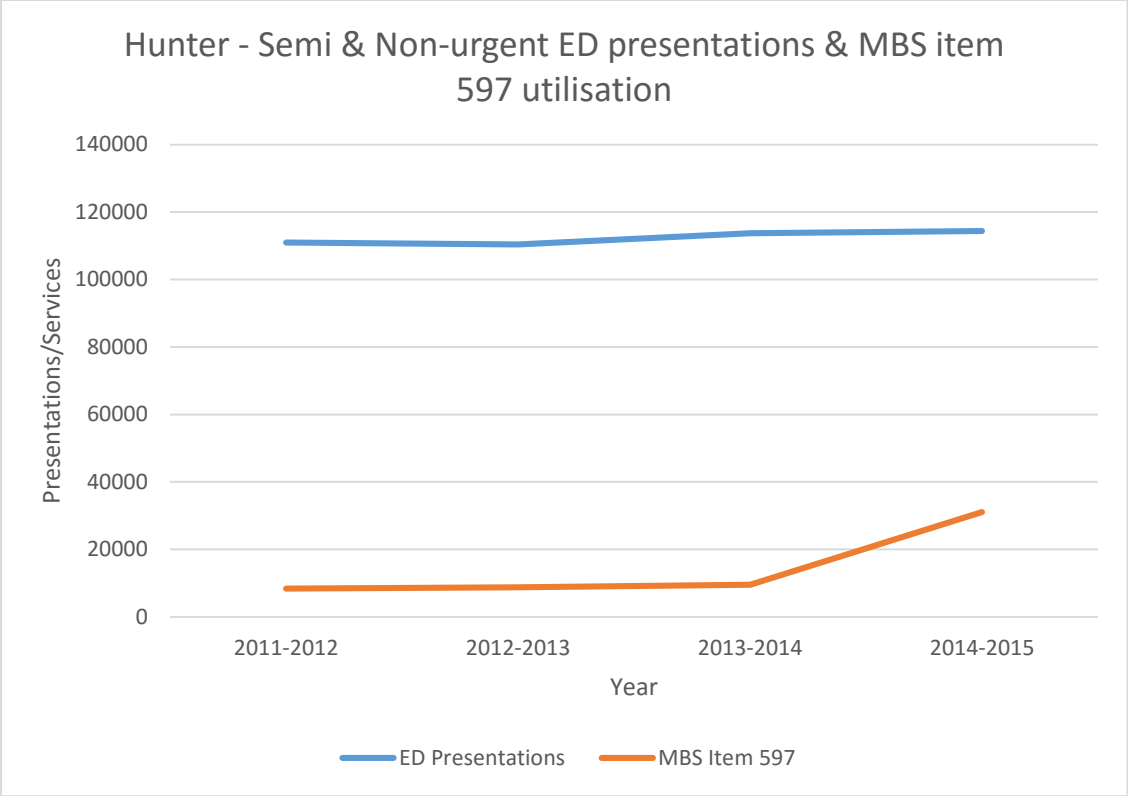
The only financial beneficiary appears to be the home-visit service.

HUNTER

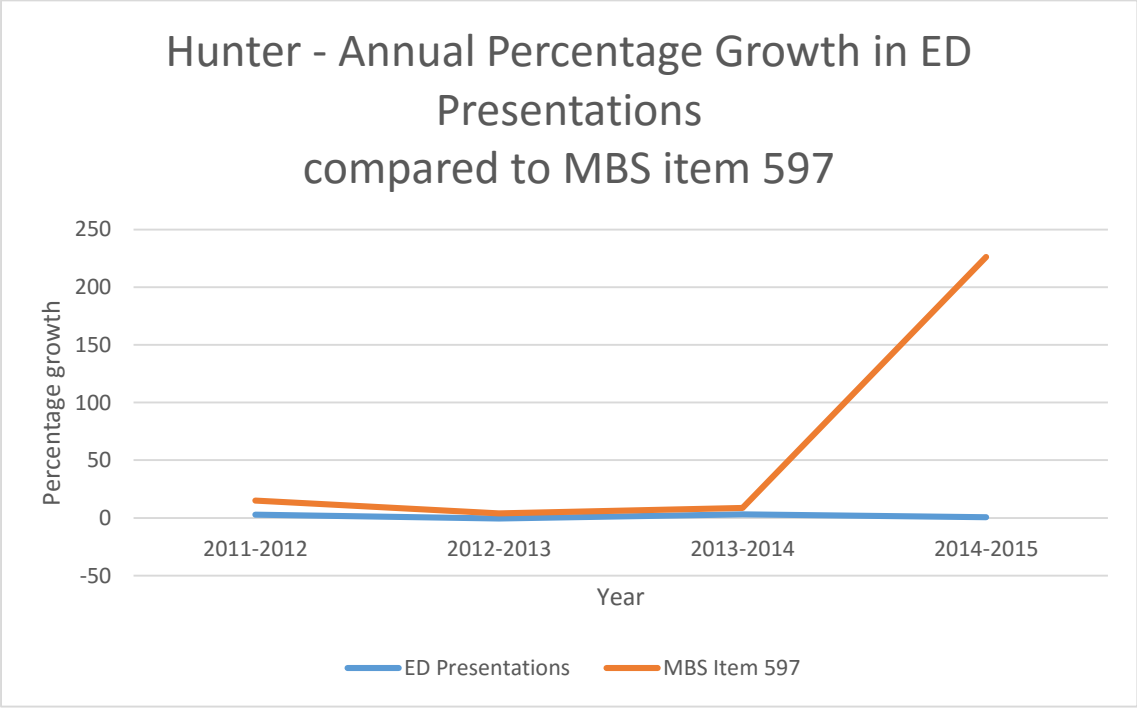
In Newcastle, Doctor-To-Your-Door (subsequently taken over by NHDS) commenced operations in May 2014.[38]

In the Hunter, there is also no obvious association between the rise in MBS item 597 utilisation and any decrease in semi- and non-urgent ED presentations.

[37] http://www.namds.com/assets/files/After%20Hours%20Medical%20Care%20in%20Australia%20FINAL.pdf, page 21
[38] http://www.maitlandmercury.com.au/story/2327500/maitland-after-hours-home-doctor-visits/



As with the ACT, the historical percentage change provides a way to predict expected ED presentations in 2014-2015,



On the percentage change figures, the average annual percentage growth in semi- and non-urgent ED presentations in the Hunter from 2011-2012 to 2013-2014 was 1.81%.

From 2013-2014 to 2014-2015, therefore, the expected number of ED presentations could have been

[Total number of ED presentations in 2013-2014] x 1.0309

= 113,728 x 1.0181

= 115,786 presentations

Actual presentations in 2014-2015 were 114,388, i.e. 1,448 below the expected number based on the preceding trend.

At the same time, +21,527 additional MBS item 597s were utilised. In other words, 15 patients need a home visit for one ED presentation to be avoided.

Savings to ED = 1,448 x $359.98 = $521,251.04

MBS revenue for home-visit service = 21,527 x $129.80 = $2,794,204.6

Net cost to taxpayer = $2,272,953.56

We can model the counter-factual scenario, where no direct marketed home-visit services were operational in 2014-2015:

Additional cost to ED = 1,448 x $359.98 = $521,251.04

Additional MBS cost of MBS item 23 services = [21,527 – 1,448] x $37.05[39] = $743,926.95

Net cost to taxpayer = $1,265,177.99

So, in this "best case" scenario for the effect of home-visit services, it appears that whilst some patients seen by home-visit services may have otherwise presented to the emergency department, there are many more patients who would not have gone to the emergency department anyway – and should have been seen in daytime general practice.

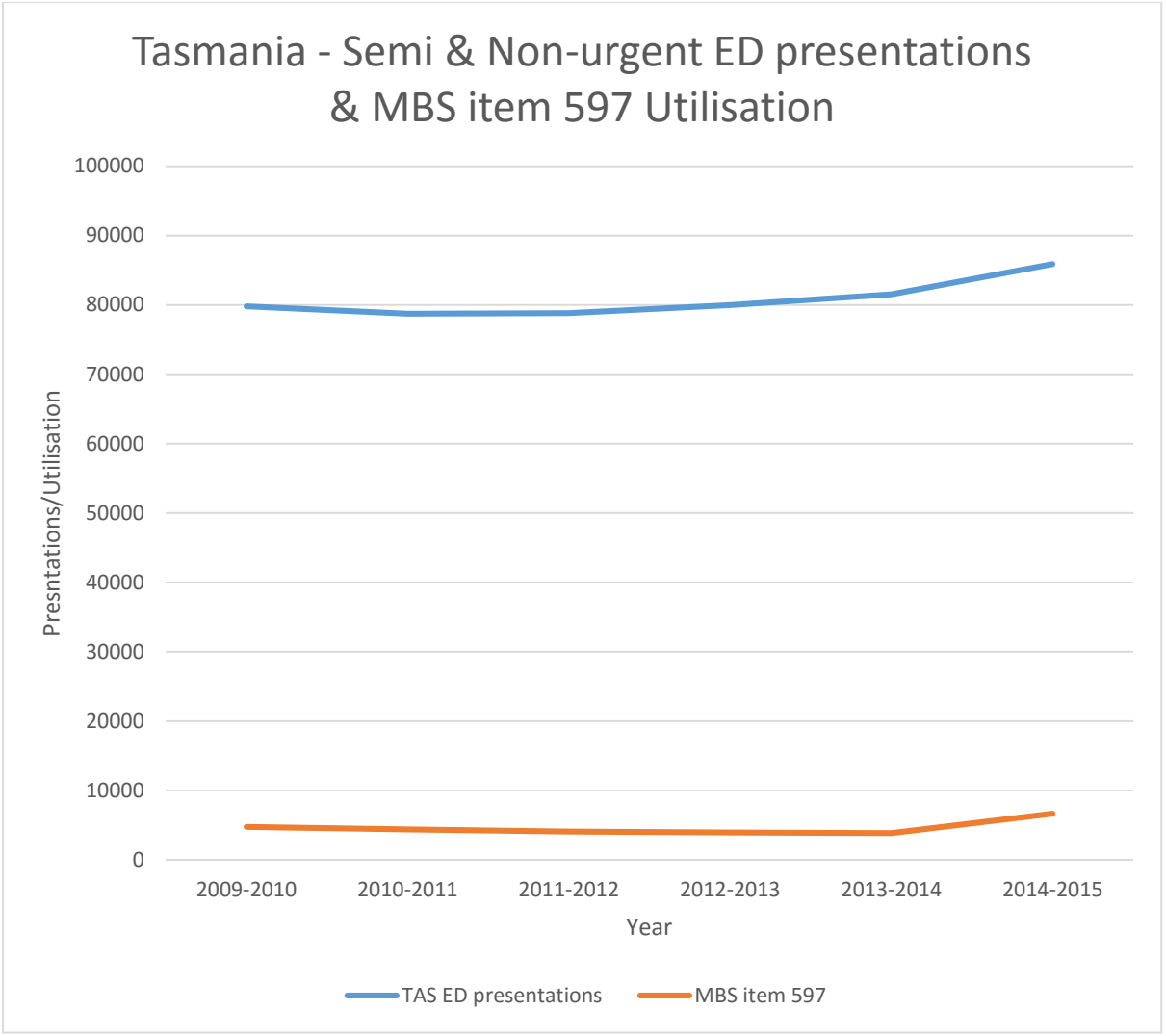
Compared to the counter-factual scenario, the taxpayer is worse off by ($2,272,953.56 - $1,265,177,00) = **$1,007,775.57**. In addition, many patients will be subjected to a fragmentation of their primary care.

It seems that the only major beneficiary is, financially, the direct-marketed home-visit service.

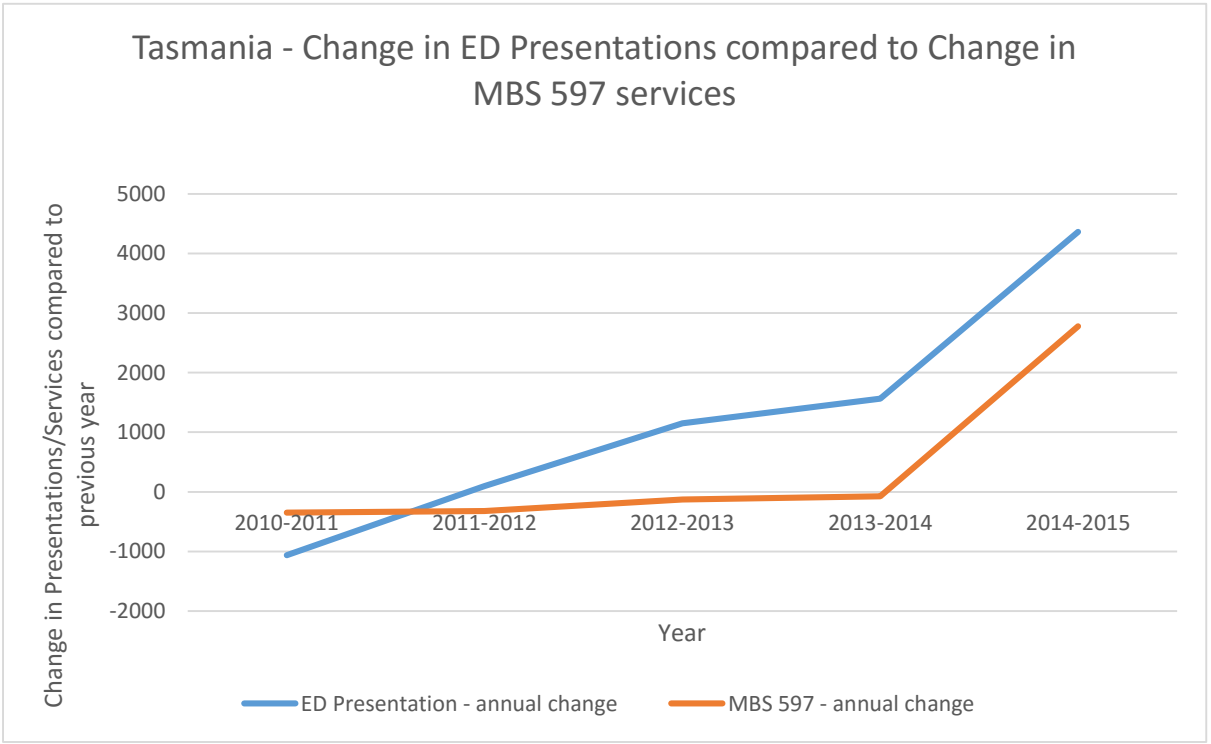
TASMANIA

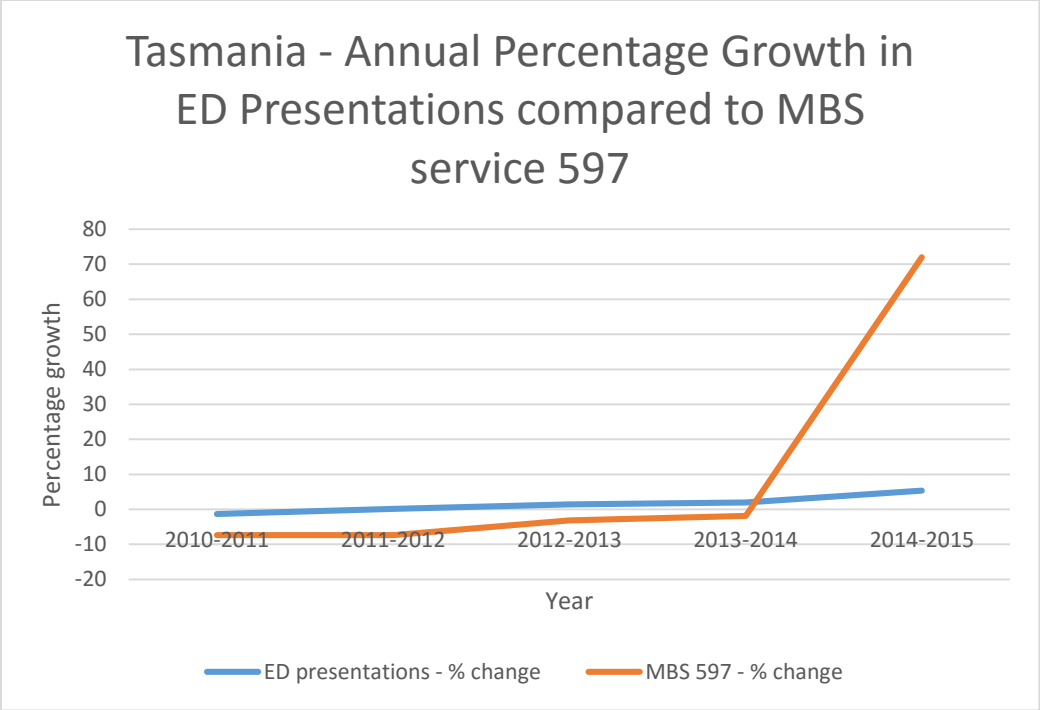
In Tasmania, Call the Doctor commenced operations in Hobart in February 2015,[40] and NHDS commenced operations in Launceston in July 2015.[41] There is no reduction in low acuity hospital presentations when home visit services commence and MBS item 597 services start to increase.

[39] MBS level B consultation - http://remotehealthatlas.nt.gov.au/medicare_cheat_sheet_mbs.pdf
[40] http://www.abc.net.au/news/2015-02-15/concerns-over-27house-call27-doctor-service-starting-up-in-ho/6100242
[41] http://www.examiner.com.au/story/3193629/home-doctor-service-launch-poll/



In fact, the rate of semi- and non-urgent ED presentations increases.





The average annual percentage growth in Tasmania ED semi- and non-urgent presentations from 2010-2011 through to 2013-2014 was 0.55%.

Thus, from 2013-2014 to 2014-2015, the expected number of ED presentations could have been

[Total number of ED presentations in 2013-2014] x 1.0055

= 81,541 x 1.0055

= 81,989 presentations

Actual presentations in 2014-2015 were 85,904, i.e. there were 3,914 more presentations than expected based on the preceding trend.

As with the ACT, an increase in home-visit services coincided with an increase in ED presentations.

To frame this scenario from a financial perspective:

Additional cost to ED = 3,914 x $359.98 = $1,408,961.72

MBS revenue for home-visit service = 2,778 x $129.80 = $360,584.4

Net cost to taxpayer = $1,769,546.12

As the introduction of home visit services to Tasmania was in early 2015, the MBS revenue noted above reflects only the first two quarters of increased activity (1415 services in 2015Q1 & 2,794 services in 2015 Q2). If MBS 597 activity were to stabilise at levels consistent with the final two quarters of 2015 (~4,500 services/quarter), the figures would be:

MBS revenue for home-visit service = 14,300 x $129.80 = $1,856,140

Net cost to taxpayer = $3,265,101.72

Once again, it appears that the only clear financial beneficiaries from this are the direct-marketed home-visit services.

PATIENT DEMOGRAPHICS

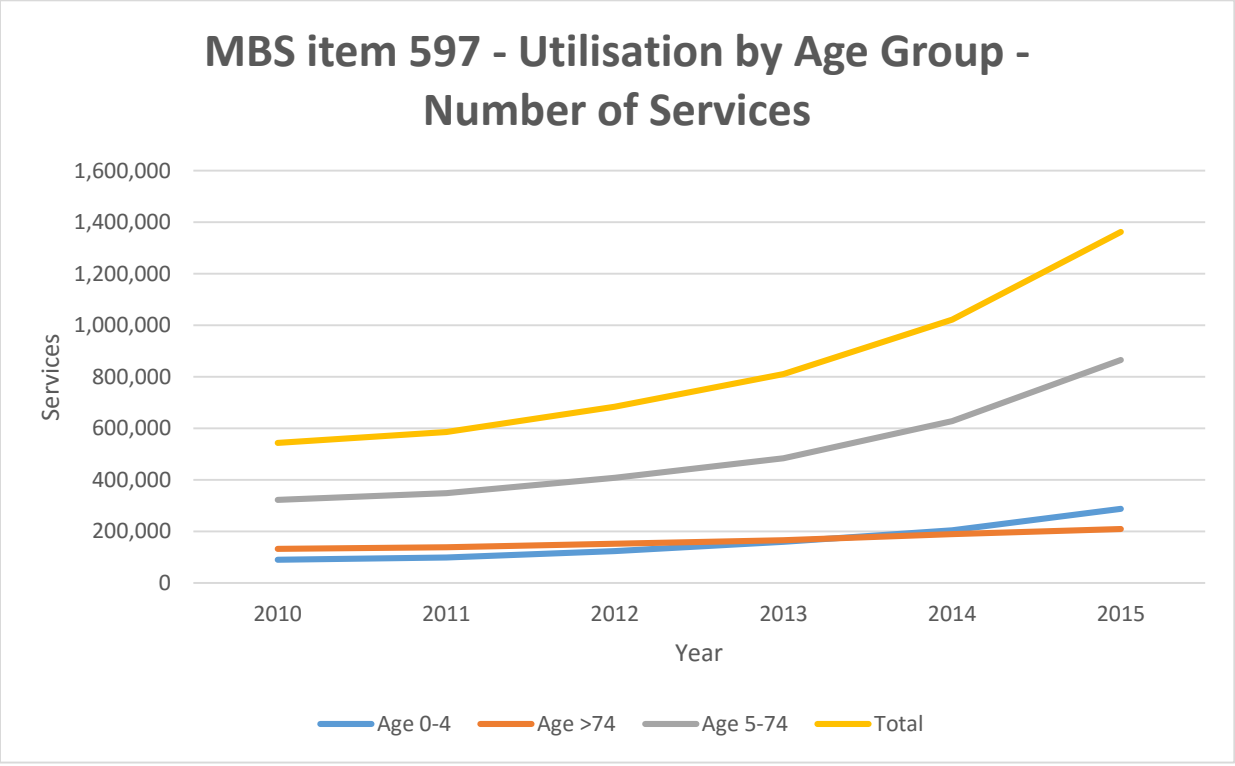
The 2014 NAMDS reports "defines" Urgent After Hours Visits as being "*Essential for ACF frail aged house bound and very young patients*".[42] On page 13, they go on to say that ACF home visits care are impossible to substitute except by ambulance.

The very young are, in fact, highly portable. It would be more true to say that home visits are *very convenient* for parents with young families.

It is untrue that ACF care is impossible to substitute, except by ambulance. Working in close collaboration with Hunter Primary Care/GP Access After Hours, the ACE program[43] in NSW, by providing a combination of education and telephone support to ACFs has been proven to reduce hospital ED presentations by as much as 50%.[44] This demonstrates that many ACF patients *can* be managed over the telephone.

The President of NAMDS and CEO of NHDS is quoted as saying that their "*…patient profile is "overwhelmingly" paediatric and geriatric cases suffering episodic, urgent illness*", and that by contrast, "*…By contrast, regular after-hours clinics tend to see middle-aged, ambulatory patients who like the convenience of late consultations*."[45]

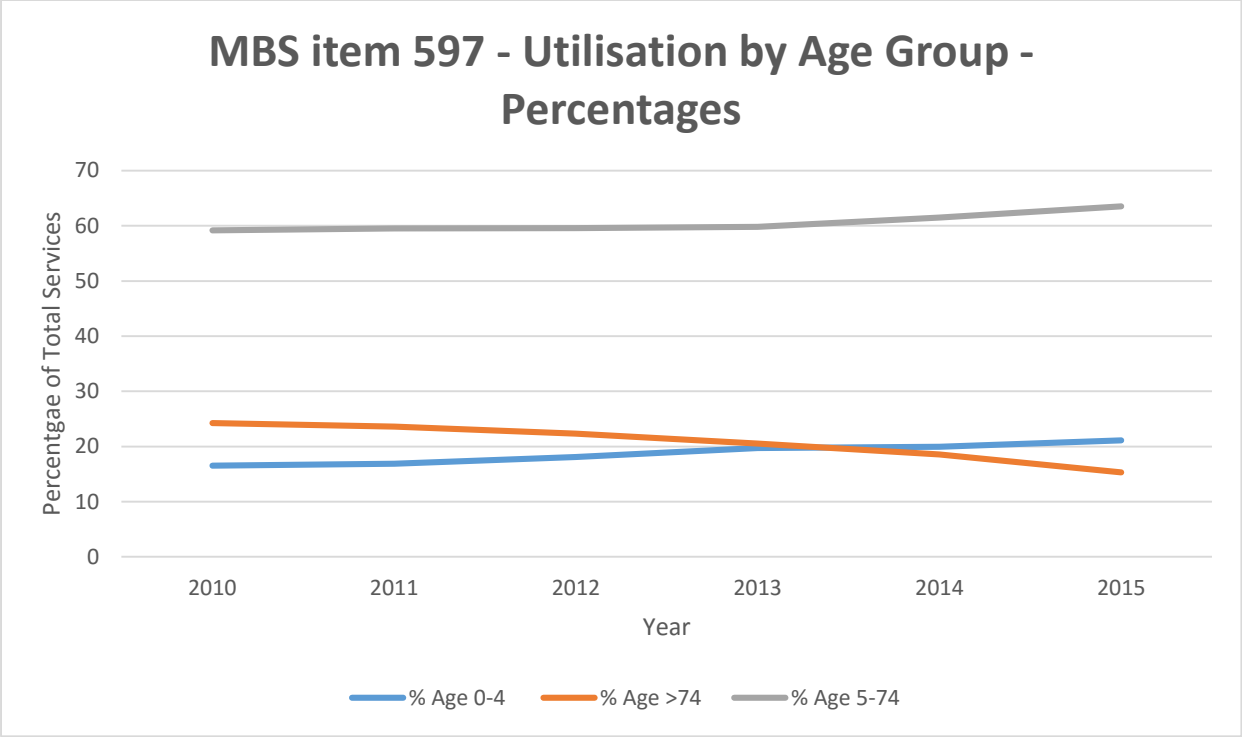
To first look at the "*very young*" and "*frail aged*", we will define the "*very young*" as age 0-4, and the "*frail aged*" as >74. The following figures all utilise national MBS data on item 597.



Only a small proportion of the patients being seen are either <5 or >74.

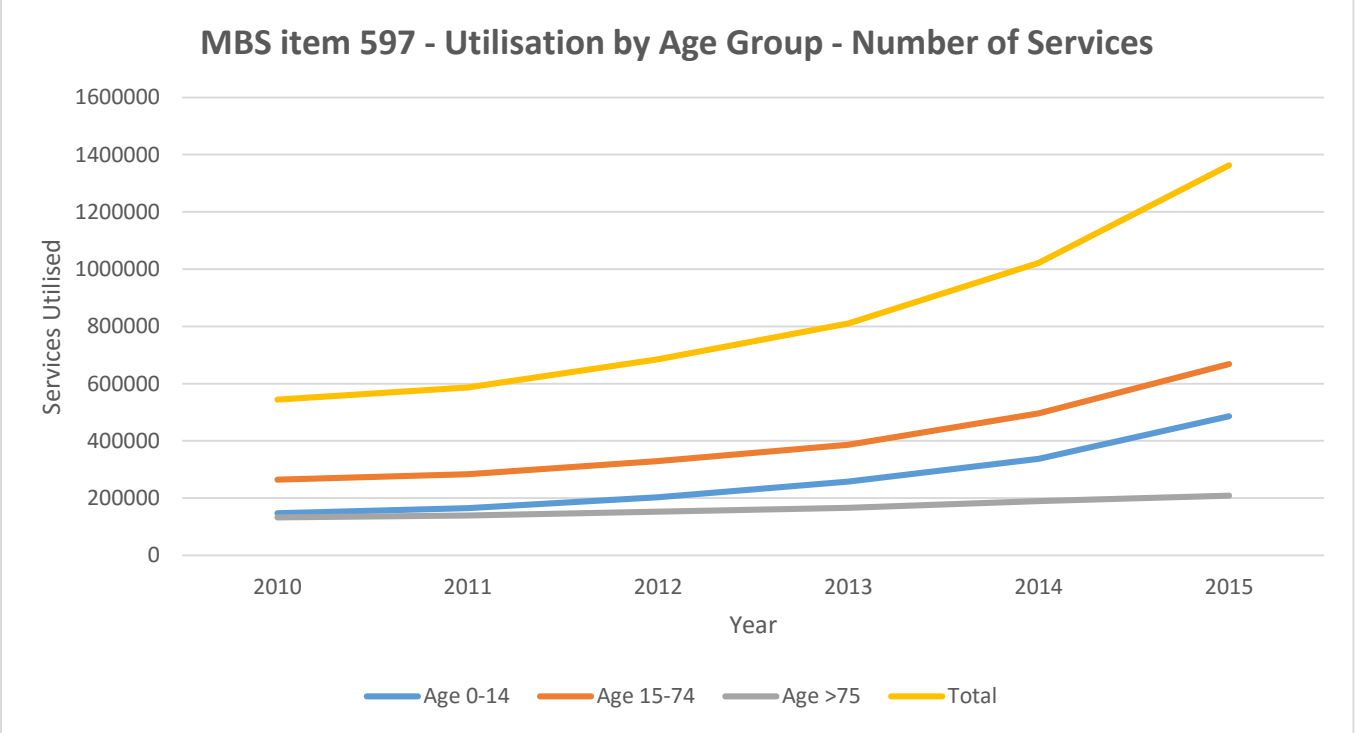
The trends in the age groups become even more apparent when examined by percentages.

[42] http://www.namds.com/assets/files/After%20Hours%20Medical%20Care%20in%20Australia%20FINAL.pdf, page 3
[43] http://www.ecinsw.com.au/ace
[44] http://www.ecinsw.com.au/sites/default/files/field/file/ACE%20Final%20Report%20JHH.pdf
[45] http://www.medicalobserver.com.au/professional-news/home-doctor-service-to-pitch-direct-to-patients

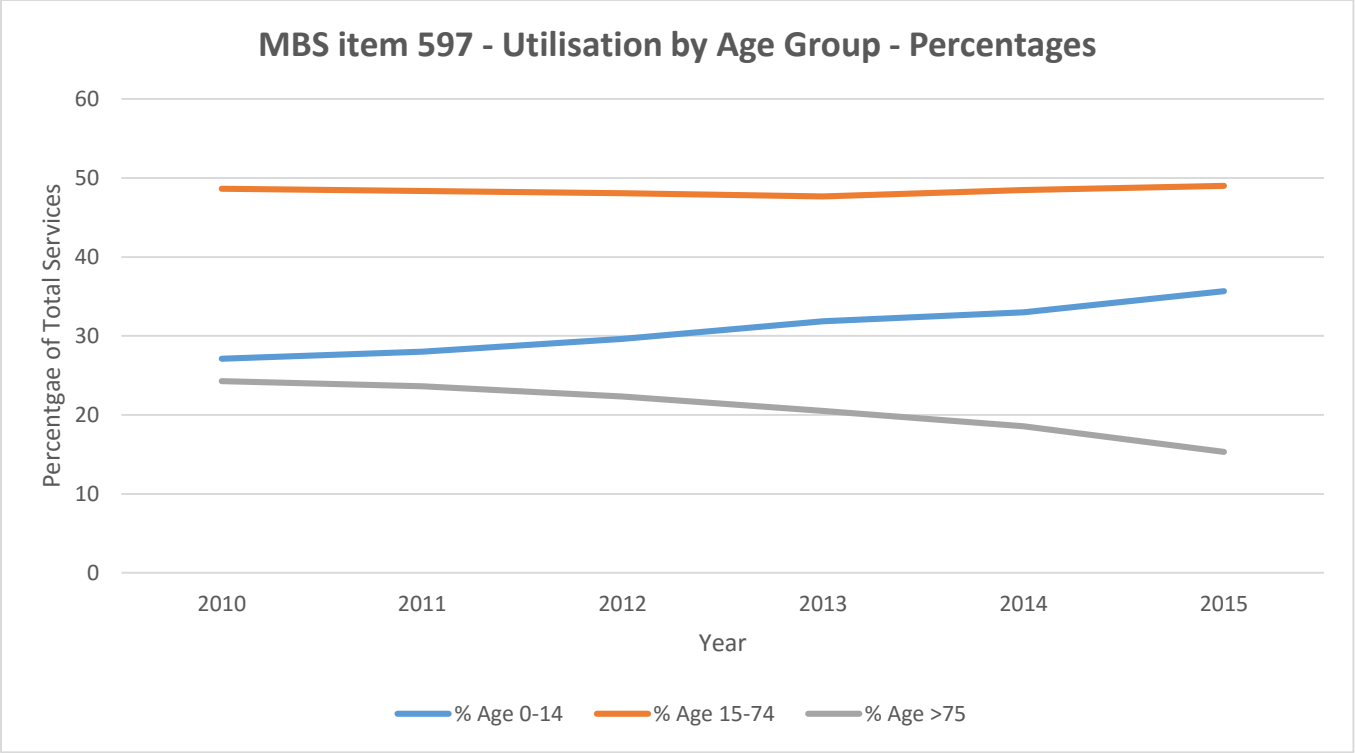


Not only do 5-74 year old comprise almost two thirds of the patients being seen, but *the proportion of services being provided to the most vulnerable group of all, those aged >74, are actually falling*.

To examine the statement that the "…*patient profile is 'overwhelmingly' paediatric and geriatric cases suffering episodic, urgent illness",* we will broaden out the paediatric age group to include 0-14 year olds.[46]

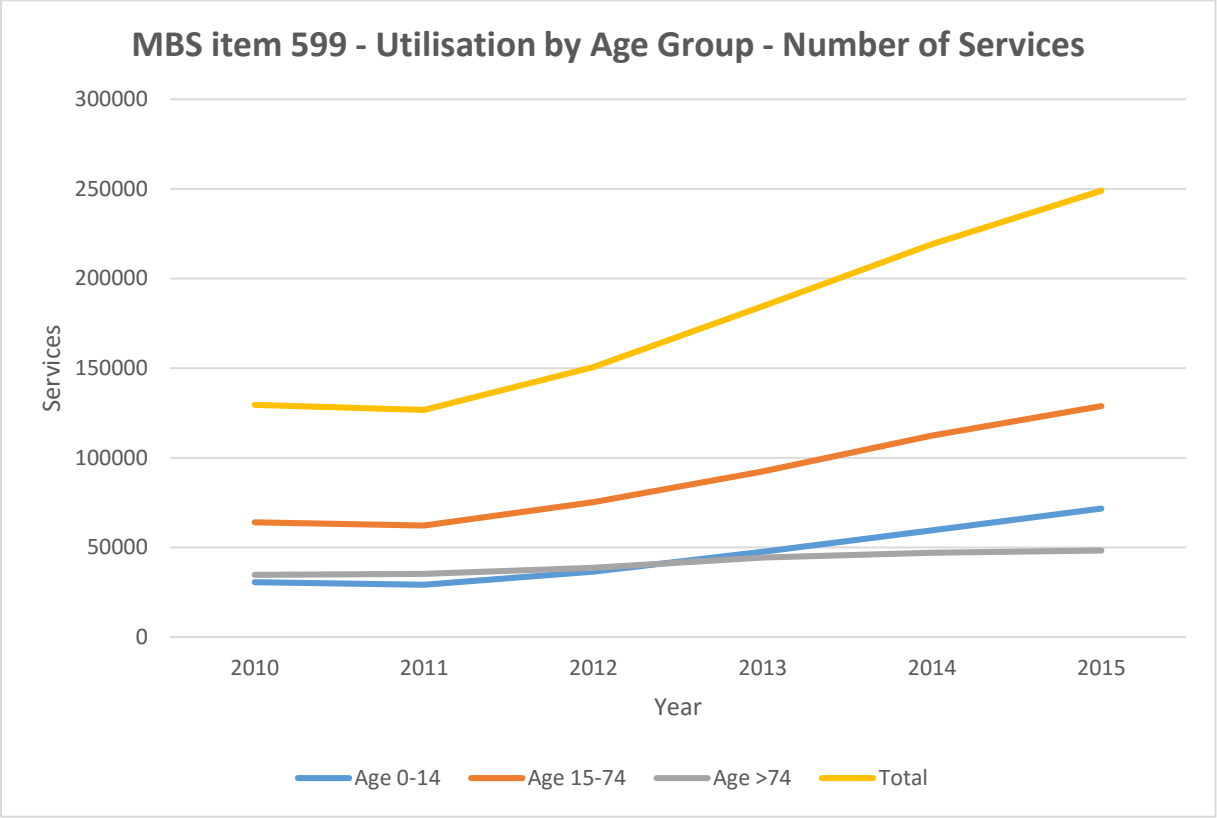


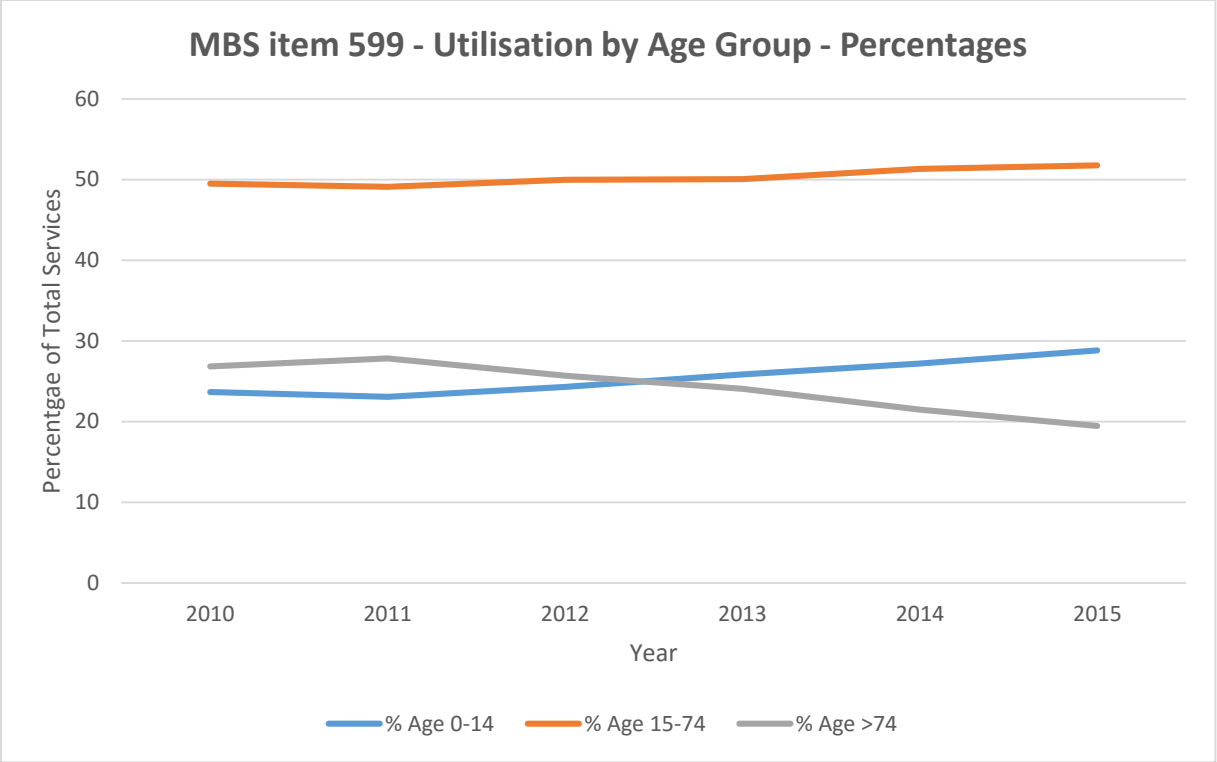
[46] Publically available Medicare data is grouped by ages 0-4, 5-14, 15-24, 35-44, 45-54, 55-64, 65-74, 75-84, >=85 - http://medicarestatistics.humanservices.gov.au/statistics/mbs_item.jsp



15-74 years olds still comprise half the patients being seen.

One would think it more likely that in the "unsociable hours" of 11pm-7am, a greater proportion of home-visit patients seen will be the frail elderly. Urgent "unsociable hour" home visits are covered by MBS item 599.





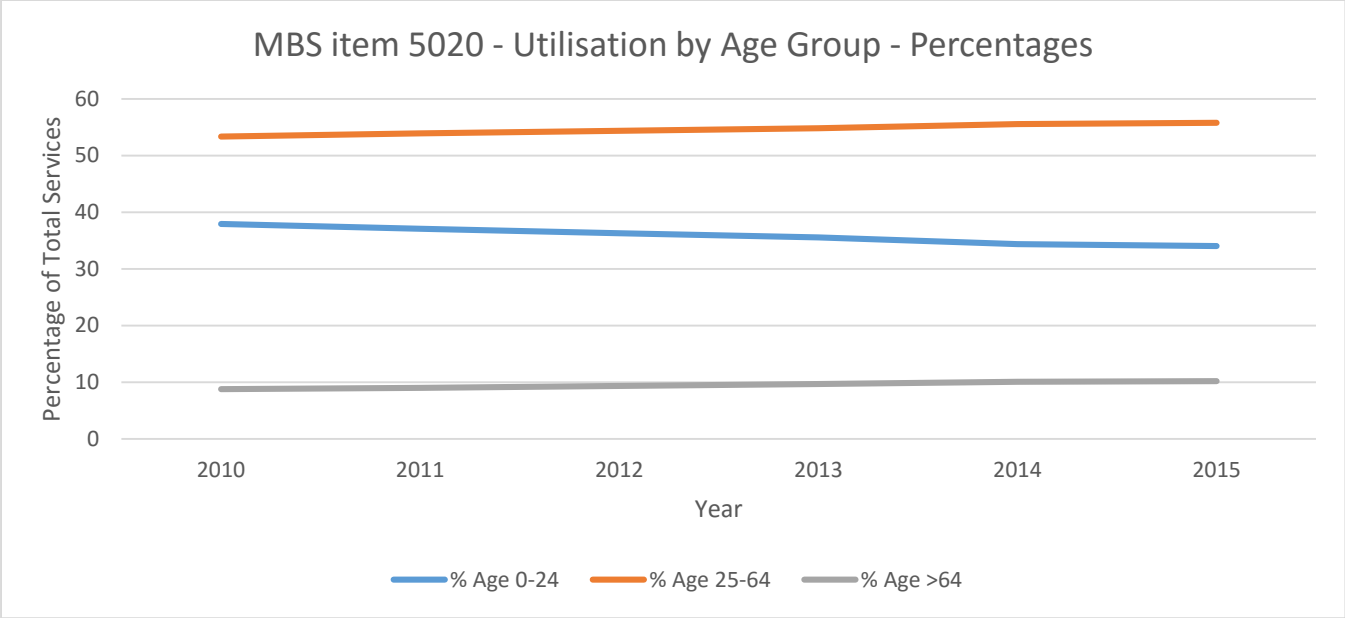
The proportion of patients >74 receiving home-visits in the unsociable hours is *also falling*.

When considered in the light of the direct marketing messages of home-visit services (high convenience and "no" cost), and the demographics they are targeting via social media[47] and television advertising[48], this evidence is not surprising.

Extended hours services, as evidenced by MBS item 5020 ("Level B, non-urgent after hours at the consulting rooms") do tend to see slightly more middle-aged patients (58% cf 52%) but the difference is small:

[47] https://www.facebook.com/13SICK/, https://www.huggies.com.au/parenting/resources/national-home-doctor-service, http://parent101.com.au/national-home-doctor-service-13sick/

[48] http://www.medicalobserver.com.au/professional-news/home-doctor-service-to-pitch-direct-to-patients, https://www.youtube.com/watch?v=bVJG-sOzxso, https://www.youtube.com/watch?v=t4j9QUCwrPs, https://www.youtube.com/watch?v=BqmaPEmKu6Y, https://www.youtube.com/watch?v=1bJkQSDuqfo, https://www.youtube.com/watch?v=A1HqVkfUB-Q



However, they still do see a substantial proportion of both younger and older patients.

The suggestion that patients who attend extended-hours clinics are driven by convenience more than patients who use after-hours services is questionable. As noted above, the marketing messages for home-visit services are highly orientated around convenience.[49] The definitive way to resolve this question would be to audit the clinical records from both types of services.

Overall, the evidence from MBS data and MDS advertising suggests that whilst home-visit services do see the frail elderly, it is not the major focus of their business. The claim of having an "overwhelmingly" paediatric and geriatric caseload is not substantiated by the MBS data.

Billing practices

The most commonly used MBS item used by after-hours home visit services is 597, which is defined as:[50]

> *Professional attendance by a general practitioner on not more than 1 patient on the 1 occasion - each attendance* ***(other than an attendance between 11pm and 7am)*** *in an after-hours period if:*
>
> *a) the attendance is requested by the patient or a responsible person in, or not more than 2 hours before the start of, the same unbroken urgent after-hours period;*
>
> *b) the patient's condition requires urgent medical treatment; and*
>
> *c) if the attendance is undertaken at consulting rooms, it is necessary for the practitioner to return to, and specially open, the consulting rooms for the attendance.*

[49] https://www.youtube.com/watch?v=bVJG-sOzxso, https://www.youtube.com/watch?v=t4j9QUCwrPs, https://www.youtube.com/watch?v=BqmaPEmKu6Y

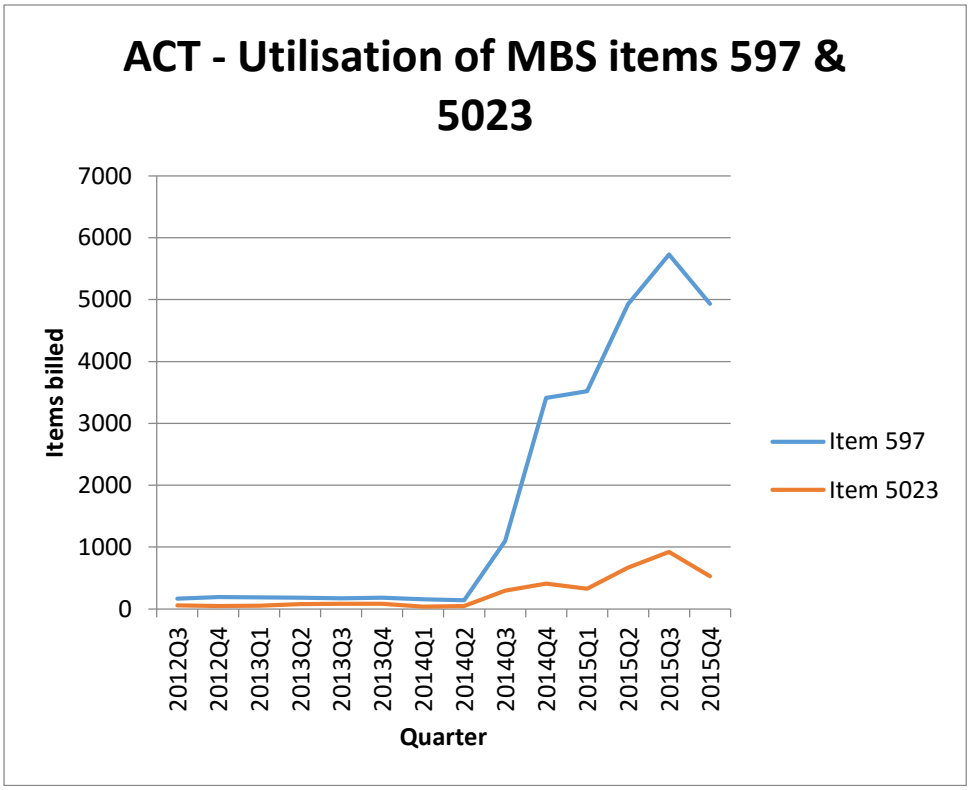
[50] http://www9.health.gov.au/mbs/search.cfm?q=597&sopt=S

It is clear from note A10[51] regarding this item that all of the above criteria must be fulfilled in order for item 597 to be legitimately billed. That is, it is not sufficient that the request be made by a patient/responsible person in the after-hours period, but the condition requiring attention must also require urgent medical treatment.

Where a home-visit is done for a non-urgent condition, or where second or subsequent consultations are done at the same location, the appropriate item numbers that should be utilised are 5003, 5023, 5043 and 5063, which are Level A, B, C, D items with the following description:[52]

> ***CONSULTATION AT A PLACE OTHER THAN CONSULTING ROOMS, HOSPITAL OR A RESIDENTIAL AGED CARE FACILITY***
>
> *Professional attendance on 1 or more patients on 1 occasion at a place other than consulting rooms, hospital or residential aged care facility. The attendance must be initiated either on a public holiday, on a Sunday, before 8am or after 12noon on a Saturday, or before 8am or after 6pm on any other day.*
>
> *The fee for item 5040, plus $25.95 divided by the number of patients seen, up to a maximum of six patients. For seven or more patients - the fee for item 5040 plus $2.00 per patient.*

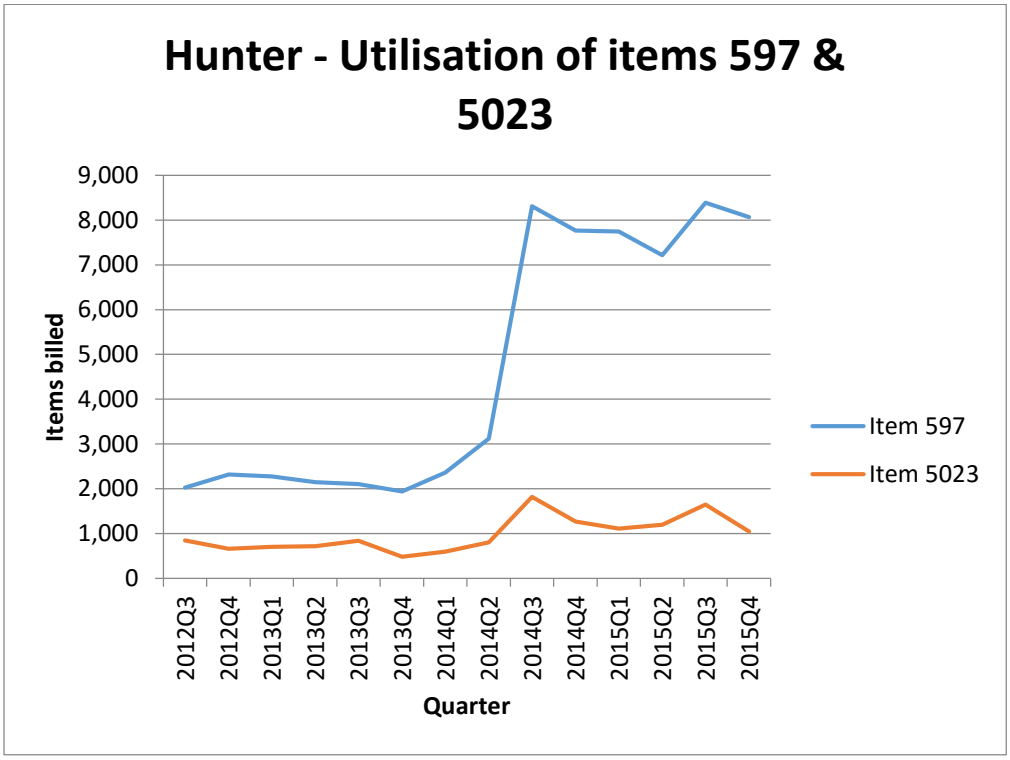
Of items 5003, 5023, 5043 and 5063, by far the most common item number used is 5023 (indicating "… a consultation lasting less than 20 minutes for cases that are not obvious or straightforward in relation to one or more health related issues).[53]



[51] http://www9.health.gov.au/mbs/fullDisplay.cfm?type=note&qt=NoteID&q=A10
[52] http://www9.health.gov.au/mbs/fullDisplay.cfm?type=note&q=A6&qt=noteID&criteria=5003
[53] http://www9.health.gov.au/mbs/fullDisplay.cfm?type=note&qt=NoteID&q=A5

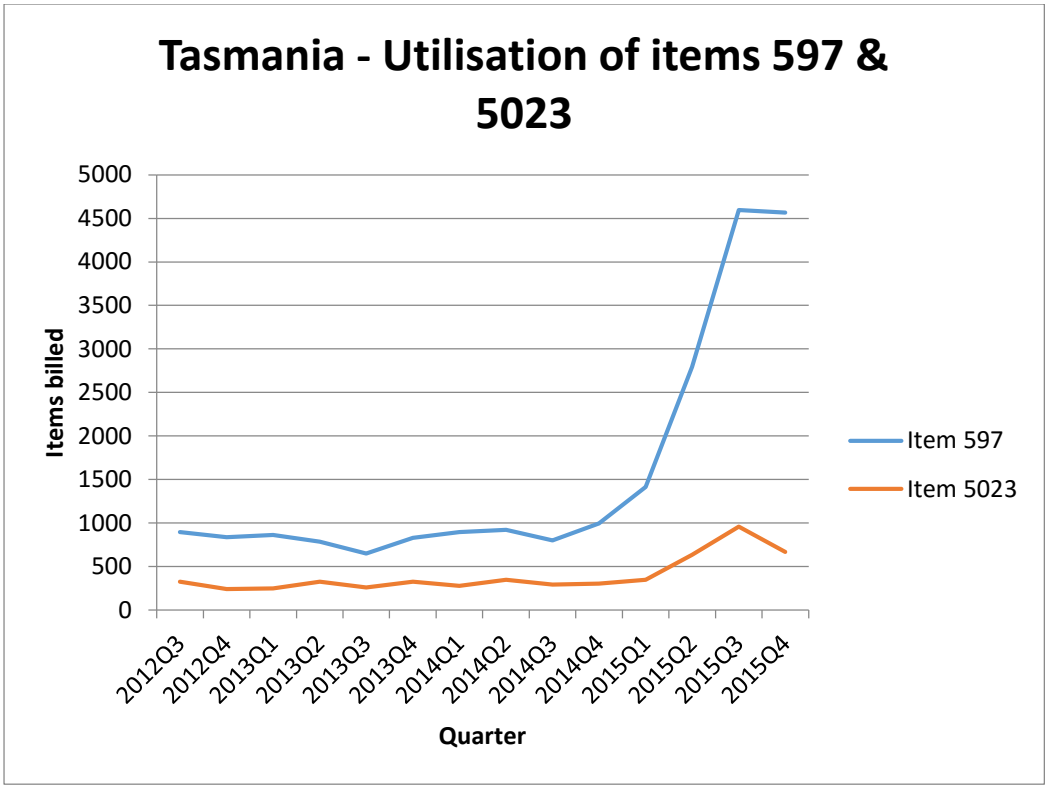
In 2013 in the ACT, prior to the commencement of NHDS in the region (August 2014), there were 297 item 5023s billed, and 724 item 597s billed. This gives a ratio of 0.41 – this is, for every "non-urgent" 5023 billed, 2.44 "urgent" item 297s were billed.

In 2015, after the commencement of NHDS in the region, there were 2449 item 5023s billed, and 16106 item 597s billed. This gives a ratio of 0.15 – that is, for every "non-urgent" 5023 billed, 6.6 "urgent" item 297s were billed.



In 2013 in the Hunter, prior to the commencement of Doctor To Your Door (commenced May 2014, since acquired by NHDS) in the region, there were 2749 item 5023s billed, and 8456 item 597s billed. This gives a ratio of 0.33 – this is, for every "non-urgent" 5023 billed, 3 "urgent" item 297s were billed.

In 2015, after the commencement of NHDS in the region, there were 4991 item 5023s billed, and 31415 item 597s billed. This gives a ratio of 0.16 – that is, for every "non-urgent" 5023 billed, 6.3 "urgent" item 297s were billed.



In 2013 in Tasmania, prior to the commencement of Doctor To Your Door or Call the Doctor in the state (Februrary 2015), there were 1154 item 5023s billed, and 3124 item 597s billed. This gives a ratio of 0.37 – this is, for every "non-urgent" 5023 billed, 2.7 "urgent" item 297s were billed.

In 2015, after the commencement of NHDS in the region, there were 2605 item 5023s billed, and 13374 item 597s billed. This gives a ratio of 0.19 – that is, for every "non-urgent" 5023 billed, 5.1 "urgent" item 297s were billed.

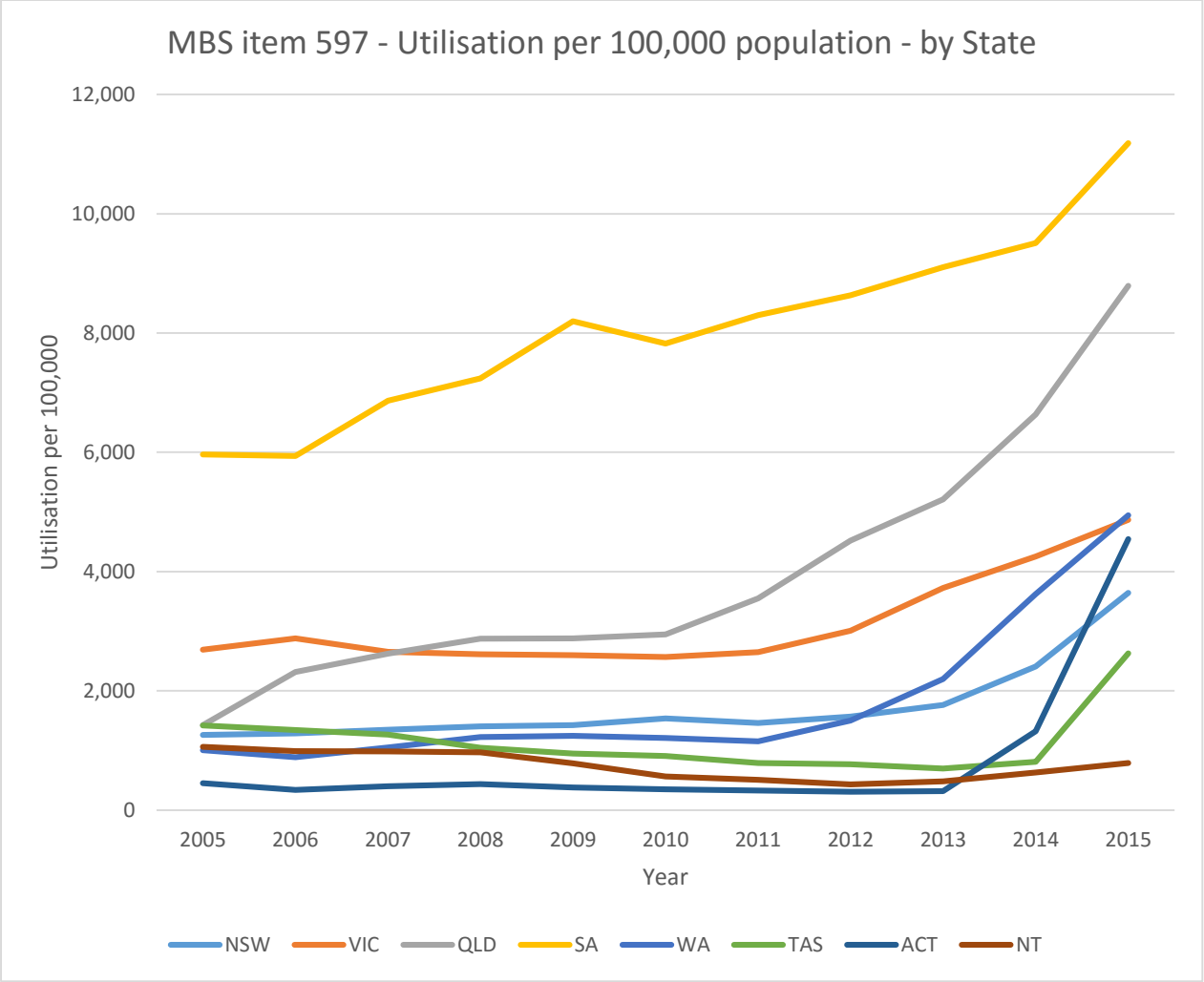
On pre-2014 MBS data, for every 2 to 3 urgent home visits, you would expect there to be one non-urgent home visit. Following the introduction of bulk-billed services in each of the above regions, the dramatic increase in "urgent" MBS item 597 claims was not accompanied by an accompanying surge in "non-urgent" MBS item 5023 claims.

Instead, in Tasmania, as with all the other regions reviewed here (ACT/Hunter) the proportion of "urgent" home visits compared to all home visit claims has increased significantly (chi-square = 9943, $p<0.001$)[54] since the introduction of direct-marketed home visit services.

The Future Cost

The expenditure on "urgent" after hours MBS items 597 and 599 is increasing rapidly. As can be seen from the figures below, this has not obviously stabilised.

[54] This statistical analysis compared growth of "urgent" after ours home visit MBS item 597 and 599 in comparison to "non-urgent" after hours home visit MBS items 5023/5028/5043/5049



Assuming that item 597 will not exceed the 2015 maximum utilisation (South Australia, 11,186 services per 100,000 population), but that all other states and territories will meet this level of utilisation, and Australia's population is 24,000,000[55], then we can forecast a possible annual spend on item 597 as being:

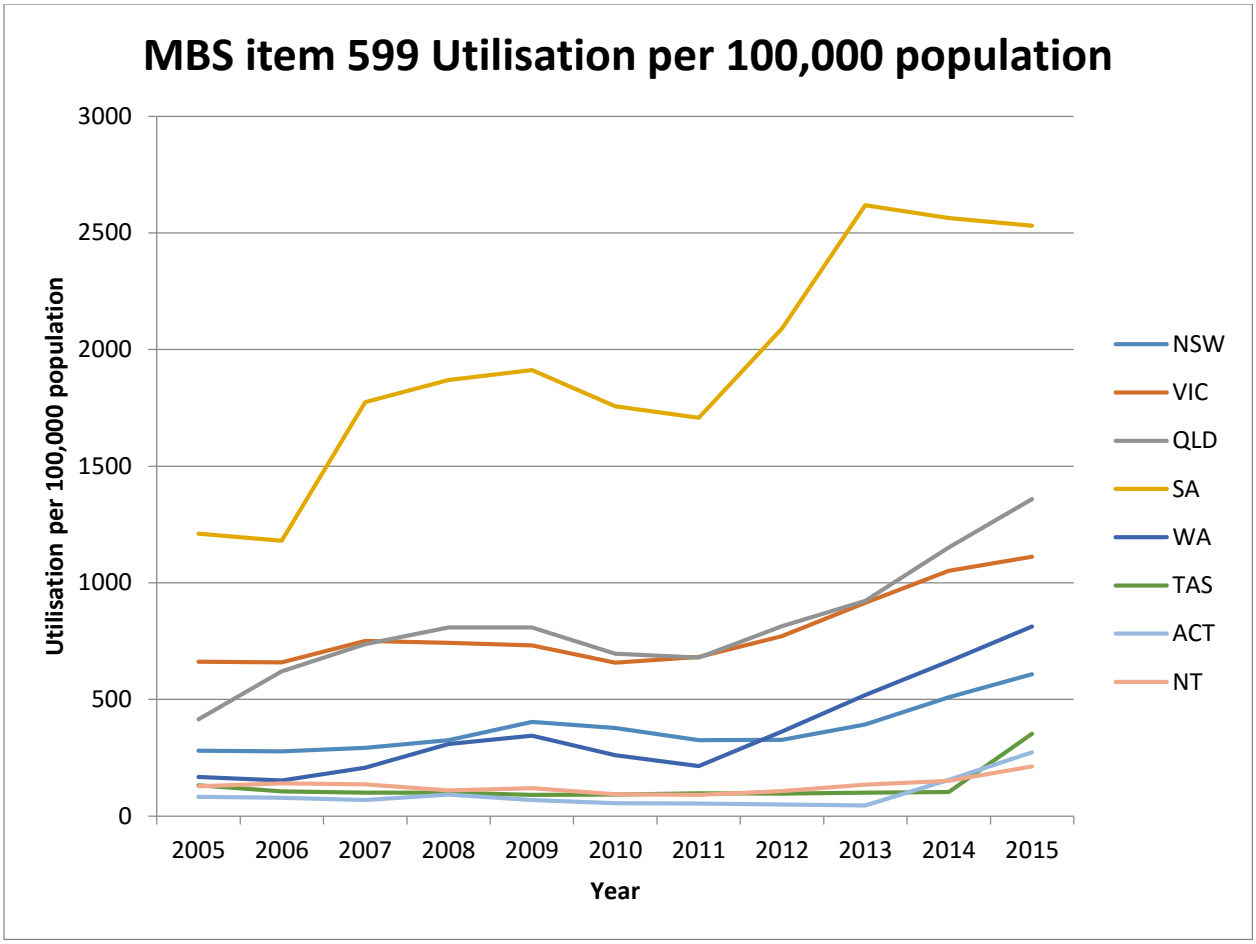
24,000,000 / 100,000 x 11,186 x $129.80 = ***$348,466,272***.

Another approach to possible future expenditure is to look at service capacity. The maximum rate of item 597 per capita service recorded over one month in 2015 was 1,150 per 100,000 (South Australia, August 2015). Using this figure, a potential annual spend on item 597 would be:

24,000,000 / 100,000 x 1,150 x 12 x $129.80 = ***$429,897,600***

In 2015, the national spend on item 597 was **$176,773,226**.

[55] http://www.abs.gov.au/ausstats/abs@.nsf/Web+Pages/Population+Clock?opendocument



Assuming that item 599 will not exceed the 2015 maximum utilisation (South Australia, 2,531 services per 100,000 population), but that all other states and territories will meet this level of utilisation, and Australia's population is 24,000,000[56], then we can predict an possible annual spend on item 599 as being:

24,000,000 / 100,000 x 2,531 x $153 = ***$92,938,320***

As with MBS item 597, we can also approach possible future expenditure by looking at service capacity. The maximum rate of per item 599 capita service recorded over one month in 2015 was 264 per 100,000 (South Australia, August 2015). Using this figure, a potential annual spend on item 599 would be:

24,000,000 / 100,000 x 264 x 12 x $153 = ***$116,328,960***

In 2015, the national spend on item 599 was **$38,077,668**.

In summary, in 2015 the total national spend on items 597 and 599 was **$214,850,894.**

Based on the highest 2015 annual state per capita utilisation data, this could reach **$441,404,592** per annum.

Based on the maximum demonstrated service capacity in 2015, this could further increase to **$546,226,560** per annum.

[56] http://www.abs.gov.au/ausstats/abs@.nsf/Web+Pages/Population+Clock?opendocument

DISCUSSION

Medical care in the after hours period is an essential part of our health system. Medical deputising services have been part of the healthcare landscape for a long time, but only recently have they been targeted by big business.

The General Practice landscape has changed as well. Less GPs are willing to work in the after-hours period. "*We all want a life these days…Times are changing*."[57]

The challenge with after hours medical services, as with all other aspects of the healthcare system, is how to simultaneously achieve the "IHI triple aim" of improving the patient experience of care (including quality and satisfaction), improve the health of populations, and contain or reduce the per capita cost of care.[58]

Regardless of whether a health care system is managed by a public institution, a not-for-profit company, or a private equity firm, the hope for our healthcare system is that they will achieve the "triple aim" in whatever area of the healthcare system they are working.

When it comes to the efforts of current direct-marketed home-visit services, this does not appear to be successful.

It has been mentioned previously that the very young, the frail elderly and the socially disadvantaged may benefit the most from a bulk-billed home visit service. For these groups, a home visit may well improve their experience of care and their actual health. However, it must be noted that home visit services are not the only type of after-hours service that can address their needs.

And as far as the actual experience of the more vulnerable goes, the frail elderly have been shown to represent a shrinking proportion of home visits. This is not to say they are not being provided with home visits, but they are clearly not the focus of home visit services' marketing efforts. This contrasts with after hours care in the Netherlands, where >90% of home visits are to patients >65 years of age.[59] The marketing model of Australian home-visit services targets a much broader audience.

For the broader target audience, a direct marketed, home-visit service may be improving some patients' experiences of care – few would refuse a service that provided a doctor to your doorstep, at no apparent cost. In the same way, few people would refuse a completely "free", home-delivered pizza – this represents excellent customer service.

But are home visit services improving the health of these broader populations? The health outcome of these services must be questioned. Additionally, in all three regions examined in this paper, where there is a clearly identifiable commencement date for a direct marketed home visit service, the surge in "urgent" after hours MBS item 597 has been accompanied by a fall in in hours MBS item 23. In fact, at a national level, the only state/territory where MBS item 23 utilisation has not fallen (Northern Territory) is the only region where NHDS is not yet operational. Together, this suggests that many patients of after hours home visits services are being diverted from daytime general practice, rather than from emergency departments. This amounts to a fragmentation of care, and moves the health care system in the opposite direction from the Federal Government's statement on after hours primary health care: "*It should not be a substitute for primary health care that could otherwise occur 'in hours'*".[60]

Do home-visit services contain or decreased costs?

[57] http://www.medicalrepublic.com.au/is-after-hours-being-abused/
[58] The IHI triple aim - http://www.ihi.org/engage/initiatives/tripleaim/Pages/default.aspx
[59] http://www.hindawi.com/journals/ijfm/2013/987834/
[60] http://www.health.gov.au/internet/main/publishing.nsf/Content/primary-ahphc

Firstly, if they are diverting patients from daytime general practice, they are converting daytime MBS item 23 billings ($37.05) into after hours MBS item 597 billings ($129.80) and substantially *increasing* costs.

Secondly, their claim that "…*their own research had shown that home visits lowered system costs by reducing ED presentations*"[61] needs to be subjected to external, independent scrutiny, because the evidence reviewed is this paper suggests that (a) there is no clear association between the commencement of home visit services in a region and decreased ED presentations. In fact, in the ACT, ED presentations increased more than could be expected, and in Tasmania, the rate of ED presentations even accelerated. A possible explanation for this is that the home-visit services provided were of poor quality, and either (a) over-referring to the ED, or (b) causing increased ED presentations through poor management plans.

In the "best case" scenario in the Hunter, where some expected ED presentations may have been diverted by home visit services, the net cost to the system is still probably higher with direct-marketed home-visit services, because for each patient who may have been diverted from the ED, many more may have been diverted from (cheaper) daytime general practice.

On page 23 of the NAMDS 2014 report, NAMDS notes that in France a home visit service, complete with telephone based GP triage, provides 0.03 home visits per capita in the after-hours period, and because Australian figures were less than this, that unless we reach those figures, we are "*under-servicing the market by on-referrals to public hospital EDs*" (page 22).

On 2015 figures, per capita home visits in Australia have already reached:

(5630 + 1029) / 100,000 = ***0.067***

This is already more than double the French figures quoted. On both this basis and the aforementioned data, this suggests direct-marketed home visit services may have already moved from possible "*under-servicing"* into probable *over-servicing*.

Thirdly, the ratio of billing "urgent" to "non-urgent" after hours MBS items has risen dramatically in the reviewed regions where home-visit services have commenced. If anything, given the wide-spread advertising the direct-marketed home visit services employ, one would expect the proportion of "non-urgent" home visits should increase, because, with improved knowledge of the available services, people should be calling for help earlier, when they are less sick. Instead, the opposite appears to be the case.

Assuming all "urgent" home visits are truly urgent, possible explanations for this include:

- patients are delaying seeing their own GP, in order to access more convenient services in the after-hours period; this delay is causing a deterioration in their condition. This would highlight the problems associated with the fragmentation of primary care.
- There has been a sustained epidemic that has otherwise gone unnoticed by the Australian healthcare community. This seems improbable.

The most plausible explanation is that the "urgent" MBS item number 597 is being used inappropriately; that is, it is either being billed for "non-urgent" cases, and/or being billed two or more times at the same address. Anecdotally, both these possibilities are compatible with feedback from GPs who view the reports being sent to them by home visit services. As previously mentioned, one GP reported that during his first shift working for a medical deputising service, "*All but one of them could have safely waited for an appointment with their usual GP in the coming days".*[62] And it has

[61] http://www.medicalrepublic.com.au/is-after-hours-being-abused/
[62] http://www.medicalrepublic.com.au/is-after-hours-being-abused/

also been reported that, "*One concerned GP…audited four months of faxes from a local after-hours service and found that just one in 12 required urgent clinical intervention*".[63]

In the Dutch after hours primary care system, which utilises GP co-operatives with nurse-led telephone triage, clinic appointments and home visits, looking after populations of 50,000 to 500,000 people "*…only 20% of cases presenting to the GP cooperative are considered (by GPs) as urgent*".[64]

This all calls into question the validity of the billing classifications being used by direct-marketed home visit services.

Finally, in 2010, the total national spend on MBS items 597 and 599 was $83,679,883. By 2015 this had risen to $214,850,894. Based on the maximum 2015 demonstrated per capita service capacity of home visit services, this could rise to $546,226,560 per annum.

The above points suggest home visit services are not trying to contain costs. Instead, this points to using "*Medicare…to be…guaranteed bankable revenue for corporations*"[65] and suggests a different set of priorities.

Other than financial, there are other costs to consider as well, which may well have a deeper and longer-lasting impact on Australian healthcare.

Of great concern is the reversal of health literacy messages regarding the most appropriate way to seek medical care, with attempts to educate people to seek "the right care, at the right place, at the right time"[66] replaced by, "*I've used dial a doctor in Perth and it's a similar service [to the National Home Doctor Service]…**I think my son now expects the Dr to always come to him now**…*".[67] The NHDS CEO has said, "*We want to change people's behaviour, and encourage them to have a doctor visit them in their home when they are sick…We want to create a new social norm…*".[68] They appear to be succeeding, but in a fashion that is financially beneficial for NHDS, rather than the health system as a whole.

As convenient as home delivered medical care is, for the sake of the healthcare system, this is not synonymous with the most appropriate care. Most appropriate care is "*…Care that meets the clinical need, is delivered by the most appropriate clinician and is provided at a location that is most suitable to the needs of the patient and of the wider healthcare community*".[69] If patients eschew other after hours services that practice the "triple aim" in favour of the convenience and "free" nature of home visit services, this may force those other services to contract or close. This would not be positive development for the Australian healthcare system.

There will always be tensions when privatisation and corporatisation meets the health sector. Another area where this has occurred in Australia is with pathology. In his analysis of the sector, Stephen Duckett wrote in the Grattan Institute's report, "*Blood Money: Paying for pathology services*"[70], the features of pathology services include:

- Services are provided by the private sector, with the expectation they can deliver services more efficiently than the public sector
- Funding is provided through the Medicare Benefits Schedule (MBS) on a fee-for-service model

[63] http://www.medicalobserver.com.au/professional-news/racgp-responds-to-concerns-over-rise-of-after-hours-services?mkt_tok=3RkMMJWWfF9wsRohuq3IZKXonjHpfsXx7OsvXaO2lMI%2F0ER3fOvrPUfGjI4GT8NhI%2BSLDwEYGJlv6SgFSLHMMbNn0LgLXhg%3D

[64] https://www.stfm.org/fmhub/fm2006/September/Caro565.pdf

[65] Federal Health Minister Sussan Ley - http://www.smh.com.au/business/the-economy/healthcare-sector-threatens-bruising-political-battle-after-medicare-cuts-20151218-glqmfi.html

[66] http://www.swast.nhs.uk/right_care.htm

[67] http://parent101.com.au/national-home-doctor-service-13sick/

[68] http://www.adnews.com.au/news/cumminsandpartners-wins-full-service-duties-for-national-home-doctor-service

[69] http://www.swast.nhs.uk/right_care.htm

[70] https://grattan.edu.au/report/blood-money-paying-for-pathology-services/

- Pathology tests, as part of healthcare, are not a discretionary item
- The provision of pathology services is big business
- The industry has undergone dramatic changes in recent times, with consolidation of companies from "mom and pop" businesses into two dominant companies with highly automated processes
- As service efficiency increases, MBS rebates have not declined proportionately
- "Payment structures have not changed to reflect modern cost structures in…provision, so that windfall efficiency savings enjoyed by industry are not shared with taxpayers."
- "The appropriate level of expenditure is the *efficient* level of expenditure, not how much other sectors are consuming, or how much we used to spend. Policymakers should be focused on getting taxpayers the biggest bang for the buck, through cheap, high quality services."

The comparison with after hours medical services is striking:

- The expectation is that the private sector can deliver after hours services more efficiently than public hospital emergency departments
- Funding is provided through the Medicare Benefits Schedule (MBS) on a fee-for-service model
- Truly urgent after hours medical care is not a discretionary item
- The provision of after hours services is big business
- The industry has undergone dramatic changes in recent times, with consolidation of after hours deputising services from "mom and pop" businesses into a much smaller number of dominating companies – the private equity owned group, NHDS, has about half of the after hours home visit market, and leverages economies of scale, technology and modern management techniques to maximise profits.[71]
- As service efficiency increases, MBS rebates have not been adjusted accordingly. The taxpayer pays as much for the 100,000th person seen by a national corporation, as for the 1st person seen by a solo country GP.
- "Payment structures have not changed to reflect modern cost structures in…provision, so that windfall efficiency savings enjoyed by industry are not shared with taxpayers."
- "The appropriate level of expenditure is the *efficient* level of expenditure, not how much other sectors are consuming, or how much we used to spend. Policymakers should be focused on getting taxpayers the biggest bang for the buck, through cheap, high quality services." This point is particularly relevant given that services such as NHDS appeal to the cost of other parts of the health system[72] and previous rates of home visit services[73] as justification for the expansion of their business model.

In conclusion, as Jeremy Knibbs, from The Medical Republic put it, "…*will the growth of these services actually decrease costs, or will they promote a very expensive taxpayer foray into subsiding patients who can't be bothered to see their doctor in normal working hours? The key issue is that the end user isn't paying the premium to be seen after hours, the government is*."[74]

The evidence appears to be that the latter is the most probable situation.

---

[71] http://www.medicalrepublic.com.au/is-after-hours-being-abused/; "As a fast growing business, **the management team at NHDS identified the need to reduce 'patient cancellation' as a key means of improving profitability.**" - http://www.vivant.com.au/national-home-doctor-service/

[72] http://www.namds.com/assets/files/After%20Hours%20Medical%20Care%20in%20Australia%20FINAL.pdf

[73] https://www.google.com.au/url?sa=t&rct=j&q=&esrc=s&source=web&cd=14&cad=rja&uact=8&ved=0ahUKEwjA7JHQtMjLAhVD3KYKHbPnB0Y4ChAWCCswAw&url=http%3A%2F%2Fwww.aph.gov.au%2FDocumentStore.ashx%3Fid%3D4625a53c-c154-4cb0-a885-ec6fa5abe27c%26subId%3D402170&usg=AFQjCNEyW_HNlOFIJ9vZJ2EA_BzRUm0_Xg&sig2=pd2zaat4GShhCpLLMJhT-g&bvm=bv.117218890,d.dGY

[74] http://www.medicalrepublic.com.au/is-after-hours-being-abused/

RECOMMENDATIONS

Australians need home visit services to help attend urgent medical problems in the after hours period. In many places in Australia, the medical deputising service, whether owned by a local business person or a private equity firm, may be the only effective after hours medical service provider outside of the emergency department.

So the problem is not the existence of home visit services; neither is it the issue of who owns a particular home visit service; it is the effectively unregulated nature of the industry which leaves it open for potential financial exploitation.

What are the models of after hours care that embrace the "IHI triple aim"?

TRIAGE

It is impossible to determine the most appropriate care for a patient without a triage process. The After Hours Primary Health Care Review[75] notes that, "*International evidence suggests that graduated access to after hour services through an understood national approach may assist in accessing the right after hours services at the right time*." In other words, patients should first be evaluated by a triage service to determine their most appropriate management pathway, whether that be telephone advice, a clinic appointment, a home visit, or presentation to an emergency department.

The NAMDS 2014 report[76] itself notes that:

- "*Nurse/ Doctor triage are best suited to reduce ED attendances*" (page 19)
- "*To optimise the efficiency of the model, GP triage systems are often used, with the main benefits being that there is more reliable diagnoses, resulting in more efficient triage systems*." (page 22)
- "*A centralised MDS style service…can be further optimised through the use of a complementary Nurse/GP triage system*" (page 22)
- *"[The French after hours model] comprises a telephone based GP triage system that directs patients to the most appropriate form of care…despite the existence of this triage system, total per capita After Hour call-outs in France are still higher than in Australia, implying continued growth for the Australian MDS market*" (page 23)
- *"Only MDS models integrated with a Nurse triage appear to offer a more efficient way of dealing with the After Hours attendance market. The impact would not necessarily be major, as in countries where it is in operation there is strong evidence to suggest that Home/ACF visits per capita are significantly higher than in Australia."* (page 26)

As noted earlier, Australian home visit rates are now more than double the French figures referred to above – which could strongly suggests that the use of a robust triage system would be an ideal way to both ensure appropriate care and contain costs.

But there is also an obvious conflict of interest for that same triage process to be conducted by a home visit service that derives its primary source of revenue from a home visit.

[75] http://www.health.gov.au/internet/main/publishing.nsf/content/79278C78897D1793CA257E0A0016A804/$File/Review-of-after-hours-primary-health-care.pdf
[76] http://www.namds.com/assets/files/After%20Hours%20Medical%20Care%20in%20Australia%20FINAL.pdf

What is the best form of triage to link to a home visit service? In a 2006 review of after hours care in the UK, Denmark and the Netherlands[77], various forms of telephone triage were reviewed.

- In the UK, nurse-led triage within a primary care co-operative was found to be superior to triage by a receptionist, resulting in 69% less telephone contacts with doctors, 38% fewer clinic attendances, and 23% fewer home visits. There was no increase in hospital admissions or mortality within seven days and costs were considerably lower than previously
- Also in the UK, there was an attempt in some regions to tightly integrate the national telephone triage and advice service (at the time, NHS Direct) with GP co-operatives and ED services. NHS Direct would do the triage and establish one of the following dispositions: telephone advice, GP telephone contact, GP/nurse clinic appointment or referral to emergency services. Results were variable, with calls to the ambulance increased in some regions.
- In Denmark, GP co-operatives were combined with doctor-based telephone triage. This resulted in more telephone consultations (22% increasing to 54%), and less home visits (57% down to 19%). Danish doctors were remunerated according to a fee-for-service that varies by contact type, with the highest fee for home visits, a lesser fee for telephone advice, and the lowest fee for referral for face-to-face contact.[78]
- In the Netherlands, GP co-operatives used their own nurse-led telephone triage, some using decision-support software. The resulting dispositions were 50% telephone advice, 35% clinic appointment, 15% home visits, and 6% ED referral. (In a subsequent review, the figures were 52% telephone advice, 36% clinic appointments, and 10% home visits).[79] About 20 percent of calls were classified by the GPs themselves as "urgent". It was noted that patients were less satisfied with telephone advice compared to a home visit or clinic appointment. House, calls, when conducted, were provided mostly for very or moderately urgent problems, with about 22% being provided for non-urgent problems. 90% of house visits were for patients aged over 65. About 21% of home visits ended up being referred to an ED. Outcomes included a 25% increase in contact with primary care, a 53% reduction in emergency care, 89% fewer self-referrals to ED, 12% fewer ambulance referrals, and 34% fewer hospital admissions.

From this, there are a few keys points that can be concluded:

- Nurse/GP-based triage is superior to receptionist-based triage
- Nurse/GP-led triage embedded in a local GP co-operative (where there are multiple integrated service destinations such as telephone advice, GP telephone advice, clinic appointment, home visit) has the best proven track record
- Local triage services are superior to national triage services
- Good integration of all services related to after hours care, centred on the GP, appears to produce the best results

It is therefore recommended that, where possible, that a local nurse/GP-led triage service should be the triage service of choice. To avoid a conflict of interest, such as service should be independent of the home visit service, unless the home visit service is fully integrated and can provide real management options other than a home visit (e.g. telephone advice, clinic appointments).

If no such service was available, then the local Primary Health Network could be funded to explore this possibility. Support for local triage could be given via new MBS items for nurse and GP triage/telephone consultations and/or block funding.

[77] http://content.healthaffairs.org/content/25/6/1733.long
[78] http://www.hindawi.com/journals/ijfm/2013/987834/
[79] https://www.stfm.org/fmhub/fm2006/September/Caro565.pdf

As an interim measure, or where local triage services are not possible, the National Health Call Centre Network/HealthDirect could be used, but with the proviso that more research first be undertaken to identify the characteristics of successful instances of national phone triage integrating with local services, either in the UK or elsewhere.

ADVERTISING

Given the evidence that non-urgent daytime GP patients are being diverted into the after-hour period as a consequence of the direct marketing strategies of home visit services, we concur with the recommendation of the After Hours Primary Health Care Review that:

- *"MDSs are accredited deputising services and access to after hours should happen via a patient's regular general practice, rather than through direct marketing."*

And similarly, we agree with the AMA position statement that:

- "*Patients should not have direct access to medical deputising services. Deputising services should not have listed telephone numbers. Patient access should be via the practices of the doctors using the service by means of pre-recorded telephone messages or other means.*"

At a local level, where such a service exists, PHNs could be funded to advertise a local telephone triage service as a portal to call for patients without a regular GP. At a national level, advertising a triage number to call could occur via HealthDirect.

FUNDING

Also from the After Hours Primary Health Care Review:

- ***"…****the rapid increase in deputising service utilisation of MBS items raises questions around the appropriateness of a purely fee-for-service funding model for the sector. Funding for MDSs should be considered to strike a better balance between infrastructure and activity based funding for a sector with unpredictable and uneven service demand."*

There are a number of issues to consider here. The aim is not to affect the business viability of home visit services – it is to encourage practices that are consistent with the "triple aim".

As noted previously, the ratio of urgent to non-urgent home visit item numbers has increased dramatically. The Dutch experience is that just 20% of after hours telephone calls for primary care medical assistance are truly "urgent".[80] It is recommended that an audit of home visit services medical records be conducted to assess "urgency"; and that the audit also examine whether multiple item 597s are being billed to the same address on the same day. There could also be a tightening of the MBS definitions of urgent home visit item numbers 597 and 599.

[80] https://www.stfm.org/fmhub/fm2006/September/Caro565.pdf

The MBS rebate for items 597 and 599 could also be reduced when used in urban regions.

Any cost savings from the above process should be used to help fund new MBS item numbers (or block funding) for triage/telephone advice; and/or increase the rebate for MBS items 597/599 in rural regions.

CONCLUSION

Medical deputising services are essential to the after hours period. The evidence suggests that the consequences of their current business practices are not delivering value for our healthcare system. They need effective regulation to ensure their activities are aligned with the needs of the nation that is funding them.