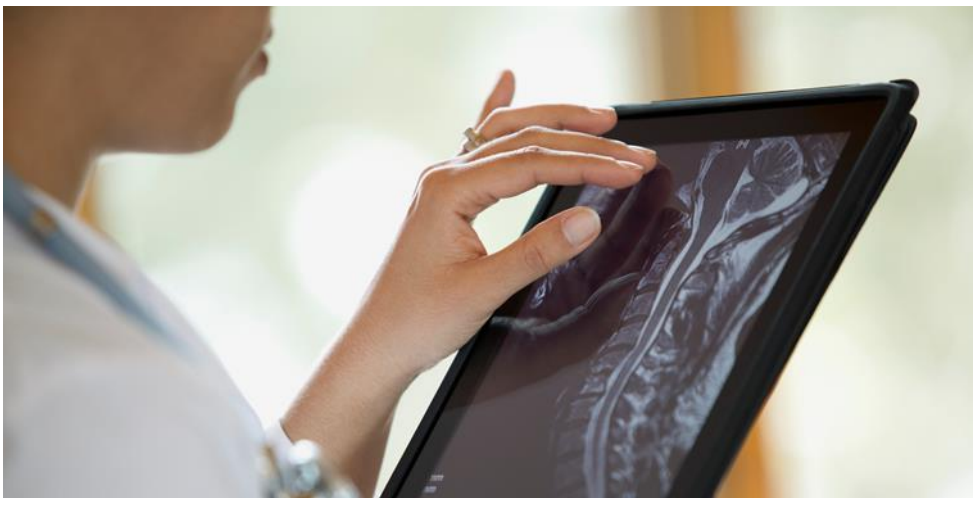
Deloitte Access Economics

Mind the gap: consideration of an up-front gap only payment model in diagnostic imaging

Australian Diagnostic Imaging Association

24 February 2016



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Pattie Beerens
Chief Executive Officer,
Australian Diagnostic Imaging Association
71B Grosvenor Street, South Yarra VIC 3141

24 February 2016

Dear Pattie

On behalf of Deloitte Access Economics I am pleased to attach the final issues paper examining gap payment models in diagnostic imaging. The paper considers the current up-front payment model for non-bulk billed patients and compares this to an up-front gap model, as proposed by ADIA.

In summary, selected key findings of the paper include:

- a common situation for non-bulk-billed diagnostic imaging patients is to pay the full price up-front – which can be extremely costly – and then claim the Medicare Benefits Schedule rebate;
- limitations of the full cost up-front model include inconvenience for consumers; increased administrative burden ('red tape'); disproportionate impact on some vulnerable patients; and possibly pushing more patients towards the public hospital system or discouraging them from accessing a diagnostic imaging service;
- these effects are pronounced in diagnostic imaging relative to other health services because imaging can be costly, and multiple services can be required concurrently;
- introducing a gap only up-front payment model in DI would promote pricing transparency and simplicity, which would be beneficial to patients and make it easier to compare prices between DI practices;
- this would also mitigate the impact of lowering bulk billing rebates on patients who are soon to be faced with co-payments for non-bulk billed services;
- gap only up-front payments would also mitigate the impact of changes in the existing rebates on DI practices since fewer patients would be induced to switch to public hospital emergency or outpatient departments for their DI or forgo treatment; and
- removing full cost up-front payments for diagnostic services would not be inflationary, as there appears to be effective competition in the sector.

Overall, based on this high level analysis, there is merit in the Australian Government considering replacement of the current full cost up-front payment model in diagnostic imaging with a gap only payment model.

Yours sincerely,

Lynne Pezzullo
Partner, Deloitte Access Economics Pty Ltd

Contents

The Medicare payment full cost up-front model has become a barrier to accessing diagnostic imaging

1. Purpose

The Australian Diagnostic Imaging Association (ADIA) engaged Deloitte Access Economics to provide advice on the potential introduction of a gap up-front payment model for diagnostic imaging, to replace the existing full cost up-front payment model.

This paper provides high level analysis of the main policy issues and considerations regarding the current payment model and its proposed replacement. However, economic or financial modelling of the costs and benefits of these payment models was not within the scope of this paper.

2. Background – the full cost up-front payment model

Through the health portfolio, the Australian Government works towards achieving better health and wellbeing for all Australians. In recent years, the Australian Government has focused on delivering better health outcomes by ensuring that our high quality health system is **affordable, accessible and efficient**[1].

In diagnostic imaging (DI) the established practice is that patients will pay in one of two ways. Patients will either be bulk-billed – meaning they have no out of pocket expense; or, they will be required to pay the full cost of their service up-front and then claim a Medicare Benefits Schedule (MBS) rebate.

This model of paying the full cost up-front and claiming a MBS rebate is not unique in the Australian health system. It has become more common in various forms since the early 1990s. The gap between a full cost up-front payment and the rebate value can be referred to as a co-payment. Such payments may arise because rebates do not increase in line with the cost of providing a service, as has occurred in DI since indexation of the rebate was removed.

There are however some aspects which are distinct in DI. The situation in DI compared with a visit to a general practitioner (GP) is as follows:

- At both a GP or DI service, the bulk-billed (BB) service is free to the patient and the practice claims the rebate from Medicare Online.

[1] Health, Portfolio Budget Statement 2015-16

- At both a GP or DI service, for non-bulk-billed services, the full fee is paid by the patient at the time of service.
  - For a GP service the practice claims the rebate for the patient through Easyclaim. The patient receives the rebate almost immediately, paid into their bank account.
  - For a DI service, the practice claims the rebate for the patient through Medicare online. The patient receives the benefit within three working days. However this service is not always available for complex claims.
  - Alternatively, for either a GP or DI service the patient may claim the rebate through Medicare in person or via mail.
- A DI practice may, in rare cases, permit the patient to pay the gap only, with the practice claiming the rebate on the patient's behalf and Medicare sending the rebate cheque to the patient for forwarding to the practice. Practices prefer not to do this because it imposes administrative costs and causes reduced cash flow. It is also inconvenient for patients, many of whom are no longer accustomed to using cheques. In addition, a mail based system is poorly suited to a transient population.

The points that make DI distinct from the arrangements for GP services are:

- The cost of DI services is relatively high. An imaging service routinely costs hundreds of dollars. Often a patient will be required to undertake more than one imaging service within a short space of time.
- Easyclaim is not commonly used in DI because it cannot handle multiple services and does not connect to practice billing systems[2].

Consequently, a common situation for non-bulk-billed DI patients is to pay the full amount up-front – which can be extremely costly – and then claim the rebate.

3. How the full cost up-front payment model operates today for different types of patients

Most DI service providers bulk-bill some patients while others pay a gap. Some practices bulk-bill most or nearly all patients but the extent of bulk-billing in a practice is at the discretion of its owner. Dedicated bulk-billing services are more likely to be located in lower socio-economic areas.

Currently, about 77% of DI services are bulk-billed, which means that 23% of services require a full cost up-front payment to be made at the time of service. The average DI service attracts $131 in MBS rebates, and non-BB services require patients to contribute an average of $94 per service. This means that, on average, a patient receiving a non-BB DI

[2] Diagnostic imaging services are ill-suited to being processed through Easyclaim, as the Easyclaim system cannot process multiple services in a single transaction, and most diagnostic imaging involves multiple services. Only 0.1% of all non-bulk-billed diagnostic imaging services were processed using Easyclaim in 2014/15 (Department of Human Services 2016, *Table 4: Medicare - % bill type by Broad Type of Service and various periods*).

service is required to pay $225 up-front for the service (and subsequently receive the $131 rebate from Medicare).

The average out-of-pocket payment varies across locations, with people in inner regional areas paying $86 per service on average, and people in very remote locations paying $107 per service on average. The Grattan Institute estimates that out-of-pocket costs for DI services have increased by approximately 16% over 2007-2013[3].

There is a wide spread of prices across DI modalities. In 2009 the then Department of Health and Ageing calculated the up-front fee as varying from $95 for diagnostic radiology to $542 for nuclear medicine (see Table 1).

Table 1: Up-front payments by modality, 2009-10

Modality	Up-front-fee per service	MBS rebate per service	Out-of-pocket payment per service
Diagnostic radiology	95	52	43
Ultrasound	187	110	77
CT	411	297	114
MRI	498	362	136
Nuclear medicine	542	447	95

Source: Medical Benefits Review Task Group 2011, *Review of funding for DI services: final report*, Department of Health and Ageing.

Full upfront payments vary by modality, and can place a significant burden on low-income consumers who can't access BB services. These significant up-front fees present a sizable cost burden for most of the population, and in particular, low-income patients who do not qualify for concession cards. It is also important to note that periods of poor health (and thus increased consumption of medical services) often contribute to periods of low income, which exacerbates the effect of high up-front payments. Additionally, certain DI services listed on the MBS are not commonly bulk billed. Examples of services with a bulk billing rate of 50% and below are in Table 2.

Table 2: Diagnostic imaging services with low bulk billing rate

Service	No. in 2014-15
US 17-22 weeks pregnancy	253,546
Ultrasound in conjunction with surgical procedure	224,525
Ultrasound nuchal lucency study	157,875
Ultrasound prostate	19,030
US transoesophageal echocardiography	15,151
US pelvis with saline infusion	10,866
US doppler leg venous mapping prior to VV surgery	6,626
Ultrasound 17-22 weeks twin pregnancy	3,538
Ultrasound intraoperative transoesophageal echocardiography	3,387
Ultrasound doppler intra-cranial vessels	2,132

[3] Duckett S, Breadon P 2014, *Out –of-pocket costs: hitting the most vulnerable hardest*, Grattan Institute.

Service	No. in 2014-15
US doppler penile study with injection vasoactive agent	586
Practice perfusion study	520
Whole body gallium study with SPECT	461
Ultrasound paediatric hip	302
Bowel haemorrhage study	235
Whole body gallium study	188
CT spine with intrathecal contrast	166
Liver and spleen study	69
Venography	2

Source: Department of Health (supplied by ADIA)

DI patients are permitted to go to the provider of their choice (unlike other specialists where patients must attend the named provider) with a clear statement on the referral to inform patients of this choice also required. In addition, all practices are now required by regulation to disclose all treatment costs (informed financial consent). This means patients are able to shop around and compare the prices offered by different DI practices.

However, some patients face barriers in their ability to choose alternative providers; for instance, if they are mobility-constrained or located in a regional area with minimal choice of providers.

3.1 High cost services

When the full cost up-front cost to a DI patient is high, this will have a greater impact on patients with less access to cash or credit. Practices may ease the burden on these patients by bulk-billing, or allowing them to just pay the gap, in which case the practice must wait to receive a rebate cheque via Medicare up to 90 days in the future which is increasingly not financially viable for most individual businesses or convenient for patients. Both of these options have drawbacks.

When the practice requires a full cost up-front payment, patients who are financially constrained may look to obtain credit to meet this cost. Alternatively, they may be induced to switch to a public hospital emergency or outpatient department, or to forgo treatment altogether. Each of these options has potential negative consequences:

- relying on credit for a large amount while awaiting the rebate may result in unintended negative financial consequences for the patient;
- switching to a public hospital will impose increased cost on the public health system; and
- foregoing treatment may result in illness or injury remaining undiagnosed and worsening.

3.2 Consideration of the full range of DI services that a patient may need to access

Many patients will require a cluster of DI services. Receiving these services may require multiple visits to one or more DI practices. In this situation, a patient could be required to

pay the full cost up-front for many services within a short space of time. This further exacerbates the problems outlined above – and this will be disproportionately true for patients who are financially constrained.

4. Assessment of the full cost up-front payment model

Overall the full cost up-front payment model is inconvenient for consumers; it results in a more opaque payment model than would otherwise be available; it increases administrative burden ('red tape') through the processing of post-transaction rebates; it disproportionately affects lower-income earners; it is more likely to be confusing for some consumers, particularly those with limited understanding of English or low education levels; and it may lead to adverse outcomes by pushing more patients towards the public hospital system or discouraging them from accessing a DI service. These effects are more pronounced in DI relative to other health services because imaging can be costly, and multiple services can be required concurrently.

It is contended that one benefit of the full cost up-front gap policy is protecting consumers from price inflation. Presumably, this assertion reflects an assumption that, if consumers were only required to pay a gap, providers could increase their prices without consumers noticing much impact; and that, on the other hand, if providers know they are going to charge large amounts up-front and that some patients find it difficult to pay, they will feel more constrained in their ability to raise gaps.

In fact, **removing full cost up-front payments for DI services would not be expected to put inflationary pressure on prices**. Payment of the gap (alone) up-front is not inflationary as there is effective competition in the sector. Patients are able to shop around for the lowest out-of-pocket cost and so increase pressure on bulk-billing. Providers can also compete on quality of service, professional and technical prowess (i.e. accuracy of diagnosis) and medical practitioner referral networks. Private providers also compete with hospital radiology departments, influencing patient choice through appointment availability, convenience of service location and superior customer service.

5. Issues that could be addressed if it were replaced with a gap only up-front model

Introducing a gap only up-front payment model in DI similar to HICAPS would mitigate the impact of lowering BB rebates on patients formerly accessing BB services, who are now faced with co-payments for non-BB versions of the same services. It would also promote pricing transparency and simplicity, which would be beneficial to patients and make it easier to compare prices between DI practices.

Gap only up-front payments would also mitigate the impact on DI practices since fewer patients would be induced to switch to public hospital emergency or outpatient departments for their DI or forgo treatment. They would instead access non-BB DI services by making the modest co-payment rather than needing to fund the full cost of the non-BB

service even for as long as it takes to visit the nearest Medicare office, let alone the 3-4 days it might otherwise take to be reimbursed for the rebate.

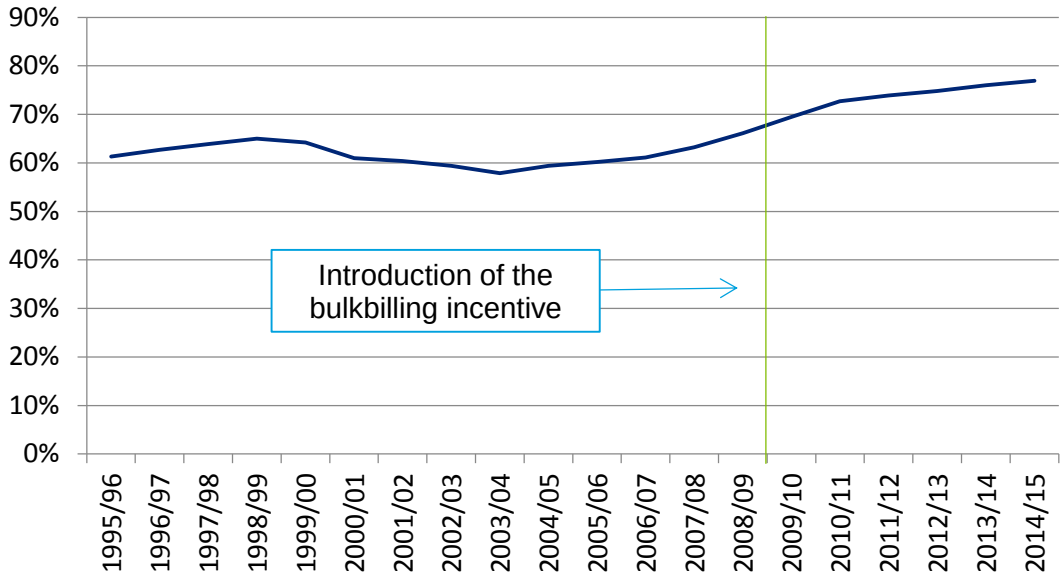
- Avoiding the need to pay the full amount up-front would particularly benefit financially disadvantaged patients.
- Being able to offer gap only up-front payment only would benefit practices charging gaps for the first time. This would smooth the transition of these practices from pure bulk-billers into practices competing with incumbent non-bulk-billers.
- This would in turn mitigate the extent of the fee rise to non-BB patients required to make up for revenue lost through rebate cuts since fewer patients would be diverted to public hospitals or away from DI treatment altogether.

6. Consideration of the payment model in the context of changes to bulk-billing rebates

As Chart 1 indicates, it would appear that introducing the bulk-billing incentive increased the availability of bulk-billing, contributing to bulk-billing rates increasing to their highest level in the past 20 years. The proportion of services being bulk-billed increased from 66.1% in 2008-09 to 76.9% in 2014-15. However, it is also notable that the rate of bulk-billing was increasing before the incentive commenced.

The increase in bulk-billing in turn softened the impact of the full payment up-front model because more patients who would otherwise have been asked to pay in full up-front were able to receive a bulk-billed service instead.

Chart 1: Percentage of DI services bulk-billed, 1995/96 – 2014/15



In the 2015 Mid-Year Economic and Fiscal Outlook the Australian Government announced the removal of the bulk-billing rebates for adult general (non-concession) patients.

This policy change will reduce the ability of DI providers to deliver bulk-billed services and will induce providers to pass the rebate cuts on to patients as a co-payment or gap payment (sufficient to cover the reduction as well as the additional administrative costs and volume loss).

Given the contribution to bulk-billing rates made by the incentive, it is likely that the policy change will result in a reduction in bulk-billing to a level closer to its pre-incentive level.

Reducing the number of DI services bulk-billed and increasing patient contributions will also result in patients reaching the Medicare safety net sooner. Once the threshold is reached, costs to the Australian Government will increase to 100% of the service fee, or 80% of the gap payment under the extended safety net.

Without accompanying change, patients will have to pay the full cost of the service(s) up-front, and then apply to receive the MBS rebate at a Medicare office or online. Whilst online rebate applications are simple for patients, they need adequate funds in the bank. Under this scheme, when deciding whether or not to have a DI service(s), lower income patients will need to consider that:

- they will be immediately out-of-pocket for the full cost of the DI service(s) provided and this will potentially last for several days while they wait for their MBS rebate; and
- at the time of receiving the service, they must have sufficient funds or access to credit to fund the full cost of the service.

Larger up-front payments are likely to cause a reduction in services. It is anticipated that, following the abolition of the bulk-billing rebates for adult general patients, providers will reduce BB services, compromising patient access to such services even further. Those most affected by the proposed changes will be the 'working poor', patients on low incomes who do not qualify for concessions.

Econometric analysis of Medicare data shows that a decrease in bulk-billing rates by GPs imposes the biggest impact on low-income patients4. When faced with large up-front payments and the inability or unwillingness to fund it, some patients will opt instead to attend a public hospital outpatient department or forgo treatment altogether, as discussed above.

Abolishing the bulk-billing rebates for adult general patients will mean most service providers (which offer BB services) will be required to change their payment schedule to stay afloat. Most practices will shrink and some possibly close. Others will start to charge for formerly BB services and begin to compete with non-BB practices.

Providers face several options including:

- charge co-payments for a wider range of services, i.e., reduce BB services;
- absorb the reduction in revenue while continuing to offer BB services;
- raise fees charged for non-BB services to offset lower revenue from BB services; or

[4] Richardson JRJ, Peacock SJ, Mortimer D 2006, 'Does an increase in the doctor supply reduce medical fees? An econometric analysis of medical fees across Australia', *Applied Economics*, 38: 253-266.

- reduce the range of services offered on a BB basis, avoiding services with high levels of clinical input as these tend to cost more to provide.

Apart from instances where practices simply absorb the lower revenue, the impact will be a reduction in the number and range of services provided to patients. It is likely that the impact will be felt most significantly in low-income areas where operators providing specialised BB services find it no longer financially viable to operate and withdraw. Gaps in service delivery will no doubt emerge. Some patients may still locate a bulk-billed operator who offers the service they need; however, they may find it more difficult to do so and face additional travel and search costs.

Withdrawing the bulk billing rebates without addressing the up-front payment problem will push more low-income Australians back into the public hospital system for their DI or induce them to forgo treatment altogether. Similarly if the gaps are too high, many patients will be discouraged from accessing the services they need.

Either outcome exacerbates the longer-term negative impact of the change on public health outcomes and may not actually lead to increased patient co-contribution to the cost of referred medical services, assuming this is an intended outcome of the recently announced change.

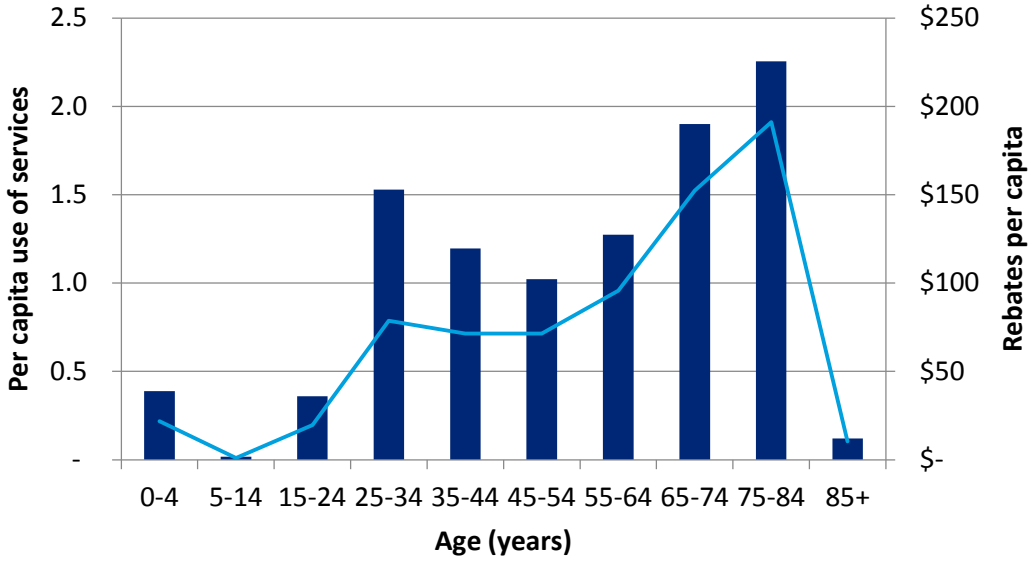
Appendix A – Background information

DI provides healthcare practitioners with information about patients' illnesses, injuries or diseases. It enables the diagnosis of diseases and injuries without exploratory surgery or other invasive procedures. These services include ultrasound, computed tomography, diagnostic radiology, nuclear medicine imaging and magnetic resonance imaging (MRI).

In 2014-15, the average Australian received one DI service. The largest consumers of DI are people aged 65-84 years. This cohort who used two services per person, reflecting the higher health needs of the older population.

Figure 2 compares the rebates received and services consumed per capita in 2014-15. As can be seen, these two metrics are closely aligned across the age groups, indicating that the average cost of a service is relatively similar across all age groups (no data is publicly available regarding the average out-of-pocket payment for each age group).

Figure 2: Services and rebates per capita, 2014-15



It is important to note that this is the average cost per service, i.e. a single service. Many patients will require multiple services in a single visit, or over several days, which significantly increases their total up-front payments. Additionally, a 2013 survey conducted by ADIA found over 60% of DI patients reported having multiple medical conditions which required imaging5, thereby increasing the payment burden even further.

[5] http://www.hospitalhealth.com.au/news/hospital-departments/a-patient-perspective-of-diagnostic-imaging-the-right-to-access/

Appendix B – Patient profiles

The following hypothetical patient profiles are provided as examples of possible patient choices under a full up-front payment model and a gap only up-front payment model.

Figure 1: Sam the cleaner

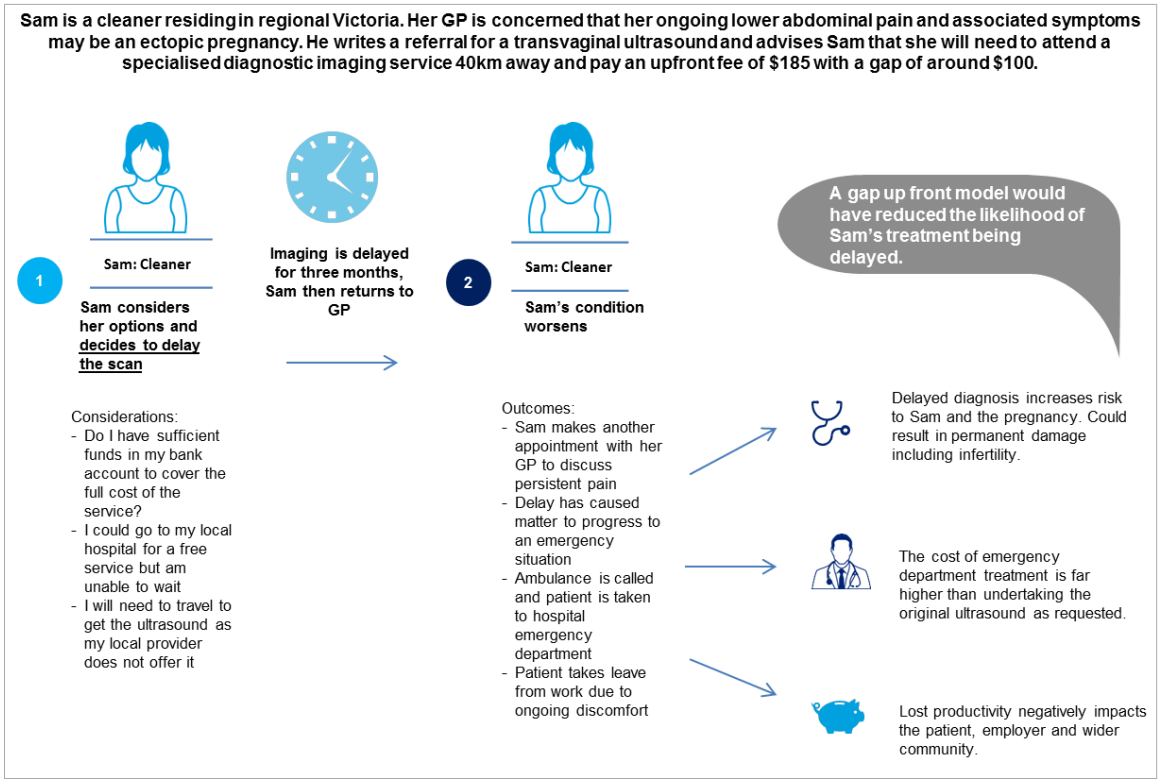


Figure 2: Casey the retail worker

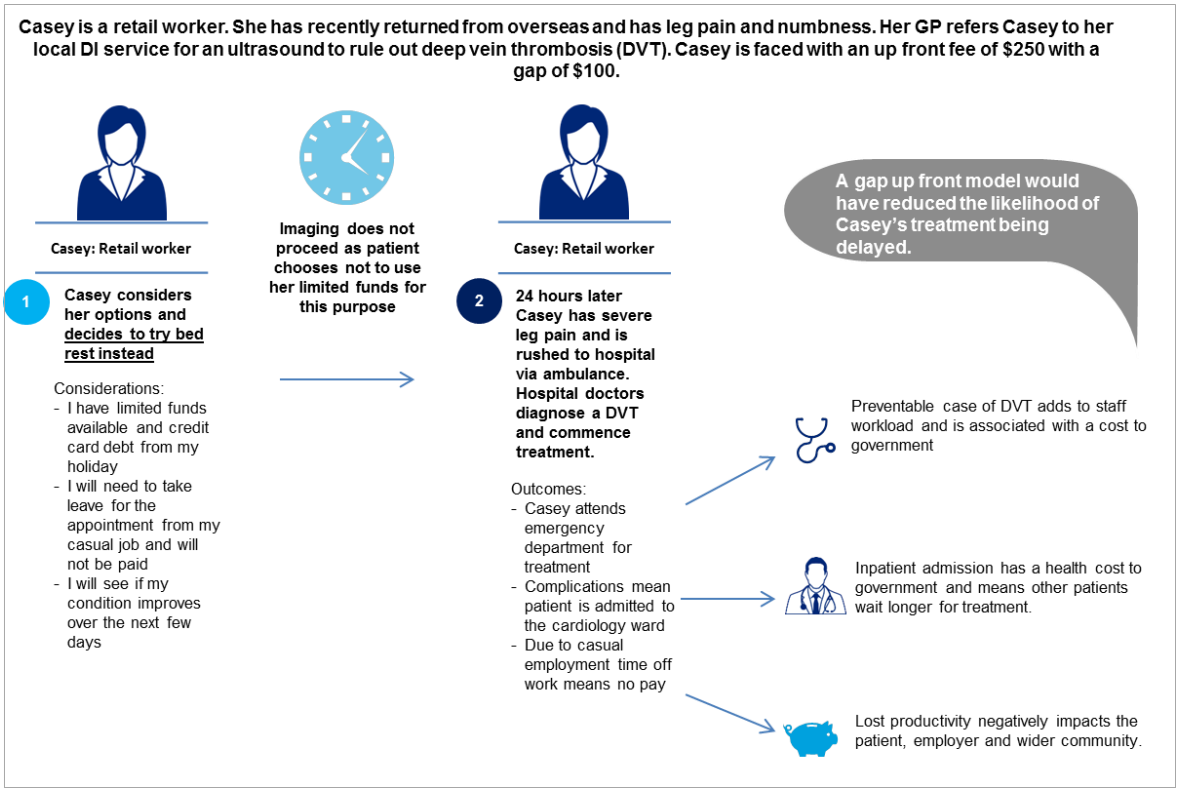
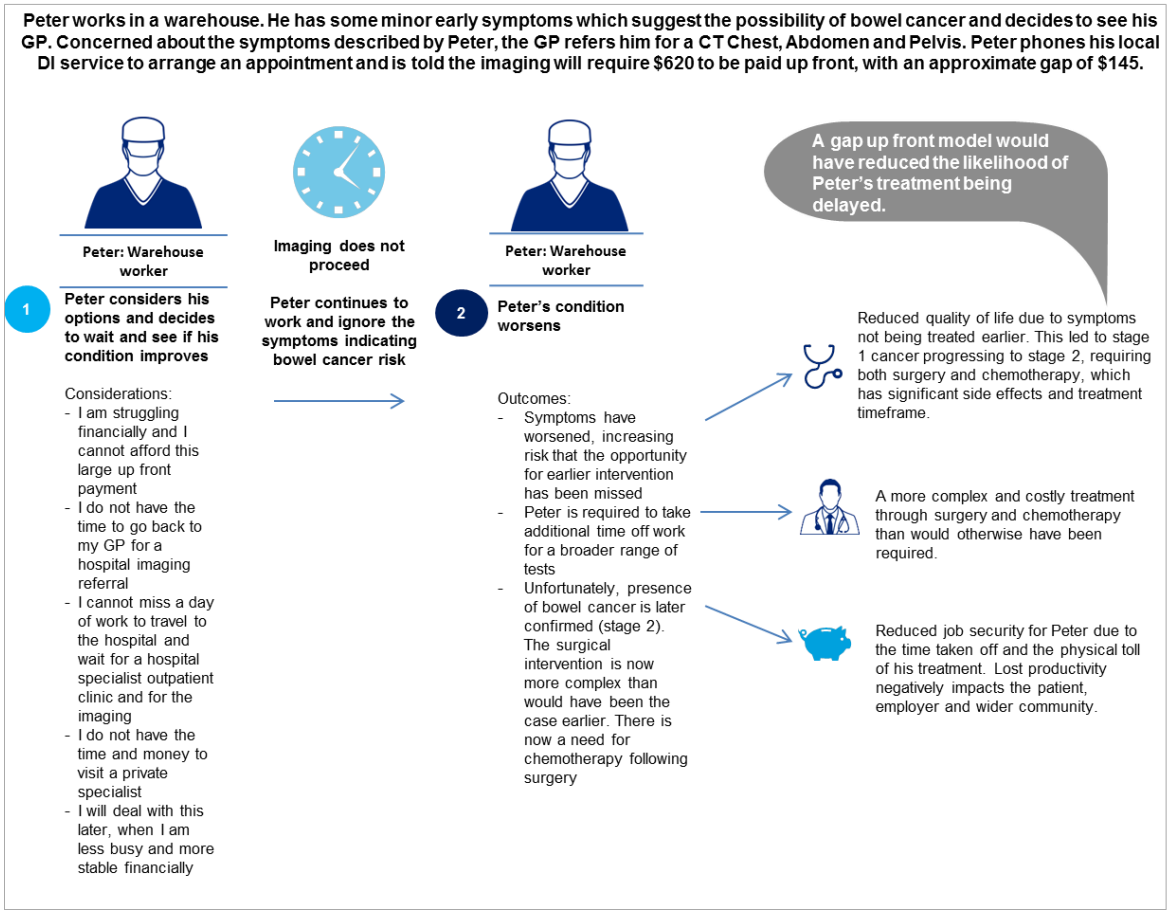


Figure 3: Peter the truck driver



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