

Performance Audit Report No. 27 (2013-14)

Integrity of Medicare Customer Data

Introduction

- 5.1 Chapter 5 discusses the Joint Committee of Public Accounts and Audit (JCPAA) review of Australian National Audit Office (ANAO) Report No. 27, *Integrity of Medicare Customer Data*, Department of Human Services (2013-14). The chapter comprises:
- an overview of the report, including the audit objective, criteria and scope; audit conclusion; and audit recommendations
 - Committee review
 - Committee comment

Report overview

- 5.2 The Department of Human Services (Human Services) is responsible for administering Medicare, in accordance with policies developed by the Department of Health. As at 30 June 2013, Human Services reported that 23.4 million people were enrolled in Medicare, including 618,533 new enrolments.¹ For an individual to enrol in Medicare, they need to reside in Australia and be either an Australian or New Zealand citizen, a permanent resident visa holder or an applicant for a permanent resident visa. Australia has Reciprocal Health Care Agreements with 10 countries,

¹ ANAO, Performance Audit Report No. 27, *Integrity of Medicare Customer Data*, Department of Human Services (2013-14), Commonwealth of Australia, 2014, p. 11.

and visitors from these countries may also be eligible to enrol. Some eligibility types are only eligible to use Medicare for a limited time.

- 5.3 Ensuring the integrity of Medicare customer data is a key aspect of the control framework applied by Human Services to support the effective administration of the Medicare program. The main repository for this data is the Medicare customer record database, the Consumer Directory.

Audit objective, criteria and scope

- 5.4 The audit objective was to examine the effectiveness of Human Services' management of Medicare customer data and the integrity of this data. To assist in evaluating the department's performance in terms of the audit objective, the ANAO developed the following high level criteria:

- Human Services has adequate controls and procedures for the collection and recording of high quality customer data;
- Medicare customer data as recorded on Human Services systems is complete, accurate and reliable; and
- customer data recorded on Human Services systems is subject to an effective quality assurance program and meets relevant privacy and security requirements.²

- 5.5 The audit scope focused on the integrity of Medicare customer data and included related testing of all Medicare customer records.³ The audit also considered the extent to which Human Services had implemented the six recommendations from a previous audit of this area in 2004-05, in ANAO Report No. 24, *Integrity of Medicare Enrolment Data*.

Audit conclusion

- 5.6 The ANAO made the following audit conclusion:

Human Services' framework for the management of Medicare customer data, including procedures and input controls for the entry of new enrolment information and changes to customer information, has not been fully effective in maintaining the integrity of data in the Consumer Directory.⁴

- 5.7 Further, with regard to the six recommendations made in this area previously, in Report No. 24, *Integrity of Medicare Enrolment Data*, the ANAO noted that 'the department has foregone an opportunity to

2 ANAO, Report No. 27, *Integrity of Medicare Customer Data*, p. 12.

3 The audit did not examine Healthcare Provider Information, the allocation or management of Individual Healthcare Identifiers or the operation of Personally Controlled Electronic Health Records, ANAO, Report No. 27, *Integrity of Medicare Customer Data*, p. 13.

4 ANAO, Report No. 27, *Integrity of Medicare Customer Data*, pp. 13-14.

enhance its performance by implementing a number of the earlier ANAO recommendations targeted at improving data integrity'.⁵

Audit recommendations

5.8 Table 5.1 sets out the recommendations for ANAO Report No. 27 and Human Services' response.

Table 5.1 ANAO recommendations, report No. 27 (2013-14)

1	To better support customer service officers who enrol Medicare customers and update their information, the ANAO recommends that Human Services review its eLearning training and eReference guidance for consistency and completeness. Human Services' response: <i>Agreed.</i>
2	To better manage duplicate and intertwined records and improve the integrity of its customer data, the ANAO recommends that Human Services: <ul style="list-style-type: none"> • consider ways to better identify duplicate customer enrolments; • investigate the underlying causes of duplicate enrolments with a view to informing approaches to their prevention; and • develop and implement guidelines for resolving intertwined records. Human Services' response: <i>Agreed.</i>
3	To further improve the completeness, accuracy and reliability of Medicare customer data, the ANAO recommends that Human Services undertake targeted, risk-based data integrity testing of Medicare customer records. Human Services' response: <i>Agreed.</i>
4	To ensure that only those customers eligible to receive Medicare benefits can access them, the ANAO recommends that Human Services review existing entitlement types and implement controls where relevant, to: <ul style="list-style-type: none"> • prevent instances of customers being enrolled under invalid entitlement types and accessing Medicare benefits without an entitlement; and • ensure mandatory data fields are completed, and that data entries are consistent with business and system rules. Human Services' response: <i>Agreed.</i>
5	To ensure compliance with the mandatory requirements of the Information Security Manual, the ANAO recommends that Human Services: <ul style="list-style-type: none"> • undertake a review of existing documentation and finalise all mandated security documents; and • complete the mandated certification and accreditation processes for the systems that record, process and store Medicare customer data and the ICT infrastructure that supports them. Human Services' response: <i>Agreed.</i>

Committee review

5.9 Representatives of the following agencies gave evidence at the Committee's public hearing on Thursday 17 July 2014:

- Australian National Audit Office

5 ANAO, Report No. 27, *Integrity of Medicare Customer Data*, p. 15.

- Department of Human Services

5.10 As discussed below, the Committee identified two key issues of concern from the ANAO report findings and evidence provided at the public hearing:

- data integrity
- implementation of ANAO report recommendations

5.11 Two other issues were also of interest to the Committee: data security, and training and guidance. While these matters were not discussed in detail at the public hearing, the Committee supports the ANAO report findings and recommendations concerning these areas, as follows:

- data security

Human Services is subject to the requirements of the Australian Government's Information Security Manual (ISM), which outlines standards to assist agencies in applying a risk-based approach to protecting their data and ICT systems ... Human Services is not compliant with two of the mandatory requirements of the ISM ... Fulfilling these requirements would assist Human Services to identify and mitigate risks to the security and confidentiality of Medicare customer data ... To ensure compliance with the mandatory requirements of the [ISM], the ANAO recommends that Human Services:

- undertake a review of existing documentation and finalise all mandated security documents; and
- complete the mandated certification and accreditation processes for the systems that record, process and store Medicare customer data and the ICT infrastructure that supports them.⁶

- training and guidance

The collection of accurate, complete and reliable customer data supports the efficient and effective administration of Medicare ... To better support customer service officers who enrol Medicare customers and update their information, the ANAO recommends that Human Services review its eLearning training and eReference guidance for consistency and completeness.⁷

6 ANAO, Report No. 27, *Integrity of Medicare Customer Data*, p. 22, p. 25.

7 ANAO, Report No. 27, *Integrity of Medicare Customer Data*, p. 16, p. 24.

Data integrity

- 5.12 The ANAO's testing of Medicare customer records used varying matching criteria that identified at least 18,000 possible duplicate records.⁸ Duplicate records mean that customer information is fragmented across more than one record, presenting a potential clinical safety risk. Further, there is a risk that duplicate customer enrolments can be used for fraudulent claiming or identity theft.
- 5.13 Intertwined records, where single records are shared by more than one customer, also pose a risk to the clinical safety and privacy of affected customers as their recorded health information does not accurately reflect their individual circumstances. Intertwined records are created when customer service officers incorrectly enable two customers to use the same PIN – customers' unique Medicare enrolment identifiers. Human Services advised that it had recorded '34 intertwined records since 2011-12', when it commenced recording identified instances.⁹
- 5.14 The ANAO report noted that duplicate customer records had been an 'ongoing data integrity issue in Medicare customer record databases', with the ANAO having made a previous recommendation in this area in 2004-05, in Report No. 24, *Integrity of Medicare Enrolment Data* (Recommendation No. 3). Human Services advised that 'it implemented this recommendation but this could not be verified by the ANAO without supporting documentation'.¹⁰
- 5.15 The Committee noted its concerns with duplicate enrolments and intertwined records, and queried why the department had not been able to demonstrate that it had addressed this issue in response to the ANAO's previous recommendation. Human Services observed that:

The response that was done based on the previous audit was insufficient. We have accepted the findings of the ANAO report and we have a team that looks at both intertwined and duplicate records, because both are issues for Medicare as they are for other parts of the department. We have started the examination of the 18,000. We believe it is a significantly lesser number but they come up as records that may be intertwined or duplicate, and we now have a team ... The point was well made ... the issue for us is

8 ANAO, Report No. 27, *Integrity of Medicare Customer Data*, p. 18. The ANAO noted that, 'in a database containing almost 30 million records, the number of possible duplicates identified by the ANAO is not significant. However, these records do represent a risk to the integrity of Medicare', p. 58.

9 ANAO, Report No. 27, *Integrity of Medicare Customer Data*, p. 19.

10 ANAO, Report No. 27, *Integrity of Medicare Customer Data*, p. 18.

going through and making sure that, wherever we can, our data cleansing works to limit the numbers.¹¹

- 5.16 To assist with recording accurate customer data, there are controls in the Consumer Directory, including mandatory fields. The ANAO tested these fields and identified that not all of them had been completed and that Medicare customer data had been inconsistently and inaccurately recorded, contravening system and business rules.¹² Incomplete, inaccurate and unreliable eligibility data could result in payments to ineligible persons. The ANAO report identified some active customer records with 'invalid entitlement types which had recent associated claims', and some customer records that did not contain 'sufficient information to support customers' eligibility for Medicare' or 'reflect an entitlement period consistent with the customer's entitlement type'.¹³
- 5.17 The ANAO also tested date of death data and found 40,541 records for customers over 85 years old that did not have an associated claim in the 12 months prior to testing, with the absence of claiming activity on these records suggesting these customers may be deceased.¹⁴ Human Services clarified that the reason some customers may not have interacted with Medicare is that 'they may have only received healthcare services using public hospitals, aged care facilities or received services provided by the Department of Veterans' Affairs'.¹⁵ The department further observed that it matched data for death 'every day through daily data feeds, so we do actually remove people from our register who are deceased'.¹⁶
- 5.18 The ANAO report noted that the department 'does not currently undertake data integrity testing' and accordingly recommended that it 'undertake targeted, risk-based data integrity testing of Medicare customer records'.¹⁷ In terms of its response to this recommendation, the department confirmed that it had 'commenced integrity work on those customers who have not claimed Medicare services in 12 months. This work has begun on customers over 90 years of age and will then move to the cohort over 80 years of age'.¹⁸ The department further commented that

11 Mr Barry Sandison, Deputy Secretary, Health Services, *Committee Hansard*, Canberra, 17 July 2014, p. 11.

12 ANAO, Report No. 27, *Integrity of Medicare Customer Data*, p. 19.

13 ANAO, Report No. 27, *Integrity of Medicare Customer Data*, p. 20.

14 ANAO, Report No. 27, *Integrity of Medicare Customer Data*, p. 20.

15 Human Services, *Submission 5*, p. 9.

16 Mrs Alice Jones, General Manager, Human Services, *Committee Hansard*, Canberra, 17 July 2014, p. 12. The department confirmed that it did 'not attempt to directly contact customers or their families to determine their status', Human Services, *Submission 5*, p. 9.

17 ANAO, Report No. 27, *Integrity of Medicare Customer Data*, p. 20, p. 24.

18 Human Services, *Submission 5*, p. 9.

data integrity testing would be achieved by 'examining whether any of these customers have interacted with other health programmes administered by the department, including the Pharmaceutical Benefits Scheme (PBS), over the last 12 months. Use of the PBS is seen as a particularly accurate indicator for determining the status of a customer for Medicare'.¹⁹

- 5.19 The ANAO again noted that it had made previous recommendations in this area in 2004-05, in Report No. 24, *Integrity of Medicare Enrolment Data* (Recommendations Nos 1, 2 and 4). Human Services 'could not demonstrate implementation of the ANAO's recommendations aimed at improving the integrity of customer information prior to its migration to the Consumer Directory'.²⁰

Implementation of ANAO report recommendations

- 5.20 A previous audit report, ANAO Report No. 24, *Integrity of Medicare Enrolment Data*, HIC (2004-05), similarly examined Medicare customer data and made six recommendations, as set out in Table 5.2. As discussed earlier, the ANAO noted that 'Human Services could demonstrate implementation of two recommendations [Recommendations 5 and 6] but could not demonstrate implementation of the remainder'.²¹
- 5.21 The Committee queried why four of the six recommendations from the previous ANAO report on this area had not been implemented by the department. Human Services observed that 'the governance arrangements about follow-through and focus on what was recommended ... were not as strong as they are now, so the governance arrangements to ensure that there was follow-through to respond to them were not appropriate'.²²
- 5.22 Noting that Human Services had previously agreed to these earlier ANAO recommendations and had subsequently failed to implement some of them, the Committee queried what arrangements the department had therefore established to implement the ANAO recommendations in this current report. Human Services pointed to the more robust governance and accountability framework now in place to respond to audit recommendations:

In our governance arrangements in the department since we were created three years ago, the audit side within the department, firstly, works very closely with the ANAO and, secondly, runs a standard report around how many audits there are, internal and

19 Human Services, *Submission 5*, p. 9.

20 ANAO, Report No. 27, *Integrity of Medicare Customer Data*, p. 21.

21 ANAO, Report No. 27, *Integrity of Medicare Customer Data*, p. 15.

22 Mr Sandison, Human Services, *Committee Hansard*, Canberra, 17 July 2014, p. 11.

external, what recommendations there are and how many of those are outstanding. The secretary gets those regular reports. Each of the relevant deputies of the executive is accountable for making sure that we respond to the findings. We are held to account to respond to them so that they do not get left sitting. At particular times, if there is a time frame that we have identified when we said we would respond to certain things, that is what our internal audit people would also hold us to account on ... There might sometimes be valid reasons for delay such as complexity, but you have to report. Rather than just leave it to the line area and ... hope that the right things are done, there is now full accountability for all audits as a central area.²³

- 5.23 Further, the ANAO noted that it had recently considered Human Services' implementation of audit recommendations and could confirm that it now had 'well developed' monitoring and reporting processes in this regard:

To provide a little additional comfort to the committee, we tabled Audit report No. 34 as part of the last program and we looked at DHS's implementation of ANAO performance audit recommendations. This was tabled on 14 May. We observed in that report:

- DHS has well developed monitoring and reporting processes which provide oversight of the implementation of audit recommendations ...

the audit that was recently conducted on the department's follow-up showed that perhaps there had been improvements made over time, and certainly one would hope that those improvements manifest themselves in recommendations being implemented in a timely and complete manner.²⁴

23 Mr Sandison, Human Services, *Committee Hansard*, Canberra, 17 July 2014, p. 10.

24 Dr Tom Ioannou, Group Executive Director, ANAO, *Committee Hansard*, Canberra, 17 July 2014, p. 10, p. 11.

Table 5.2 ANAO recommendations, Report No. 24 (2004-05)

1	<p>The ANAO recommends that HIC:</p> <ul style="list-style-type: none"> • fully implement the data cleansing recommendations contained in its <i>Medicare Enrolment Data Field Assessment Report: Recommendations for Data Cleansing</i>; and • conduct a contemporary data field assessment to identify any records generated between 2002 and 2004, that require cleansing. <p>HIC's response: <i>Agrees.</i></p>
2	<p>The ANAO recommends that, prior to the full implementation of the Consumer Directory Management System, HIC:</p> <ul style="list-style-type: none"> • reconsider enforcing all CDMS business rules during the data migration; and • consider the risks of commencing the new system with incorrect data, against the associated costs and benefits of enforcing all business rules before the changeover from the MEF to the Consumer Directory. <p>HIC's response: <i>Agrees.</i></p>
3	<p>ANAO recommends that HIC:</p> <ul style="list-style-type: none"> • produce a report on possible duplicate enrolments, employing the data matching criteria envisaged for use with the Consumer Directory; and • resolve as many duplicate Medicare enrolments as possible, before the Consumer Directory is fully implemented. <p>HIC's response: <i>Agrees.</i></p>
4	<p>ANAO recommends that HIC conduct a review of the effectiveness of the 'representative member segment' approach to consolidating Medicare enrolment information, by selecting a representative sample of such records and manually assessing the accuracy and validity of the consolidated records.</p> <p>HIC's response: <i>Agrees.</i></p>
5	<p>ANAO recommends that, to improve the accuracy of Medicare enrolment records and reduce the business risks associated with maintaining active consumer records relating to people who are deceased, HIC give a high priority to developing and implementing a system to make effective and efficient use of Fact of Death Data in the Consumer Directory.</p> <p>HIC's response: <i>Agrees.</i></p>
6	<p>ANAO recommends that HIC redevelop a Technical Standards Report, which complies with the requirements of the Privacy Commissioner's Guidelines issued under section 135AA of the <i>National Health Act 1953</i>, and lodge it with the Office of the Federal Privacy Commissioner.</p> <p>HIC's response: <i>Agrees.</i></p>

Committee comment

- 5.24 The Committee notes that the ANAO's analysis of the department's Medicare customer data holdings identified at least 18,000 possible duplicate enrolments, as well as intertwined records, giving rise to clinical safety and privacy risks. It also identified active records for customers without an entitlement as well as inactive records and some with unusual activity, and records that had customer information inconsistently, inaccurately and incompletely recorded. Further, at the time of the audit,

the department did not undertake data integrity testing. While the Committee notes that the number of records affected by data integrity issues is not significant given the scale of the department's data holdings, it points out that these are still a risk to the integrity of Medicare, with possible consequences for clinical safety, customer privacy and cost efficiency. The Committee is encouraged that Human Services has now commenced work on data integrity testing, and also assembled a team to resolve intertwined and duplicate records in the Medicare database.

- 5.25 The Committee also notes that Human Services could not demonstrate implementation of previous recommendations made in this area by the ANAO in 2004-05, in Report No. 24, *Integrity of Medicare Enrolment Data*. Consequently, the issues identified 10 years ago have persisted and continue to compromise the integrity of Medicare customer data. The Committee acknowledges that Human Services now has a more robust governance and accountability framework in place to respond to audit recommendations, with well developed monitoring and reporting processes to provide oversight of implementation in this regard. However, it is disappointing that the department missed an opportunity to enhance its performance by implementing a number of the earlier ANAO recommendations targeted at improving data integrity.
- 5.26 The Committee therefore supports the ANAO's findings and recommendations, and agrees with its conclusion that 'Human Services' framework for the management of Medicare customer data, including procedures and input controls for the entry of new enrolment information and changes to customer information, has not been fully effective in maintaining the integrity of data in the Consumer Directory [the Medicare customer record database]'.²⁵ The Committee was disappointed with the department's overall management of this area, particularly given the significant scale and cost of the Medicare program. While the department has taken some action in this area, it could do more.
- 5.27 The Committee agrees with the ANAO that Human Services needs to improve the integrity of its Medicare customer data by resolving duplicate and intertwined records; undertaking targeted, risk based data integrity testing of these records; and implementing controls for data entries. Departmental procedures and key elements of the data input control framework require management attention to better protect clinical safety and customer privacy, improve operational efficiency and reduce the risk of fraudulent activity. Given the extent of the data integrity issues highlighted by the ANAO and the length of time these issues have been

25 ANAO, Report No. 27, *Integrity of Medicare Customer Data*, pp. 13-14.

evident, the Committee concludes that Human Services should report back to the JCPAA on this matter.

Recommendation 7

- 5.28 **The Committee recommends that the Department of Human Services report to the Committee, no later than six months after the tabling of this report, on its progress towards implementing the Auditor-General's recommendations in terms of undertaking targeted, risk-based data integrity testing of Medicare customer records; better managing duplicate and intertwined records; and reviewing existing entitlement types and implementing controls to ensure that only those customers eligible to receive Medicare benefits can access them.**

Dr Andrew Southcott MP
Chair

