

QIF Project:
Assessment of quality of child maintenance service (CMS) administrative data
in Northern Ireland

Notes

1 – This Assessment was carried out in January 2014. All recommendations are based on the information gathered at this time. Subsequent work has been undertaken to develop experimental statistics around the CMS 2012 scheme. This work is ongoing with a view to publication of CMS 2012 statistics for Northern Ireland.

2 – The terms parent with care (PWC) and non-resident parent (NRP) are used to refer to parents involved in child maintenance cases on the CSCS and CS2 systems. Parents who use the CMS2012 system are referred to as either a paying parent or receiving parent. However, for the purpose of this report the terms PWC and NRP have been used.

Executive summary

The current array of systems for administering Child Maintenance under different schemes is complicated and inconsistent in a way which is undesirable for producing high quality statistics in line with the Government Statistical Service (GSS) Strategy.

A long term ambition should be to bring all the statistics (Great Britain and Northern Ireland, and the various different systems) together; a data warehouse beginning this approach is under construction by DWP. However in the short term, until issues of comparability and data quality can be addressed, the statistics should be produced separately.

This paper presents some recommendations for changes or for further investigation to improve the quality of the data.

Recommendations

Recommendation 1 Carry out a systematic review of user needs

Recommendation 2: In any published reference to the figures, include an indication of the number of cases not covered and work towards including cases managed on CMS2012

Recommendation 3: Carry out a special exercise to identify particular situations where errors and inconsistencies may occur.

Recommendation 4: Create derived variables which can be used to make increased use of the data. In particular, use them to analyse cases with a current child maintenance liability, whether or not in payment, separately from cases with arrears.

Recommendation 5: Consider collecting and linking initial contacts on Choices with cases, even if only as a special exercise.

Recommendation 6: Carry out a one-off exercise to assess the extent of lags in updating data.

Recommendation 7: Carry out a trial of editing the data supplied to the Analytical Services Unit (ASU). The exact choice of edits should be made by reference to important analysis variables, known past errors, and reasonable expectations.

Recommendation 8: Continue to explore alternative survey approaches for periodic measurement of the Child Maintenance Population independently of the administrative systems.

Introduction

1. The Child Maintenance Service provides a system for ensuring that parents contribute to the costs of raising their children when they are not a resident in the same household as the child / children. The system includes assessments of resources of the NRP and uses this information to calculate a liability for maintenance payments. The maintenance amount assessed as payable by the NRP is reduced if the NRP provides shared care for the Qualifying Children (QCs) on a regular overnight basis, amounting to an average of at least one night a week. The CMS also administers the collection of payments, and their onward transmission to the PWC. There is no *requirement* to use the service. However, the PWC and the NRP have the option to engage with the system, in which case the liability will be assessed and become payable, although there are stages in the processing of a claim which allow the process to stop before using the whole cycle.

2. The general regulations and systems for child maintenance payments are UK-wide, although some legislation differs between NI and GB. Systems are operated by the Department for Work and Pensions (DWP) for GB applications (although some staff are based in NI) and by the Department for Social Development (DSD) for NI applications, although clerical cases are operated by DWP for NI cases too, effectively making a UK operation.

3. Recent changes in policy are aimed at promoting agreement on maintenance between parents without direct engagement with the Child Maintenance Service, and a number of tools (such as an assessment tool) are available to facilitate this. If no agreement is made, the PWC can make a claim; there is a fee for claiming in GB, but no fee for making a claim in Northern Ireland (although a collection charge was introduced in both NI and GB in August 2014). Throughout the UK there will be a cost to both the NRP and the PWC for using the Child Maintenance Service.

Data sources

4. Administrative data arise as part of the management and maintenance of the systems for assessing and reassessing claims, and as part of gathering and redistributing payments. Although the systems are UK-wide, there are three main systems in use, operating under different rules, CSCS, CS2 and CMS2012. Brief descriptions of these are given below.

CSCS

5. This is the oldest system, introduced in 1993 and operating for all cases until April 2003. It has a DOS interface. Maintenance calculations involve assessing 5 different measures, and using the lowest value as the amount to be paid, or the threshold payment of £7.20 if higher. The calculation is therefore complicated and time-consuming when performed manually. Some calculations can be performed by the system, but may need to be overwritten manually due to system errors. The system produces alerts for children who will shortly exceed the maximum age at which maintenance is payable ("age out"), and these are checked weekly and added to workloads for action. Under this system, if the PWC was on Income Support it was compulsory to have a case, but changes in legislation mean this is no longer always the case.

CS2

6. CS2 was introduced in April 2003 as a system for administering new, simpler child maintenance rules. The minimum assessed maintenance on CS2 is £5 (although some cases are assessed as 'nil payment'). Since then all new cases have been started on it, though existing cases with no material changes have continued to be administered on CSCS using the original rules. CS2 is a Windows-based application, with workflow applications for supervisors etc.

7. It has been the rule that any new case linked to an existing CSCS case (that is, involving the same NRP as an existing CSCS case) has caused the existing case to be moved to the CS2 system and the new rules. Such cases which started on the CSCS are called CS2trans cases.

CMS2012

9. Child Maintenance Service 2012 (CMS2012) system has been introduced with a set of new rules. The Government has made a new policy of charging the NRP an additional 20% of the maintenance cost, and there is a 4% charge to the PWC taken from this amount. So for example if maintenance under the new system is assessed at £100, the NRP has to pay £120, the PWC gets £96 and £24 is retained as a fee for the service of operating the system. N Ireland is using a different approach to applications from GB, where there is no cost to making an initial application (in GB there is a one-off £20 fee to be paid by the applicant, normally the PWC). The cost of the service is designed to encourage people to come to private agreements on the payment of maintenance.

10. CMS2012 makes use of HMRC income data which is separate from CIS data and credit reference agency information; these are readily available for legacy systems. Assuming that someone can be identified and found in the CIS, whether from NINO, name and address or some other means with high confidence of a match, then the tax and benefits information for that person is pulled across to the CMS2012, and forms the basis for an initial assessment. Factors not available through administrative systems are then taken into account, such as the number of nights per week a NRP looks after the qualifying child (QC); these modify the assessment. The NRP has to be contacted when a case is set up but there is no requirement to contact the NRP or to gain permission to speak to his/her employer in order to receive this information, which substantially speeds up the process. The main difficulties come from names which are misspelt. Payments under CMS2012 are based on the gross pay figure taken from HMRC records, which obviates the need for much of the data gathering to calculate the amounts in the CSCS and CS2.

11. CMS2012 has been used for all new cases in NI from November 2013. There is a target to close all active cases on all other systems by the end of 2017. The process for case closure is for CMS to contact both parties in a case and explain that the old case will close in 6 months if they take no action – that is, no further assessments or payments will be made. If action is to be taken, a new application has to be made by the PWC/NRP using the normal application process. Cases are currently only actively transitioned if a case is opened on CMS2012 where the applicant has an existing legacy case.

12. CMS2012 has an annual check for all cases (strictly annual – the clock is not reset by action within a year), which involves recontacting the two parties and checking for any changes which affect the child maintenance.

13. The process for receiving cases is different under CMS2012; rather than applying directly, people now contact *Choices* (the system in GB is called *Options*), where they have a discussion which presents the different approaches available. At this point a reference number for the case is generated. If the parties are able to agree a private family based arrangement (FBA), then there is no referral to CMS, and no case is raised.

14. The processes used in the three systems are different, and therefore have different impacts on the quality of the information contained in the administrative databases.

Clerical cases

15. Some cases are live, but because of lack of functionality of the various systems, the appropriate outcome and monitoring cannot be done on the systems directly (for example where cases contain too much detail for the system to deal with). In addition, cases sometimes get stuck in the system for no apparent reason. These cases are known as *clerical cases*, and are handled separately offline with details recorded on a Clerical Case Database. The CCD is maintained by DWP, and Northern Ireland cases which need to be dealt with in this way are therefore handled by DWP and recorded on the CCD.

16. Developments are still being made to the CS2 system during the transition period, and these are gradually adding functionality which enables clerical cases to move back to the main system.

17. CMS2012, on the evidence so far, has few if any of these cases where system functionality is wanting, and development continues, with the result that there is essentially no need for clerical cases on the new system.

The population and units

18. There are a number of units which are used in the measurement associated with the Child Maintenance Service administrative data. They are largely documented in DWP's metadata document (CSA 2013a). However, 'case' is not defined but is important in understanding how the system operates.

A **case** is a single instance of a parent/person with care (PWC) starting a claim for support from a non-resident parent (NRP). A case may cover multiple children, as long as the parents are the same. A case can also be opened by the NRP.

Qualifying child (QC), parent with care (PWC) and non-resident parent (NRP) are key concepts for statistical outputs, and these are defined in DWP's metadata document (CSA 2013a).

19. For statistical purposes there are several populations which are of interest, but not all of them are covered by the administrative systems:

- all qualifying children (information on this group is to provide details of the extent of support). Only part of this population is covered by administrative systems. Statistics for this population could be summarised by child, or by PWC
- all *cases*. This is the definition of what the administrative systems contain, although closed cases are not all retained on CSCS.
- all NRPs with liabilities. This is covered by the administrative system, but has overcoverage relative to children with an NRP at a particular moment, as undischarged liabilities remain on the system after a child becomes an adult ("transitions").

20. A NRP may be connected with multiple cases (this happens in about 5% of cases in NI). In these cases maintenance payments are split across the eligible children. A PWC may also be connected with multiple cases. In a few instances the same person may be both a PWC and a NRP, although on separate cases.

21. Geographical coverage. The geographical identification of cases is decided by where the NRP is resident so that enforcement action is carried out in the correct area. Cases are closed when the NRP or PWC are outside the jurisdiction.

Should there be a definition in here for case group level which will be a population unit on the 2012 scheme.

User requirements

22. The main requirement of NI CMS, the key user, is a NI version of the National Statistics currently produced in GB. To enable this requirement to be met, some key data quality concerns need to be addressed. These quality issues are discussed later in this paper.

23. Once data quality issues have been resolved, a comprehensive set of measures need to be defined which demonstrate the effectiveness of the scheme in transferring the money that is

assessed, and therefore providing an indicator of what effect the service has in the community. An outline set of measures could include:

- How many cases are successfully administered (to measure the performance of the CMS etc) [PWC basis]
- What proportion of assessed (“invoiced”) money is collected (“paid”) [NRP basis]
- What proportion of NRPs made “full”, “some” or “no” payment in the reference period [NRP basis]
- Calculate $\sum_{children} p_i$ where p_i is the proportion of child i 's maintenance that has been paid in the reference period. A measure of the proportion of children that are being supported as assessed. [PWC basis]

24. There are other questions for which the administrative data does not provide direct answers. These include agreements made bilaterally (which might include the absence of an agreement); confirmation of amounts transferred under bilateral agreements (even if the case was originally assessed on the system, the payments are not seen if made directly).

Quality assessment

25. The latest version of the European Statistical System (ESS) quality guidelines has five dimensions of quality; there is guidance for the GSS on measuring the quality of statistical outputs in line with these in ONS (2013):

- Relevance
- Accuracy and reliability
- Timeliness and punctuality
- Accessibility and clarity
- Coherence and comparability

These dimensions are considered in turn below, and the Child Maintenance statistics management information for Northern Ireland is evaluated for each aspect.

Relevance

26. Relevance defines how closely the statistics meet the needs of users. Some user requirements have been identified in paragraphs 23-26 above although there is no systematic evidence of users' needs. This would need to be addressed if the statistics were to be assessed for National Statistics status

Recommendation 1 Carry out a systematic review of user needs

27. The administrative data cover only some cases. Cases with a private agreement, or where the PWC does not wish to pursue an agreement, are never part of the administrative system. Therefore the administrative system is highly relevant for statistics about the system and therefore the operation of the CMS), but less relevant for providing information on the population of the population affected or supported by child maintenance. The change to policy associated with the move to CMS2012 will decrease the relevance of the statistics because they will cover a smaller proportion of the child maintenance population.

28. The Survey of the Child maintenance Population attempts to fill in this relevance gap, but there are shortcomings to the survey which means that it is only partially successful. DWP use information from the Labour Force Survey, which provides a suitable denominator, but is not linked to cases, and therefore does not provide full information. Using a survey in this context is, of course,

only possible if parents are willing to provide the necessary information. The survey is discussed further below.

Accuracy & reliability – coverage

29. The administrative data are known to cover only *cases*, where an application has been made and pursued. This is a poor indicator of the general population, but has good coverage of cases on CSCS and CS2. Statistical publications have not included cases managed on CMS2012, so that for the time being there is clear undercoverage of the child maintenance cases. This undercoverage is mentioned, but its extent is not estimated.

Recommendation 2: In any published reference to the figures, include an indication of the number of cases not covered and work towards including cases managed on CMS2012

30. The CMED Survey of the Child Maintenance Population (DSD 2013) reports a survey of the telephone-accessible population of Northern Ireland. Evidence from the Eurobarometer survey (see Mohorko *et al.* 2013) suggests just under 5% undercoverage of households in Northern Ireland from lack of a landline, and a further approx 25% undercoverage from mobile-only households. If the coverage is correlated with propensity to be in the child maintenance population, this could have a substantial effect. It is, however, difficult to envisage a viable and cost-effective alternative, but the possible effect of under-coverage should be noted when statistics are released from the survey

Accuracy & reliability – measurement error

31. It is particularly difficult to assess the accuracy of records in the administrative system in an objective way. There is a legal requirement for changes in circumstances to be reported through the Child Maintenance Service, but anecdotal evidence from transitions between systems is that this information is not updated in some cases. There are also known small numbers of cases with inconsistent information- some legitimately so, and managed as manual cases, some apparently with incorrect information or processing possibly arising from a late updating of change of circumstances

Recommendation 3: Carry out a special exercise to identify particular situations where errors and inconsistencies may occur. One possibility may be establishing a link to death records which would help identify deceased NRPs and PWCs and allow records to be updated more quickly. Even if this could only be carried out on a sample basis, it would give some indication of the spread of the problem.

Accuracy & reliability – coding and system errors

32. Because the system is in existence mainly to make payments it is, not surprisingly, at its best when dealing with monetary issues. From a statistical point of view, the actual payment may be of lesser importance, in some cases, than the child maintenance liability. This is available on the balance sheets but more use could be made of this variable in any reporting.

Recommendation 4: Create derived variables which can be used to make increased use of the data. In particular, use to analyse cases with a current child maintenance liability, whether or not in payment, separately from cases with arrears.

33. Internally, data are received as over 40 encrypted SAS datasets. This seems a cumbersome approach, and considerable resources are needed to guard against the risk of processing error. OBIEE, for end-user reports is planned for introduction in September 2015. This should make the process more manageable and at less risk of error.

34. In GB the Options contact information has been added to the data warehouse, but this process has not been followed in NI with the Choices data. Currently, Choices do not keep all the contact information of people who have phoned. If it were collected, the data on initial contacts and cases could at least in theory be linked, which would enable further cross checking and data enhancements.

Recommendation 5: Consider collecting and linking initial contacts on Choices with cases, even if only as a special exercise.

Timeliness and punctuality

35. There is a statutory requirement for participants in the Child Maintenance System to report changes of address/circumstances within 1 week. Time lags do, however, exist in the data. Reconciliations, for example, need not be reported although there is a mechanism for updating and closing where they do occur. DWP state that these administrative lags are a minimal issue in GB data, and it would be helpful to assess if this were the case in NI.

Recommendation 6: Carry out a one-off exercise to assess the extent of lags in updating data.

36. Although there is no publication schedule, the internal information is compiled sufficiently quickly after the reference period to meet users' needs if it were to be published.

Accessibility and clarity

37. NI produces a wide range of statistics for various different purposes but currently, due to data quality concerns, do not feed into the GB output. Obviously, a coherent UK picture would be of more value to users but this cannot be recommended until there is agreement that the data are comparable and of the same standards. When published, it should be accompanied by Quality Management Information so users are aware of how the data are collected and processed.

Coherence and comparability

38. Coherence refers to the internal consistency of data, and comparability to between-source relationships.

39. The coherence of the child maintenance service data is lower than for many other administrative sources, because it is based on three systems (only two of which are currently used in the production of statistics), each of which operates different legislation. Nevertheless, processes mean that there is little duplication across systems (although there is a possibility of a small amount of duplication if a case that has lay dormant for years on one system is opened as a new case on another). Nevertheless, adding together cases from the different systems is reasonable. The different rules for maintenance calculation make it more difficult to interpret financial statistics.

40. Comparability with the GB statistics produced by DWP is important, and currently the processes are very similar, with Northern Ireland information derived from the UK system by DWP. However, as outlined above, a number of quality issues need to be addressed before joint publication would be recommended. Additionally, a period of extensive stakeholder engagement would be necessary to drive such a project forward.

Editing the administrative data

41. The data available to the DSD Analysis team arrive via a multi-step process. When the data are initially recorded there are no pre-programmed edit checks carried out, although the act of using the data to access a case is likely to identify any incorrect data, particularly in certain fields.

42. At the end of the reference period, the data are processed by DWP Information Exploitation and Security (IES) directorate and sent to DSD Analytical Services Unit. They already check to ensure that they have credible data, and this catches rare occasions when the wrong file is created or transferred. ASU do not edit the data although do occasionally query the programming code supplied alongside the data. Editing of the administrative data for statistical purposes at this point could improve the quality of the data and it is recommended that this is trialled. After the trial consideration would need to be given to the level of errors found and what might subsequently be done with this information because, at present, ASU do not change the data supplied to them.

Recommendation 7: Carry out a trial of editing the data supplied to ASU. The exact choice of edits should be made by reference to important analysis variables, known past errors, and reasonable expectations. Some edits will be 'hard' i.e. they cannot be breached- others 'soft' i.e. could be correct but worth checking.

Some suggested hard and soft checks are listed below:

- Any PWCs >80 or <18 years old?
- Any maintenance calculation > £1000 wk⁻¹?
- Any children >20 years old? (Possible date of birth error?)
- Any important information (e.g. Postcode) missing

Estimating the Child Maintenance Population

43. The Survey of the Child Maintenance Population (DSD 2013) is a general population survey aiming to identify cases with a child maintenance interest (that is, where there is a child with a non-resident parent). Not surprisingly, given the data from two very separate sources, the estimates from the survey and the measured casework are both the same. For example, the survey estimates 31750 households, but the June 2012 caseload for Northern Ireland was 34857.

Some other observations about the quality of the survey are listed below. It should be remembered, however, all large scale surveys such as these are very expensive to mount, so often some limitations need to be accepted, although these need to be made explicit for users of the data.

- Census 2011 says 703,300 households in N Ireland, with 1% of the population in non-household accommodation. Assuming the screener is a random sample of households the estimate of 31,500 for households with a child maintenance interest seems reasonable.
- The SCMP is based on a RDD telephone sample. Details of the sampling process are not given, but we can assume that this is a simple random sample of telephone land lines, and that the coverage excludes households without a telephone (approx 5% in Northern Ireland according to Mohorko *et al.* 2013 using figures derived from the Eurobarometer survey) and mobile-only households (approx 25%, from the same source).
- There are potential problems with households with multiple addresses (presumably more likely where there is a child maintenance interest than in the general population).
- The low number of statutory arrangement responses in the screening survey, compared with the number of cases being handled by CMS, suggests a problem either with the understanding of the survey question, or a disincentive to report honestly, perhaps not surprisingly on a topic area of sensitivity

44. For a random population survey a household sampling approach (which is admittedly more expensive) is preferred. The use of the Family Resources survey to carry some relevant questions has been explored but time scales for questionnaire inclusion were not suitable. The option of using HMRC child benefit data to identify a potential sample is being explored and this would seem a good quality improvement.

Recommendation 8: Continue to explore alternative survey approaches for periodic measurement of the Child Maintenance Population independently of the administrative systems.

45. The change of policy to introduce charging for the administration of the child maintenance system, intended to encourage parents to make bilateral arrangements, has an effect on the ability of the administrative data to act as an indicator of the extent to which children who should be supported by absent parents are (although it should be noted that it has always been an indicator, rather than a precise measure). The policy to encourage private financial agreements is expected to reduce the number of cases managed on the CMS2012. In order to get a good understanding of the population, additional information will be required on:

- how many children in the population have non-resident parents
- how many of these are covered by private agreements (which could be null?)
- how many of them are covered by child maintenance cases
- how many are neither:
 - parent not traced
 - claim not pursued (=unilateral agreement)

46. The population survey is a valuable attempt to do this. The availability of administrative data sources other than CMS through data sharing may make new approaches to sampling, matching (for statistical purposes) or use of estimates from other sources in a composite measure practical. Comparators to help validate estimates of the child maintenance population could include

- child benefit – now not claimed by higher income families, which will reduce its coverage
- single parents identified from population census.

Customer satisfaction survey

47. There is a customer satisfaction survey for the Child Maintenance System. Its results could be included in an assessment of the performance of the CMS.

Training

48. The provision of a training system for CMS2012 has been useful in allowing experiment without affecting existing systems.

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