Working Paper

Fraud and error in financial, welfare and revenue services: A Systematic Map of the empirical research evidence with particular reference to 'notification of changes of circumstances'

by Mukdarut Bangpan, Mark Newman, Janice Tripney, Paul Matthews, Claudia Niza and Jennifer Sinclair

DWP Department for Work and Pensions

Department for Work and Pensions

Working Paper No 97

Fraud and error in financial, welfare and revenue services: A systematic map of the empirical research evidence with particular reference to ‘notification of changes of circumstances’

Mukdarut Bangpan, Paul Matthews, Dr Mark Newman, Claudia Niza, Dr Jennifer Sinclair and Janice Tripney

A report of research carried out by the Evidence for Policy and Practice Information and Co-ordinating Centre, University of London on behalf of the Department for Work and Pensions

This document/publication is also available on our website at:
http://research.dwp.gov.uk/asd/asd5/rrs-index.asp

Any enquiries regarding this document/publication should be sent to us at:
Department for Work and Pensions, Commercial Support and Knowledge Management Team,
Upper Ground Floor, Steel City House, West Street, Sheffield S1 2GQ

First published 2011.

ISBN 978 1 84712 937 6

Contents

List of tables

List of figures

Acknowledgements

This review was commissioned by the Department for Work and Pensions (DWP).

The Evidence Policy and Practice Information and Co-ordinating Centre (EPPI-Centre), Social Science Research Unit, Institute of Education would like to thank staff from the EPPI-Centre education and social policy team for their support with this report.

Thanks are also due to Jane Francis (Project Manager), Andy Brittan and Richard Zaluski-Zaluckowski, from the DWP.

The Authors

Mukdarut Bangpan is a Research Officer at the Evidence Policy and Practice Information and Co-ordinating Centre (EPPI-Centre), Social Science Research Unit, Institute of Education, University of London.

Paul Matthews is a Placement Student at the EPPI-Centre, Social Science Research Unit, Institute of Education, University of London.

Dr Mark Newman is Reader in Evidence-informed Policy and Practice in Education and Social Policy, and Associate Director of the EPPI-Centre, Social Science Research Unit, Institute of Education, University of London, where he manages the EPPI-Centre's programme of reviews in education and social policy.

Claudia Niza is a Research Associate at the EPPI-Centre, Social Science Research Unit, Institute of Education, University of London.

Dr Jennifer Sinclair is a Research Officer at the EPPI-Centre, Social Science Research Unit, Institute of Education, University of London.

Janice Tripney is a Research Officer at the EPPI-Centre, Social Science Research Unit, Institute of Education, University of London.

Abbreviations

AFDC	Aid to Families with Dependent Children
AFRO	Assistance to Families at Risk of Overpayment
ANAO	The Australian National Audit Office
ATMs	Automated Teller Machines
ATO	Australian Taxation Office
BDT	Business Delivery Target
CEP	The Commercial Education Programme
CERT	Comprehensive Error Rate Testing
CMS	Centres for Medicare and Medical Service
CoCs	Changes of Circumstances
CSA	Child Support Agency
CTB	Council Tax Benefit
DWP	The Department for Work and Pensions
EBT	Electronic Benefit Transfer
EFD	Electronic Fraud Detection
EPPI-Centre	Evidence for Policy and Practice Information and Co-ordinating Centre
FAO	Family Assistance Office
FAs	Financial Assessors
FJT	Fortnightly Job Review
FTB	Family Tax Benefit
FWTT	Financial products/services, welfare provision, the taxation, and/or tax credit systems
HB	Housing Benefit
HPMP	The Hospital Payment Monitoring Programme
IS	Income Support
JSA	Jobseeker's Allowance
LA	Local Authority

LPP	The Lone Parent Prototype
NHS	National Health Service
OLAF	The European Anti-Fraud Office
PARIS	The Public Assistance Reporting Information System
PINs	Personal Identification Numbers
RCT	Randomised Controlled Trial
RSLs	Registered Social Landlords
RSS	Random Sampling Survey
SEMORE	The Selection, Monitoring and Review System
SOM	Standard Operation Model
SSNs	Social Security Numbers
TANF	The Temporary Assistance to Needy Family
TIP	The Training and Information Program
TOP	The Treasury Offset Programme
VF	The Verification Framework
VfM	Value for Money
WIC	The Special Supplemental Nutrition Program for Women, Infants and Children

Summary

The Department for Work and Pensions (DWP) recognises that, in order to meet its strategic objectives, it is crucial to pay the right amount of benefit to the right person at the right time.[1] During 2008/09, the DWP spent approximately £135.6 billion on benefits, of which it is estimated that about two per cent (£2.7 billion) was overpaid due to fraud and error. Recent estimates suggest that there were about £550 million of overpayments of Income Support (IS) and Jobseeker's Allowance (JSA) (about five per cent of total spending on this type of benefit), £770 million on Housing Benefit (HB) (about 4.5 per cent of the total) and £340 million on Pension Credit (about 4.6 per cent of the total).[2] Despite the increased measures undertaken to reduce fraud and error in the benefit system, the DWP acknowledges that new strategies for improving correctness of benefit payments are a priority.[3]

In the light of this official commitment to reducing overpayments, there is considerable interest in the process of notifying a 'change of circumstances (CoCs)' and in potential strategies to reduce fraud and error. This project aimed to identify and describe existing research literature on issues within related fields of financial products/services, welfare provision, taxation, and tax credit systems.

This review is part of a wider programme of systematic review work commissioned by the DWP and carried out by the EPPI-Centre.

Methodology

The review described in this report is a 'systematic map' of the research evidence. The map does not aim to provide an answer to a specific policy question. Instead, the aim is to answer a question about the scope, nature and content of empirical research that has been carried out on a particular topic. This means that the question is broad, searching is extensive, and the results are presented in the form of a descriptive analysis of the research literature in the field.

The mapping exercise followed a standardised systematic review process designed to minimise bias in the identification, selection and coding of primary studies. The results of this systematic map are derived from studies that explored people's attitudes towards financial products/services, welfare provision, and/or taxation/tax credit systems, and studies that investigated intervention programmes or initiatives aiming to reduce fraud and error.

Review question

The research addressed the following question:

> *What is the empirical research evidence about financial products/services, welfare/benefit provision, and/or the taxation/tax credit systems (FWTT), in relation to notification of CoCs?*

1 Department for Work and Pensions, 2007b.

2 Department for Work and Pensions, 2008.

3 ibid.

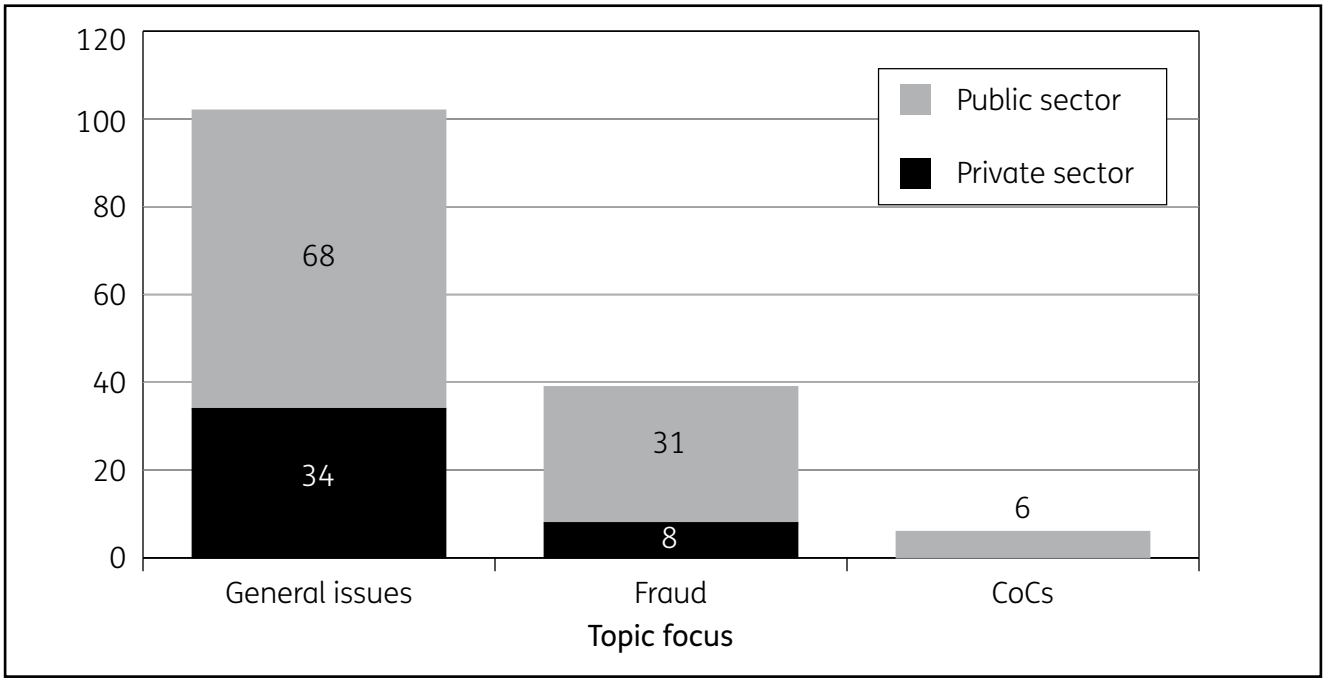
Key findings

Two hundred and forty-nine studies were included in the systematic map. Of these, 128 were UK non-evaluative studies[4], 46 were intervention studies[5], and the remainder were Value for Money (VfM) reports; the groups are not mutually exclusive.

Of the 128 UK non-evaluative studies, only six studies reported findings about notification of CoCs, all of which were in the public sector. We identified no studies about CoCs in the private sector. Fraud was the main focus of eight studies within the private sector. Thirty-one studies were about fraud (in various forms, including non-compliance and evasion of payment) in the public sector. More than three-quarters of the 128 studies explored general aspects of FWTT in both public and private sectors, but the main topic foci were not on issues of CoCs or fraud. (See Figure 1).

Only a small proportion of the 46 intervention studies focused on initiatives that encouraged customers to report CoCs correctly and promptly. None of these studies evaluated interventions aimed at preventing or minimising official error by providing training to employees or government staff.

Figure 1 Topic focus of the UK non-evaluative studies (128 studies)



Detection strategies were the largest category of interventions evaluated (39 per cent) with only one study from the UK. Around a quarter of studies (24 per cent) were evaluations of integrated strategies, all of which were conducted in the UK. A smaller group of studies evaluated deterrence strategies, the majority of which aimed to influence individual views and behaviours, by imposing either sanctions or penalties. Fifteen per cent aimed to evaluate prevention initiatives and one study was about risk assessment.

---

4 A study which does not aim to assess the impact of an action, programme or intervention on one or more outcomes, but rather investigates attitudes, perceptions, beliefs, and values about FWTT, with the exceptions noted.

5 A study that sought to assess the impact of an action, programme or intervention on one or more outcomes.

Qualitative and simulation/modelling methods were commonly used to investigate the impact of the interventions. Of 46 intervention studies, only two experiments with random allocation to study groups were identified.

The majority of the intervention studies focused on either state welfare provision or the insurance industry. We identified only a few intervention studies that focused on either healthcare or the banking industry.

The majority of the 82 VfM studies reported the results of audits of integrated strategies, including the overall actions, procedure and efforts in tackling fraud and error. Twenty-six reports evaluated performance of these initiatives in revenue collection organisations, 18 in state welfare provision, 11 in healthcare provision, and 27 in one or more government department/agency/benefit system.

Implications

One of the aims of the systematic mapping exercise was to determine whether there was sufficient existing literature to warrant conducting an in-depth review and synthesis of studies addressing the specific sub-questions identified as part of this review. The results suggest that there might be sufficient existing research to address the following in-depth review questions.

- What are the different views/values held about personal responsibility and the responsibilities of others in relation to financial services and do these vary depending on the type of services and an individuals relationship to them (e.g. whether they 'gain' or 'lose')?
- What are the different views/values about personal responsibility and the responsibilities of others in relation to the specific issue of notification of changes of circumstances in relation to financial service use?
- What is the impact of **different** strategies for tackling fraud/error?

The results also identified gaps in research activity in the field. First, it is evident that the majority of the intervention studies were qualitative evaluations which described, for example, programme activities, what happened to whom and when, what participants experienced, and/or attitudes towards the programmes. Such details are clearly important for understanding processes of interventions, identifying outcomes of interest, and improving, designing and commissioning relevant research in the future. However, the apparent paucity of quantitative evaluations using rigorous perspective designs suggests that the conduct of this type of study of a sufficiently large scale should also be a priority. This will help build a solid evidence base on the effectiveness of particular programmes and enable meaningful comparisons to be made across different programmes.

Furthermore, our findings found only few evaluations of risk assessment strategies that aim to determine the risks of fraud and error; therefore we recommend future evaluative research of risk assessment. Finally, given that the evidence about interventions for tackling fraud and error rests largely on detection interventions but very few from the UK, evaluative research programmes designed to detect fraud or error in the UK context are recommended.

1 Introduction

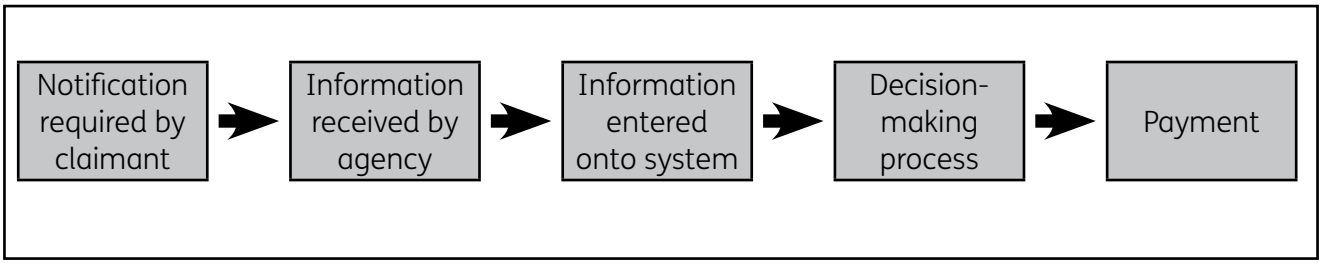
1.1 Background

During 2008/09, the Department for Work and Pensions (DWP) spent approximately £135.6 billion on benefits, of which it is estimated that about two per cent (£2.7 billion) was overpaid due to fraud and error. Recent estimates suggest that there were about £550 million of overpayments of Income Support (IS) and Jobseeker's Allowance (JSA) (about five per cent of the total), £770 million on Housing Benefit (HB) (about 4.5 per cent of the total) and £340 million on Pension Credit (about 4.6 per cent of the total).[6] Despite the increased measures undertaken to reduce fraud and error in the benefit system, the DWP acknowledges that new strategies for improving correctness of benefit payments are a priority.

In 2004, the Department set two targets aiming to reduce expenditure overpaid through fraud and error. The first aimed to reduce overpayments on IS and JSA by 15 per cent between 2005/06 and 2009/10. The second aimed to reduce the proportion of working age HB expenditure overpaid through fraud and error by 25 per cent between 2002/03 and 2007/08. Despite this commitment, recent estimates suggest that there has been no statistically significant change in levels of fraud and error on any of these benefits over this period.[7] The DWP acknowledges that all the estimates should be treated with caution because they are subject to a relatively large degree of statistical uncertainty. They do not account for all types of fraud and error, or for overpayments, which are subsequently recovered by the department. Nevertheless, the DWP remains firmly committed to reducing overpayments. There is, therefore, considerable interest in research evidence that might help to identify strategies that are effective in reducing error and fraud.

Figure 1.1 shows a simplified model of the process of claiming and making a decision about the level of benefit to be paid to an individual. An individual reports his/her particular circumstances (including a number of key personal characteristics, such as employment status) which will determine their entitlement to benefit.

Figure 1.1 Simplified model of the benefit claim information processing chain



As will be noted from this model, there are various points at which inaccuracies might occur. Some losses result from official error, such as inaccurate or untimely processing of initial claims, or changes in clients' claims. Of key interest in this review are the points at which clients provide personal information about their circumstances, particularly when these circumstances change during a benefit claim. The DWP has identified client failure to notify change of circumstances (CoCs) promptly and accurately as a substantial cause of incorrect benefit payment.

6 Department for Work and Pensions, 2008.

7 ibid., p. 2

It is particularly important, therefore, to provide solid research evidence about effective strategies for reducing fraud or error involved in the notification of 'CoCs', together with research that helps us to understand more about the reasons behind fraud or error, including customers' beliefs, values, understanding and knowledge of systems, and/or the relationship between these factors.

Several recent research studies conducted for the DWP have already focused on these issues. For example, Boath and Wilkinson (2007) visited 21 Local Authorities (LAs) whose performance varied when measured against new DWP output-based targets for reductions in benefit processed. The study also aimed to find out what helped them to achieve the biggest reductions in HB and Council Tax Benefit (CTB). They found that the best performing LAs appeared to do more to educate and remind their claimants about their responsibility to report changes (Boath and Wilkinson, 2007). They also worked with landlords to encourage the reporting of changes of circumstances. Another recent qualitative research study for the DWP (Irvine *et al*., 2008) looked at a range of means-tested benefits and suggested three broad reasons why claimants do not report CoCs:

- knowledge deficits regarding how and when changes should be reported;
- avoidance behaviour, when claimants recognise a change in their circumstances but are anxious about potential negative consequences; and
- deliberate withholding of information.

The authors' recommendations include the provision of better and more personalised education for claimants, making structural changes to reduce error, and, for benefit authorities, exploring ways of anticipating changes and sharing information. Davidson and Sainsbury (2008) have subsequently conducted further, complementary research exploring Standard Housing Benefit claimants' knowledge and understanding concerning their obligations around CoCs. Among other conclusions, the authors point out that there is considerable diversity of knowledge among claimants and that there is scope for enhancing this.

Clearly there is some consensus between the findings of these individual research studies, but, to date, there is no study that systematically and transparently summarises research activity in the field. A systematic review helps to bring a wider perspective to the issues, allowing an overview of a large number of relevant studies.

This review is part of a wider programme of work commissioned by the DWP and carried out by the Evidence for Policy and Practice Information and Co-ordinating Centre (EPPI-Centre) Education and Social Policy research team.

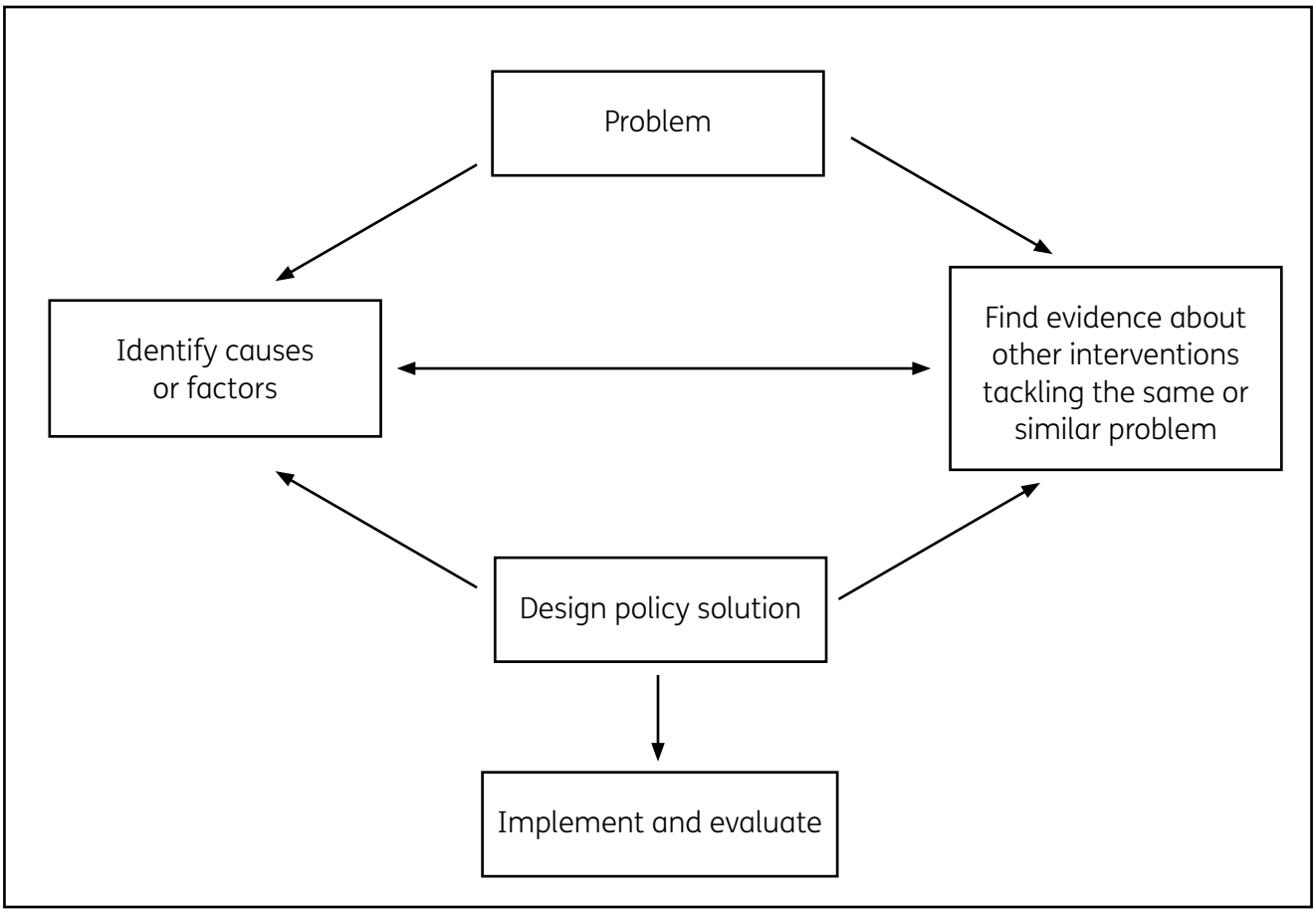
1.2 The contribution of systematic reviews

Systematic reviewing is an explicit, transparent, rigorous method of combining large bodies of research evidence by following a set of standard stages of identifying, appraising, and synthesising all relevant studies. By comparison, a single study may not have enough statistical power to demonstrate a statistically significant effect, or may be unable to provide conclusive results (Greenhalgh and Peacock, 2005; Pettigrew and Roberts, 2007).

The aim of systematic reviews is to provide knowledge to support decision-makers and researchers in making decisions about processes and practices. Figure 1.2 illustrates the general simplified conceptual model of the policy-making process, to which the systematic review can contribute evidence. In essence, this is a problem-solving framework in which policy is viewed as providing a solution in the form of an intervention. The systematic review can contribute high quality evidence to help identify the causes or factors which create or affect a particular problem and thus which will

need to be addressed in the design of any policy solution; it can also contribute evidence about the effectiveness, design and implementation of interventions which have been developed to address the same or similar problems.

Figure 1.2 The contribution of systematic reviews



1.3 Type of review

The review described in this report is a **systematic map** of the research evidence. A systematic map is defined as: '*a classification and description that aims primarily to illustrate the kinds of studies that exist*' (EPPI-Centre, 2007). The map does not aim to provide an answer to a specific policy question. Instead, the aim is to answer a question about the scope, nature and content of empirical research that has been carried out on a particular topic. This means that the question is broad, the searching is extensive, and the results are presented in the form of a descriptive analysis of the research literature in the field.

The mapping exercise in this review used standard procedures and processes developed by the EPPI-Centre (see Appendix A).

1.4 User involvement

An advisory group was set up to discuss the scope and development of the review, and to increase its relevance to policy and practice. Group membership comprised a mixture of researchers and policy specialists representing a number of streams within the DWP. Specific tasks undertaken by the group included advising on the scope of the work, and refining the data-coding questions developed specifically for this review.

1.5 Aims and review question(s)

The overall aim of the review was to locate and describe existing empirical evidence in relation to notification of changes of circumstance, and to inform decisions on directions of future research in this field.

The scope of the systematic map was defined by a broad research question which was produced in consultation between the DWP and the EPPI-Centre team:

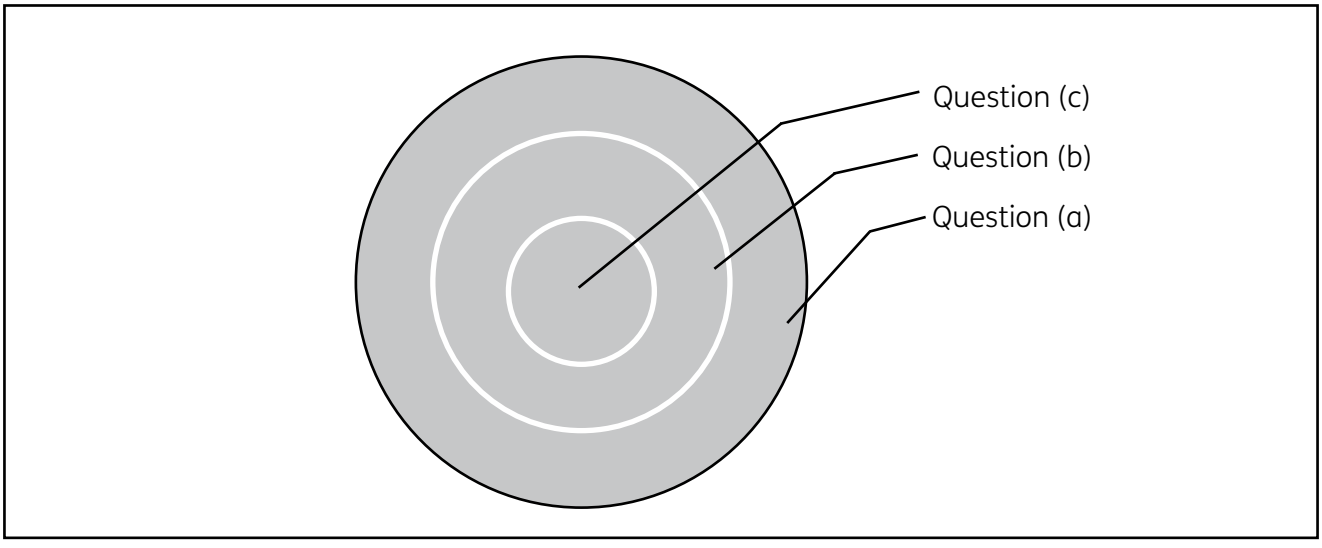
> *What is the empirical research evidence on financial products/services, welfare/benefit provision, and/or the taxation/tax credit systems (FWTT), in relation to notification of CoCs?*

This broad review question was divided into three sub-questions:

> *(a) What empirical research evidence is there on people's attitudes towards financial products/services, welfare provision, and the taxation and/or tax credit system?*
>
> *(b) What empirical research evidence is there on people's attitudes towards financial products/services, welfare provision, and the taxation and/or tax credit system, in relation to notification of changes of circumstances?*
>
> *(c) What empirical research evidence is there on the impact of interventions designed to reduce the amount of error or fraud or improve accuracy in financial products/services, welfare provision, and the taxation and/or tax credit systems?*

The conceptual content of the resulting map is illustrated in Figure 1.3. Question (a) is represented by the outer circle, question (b) by the second largest circle, and question (c) the inner circle.

Figure 1.3 Conceptual diagram of review scope



1.6 Report structure

This chapter presents a background of the systematic map, including the introduction, the contribution of systematic review, type of review, user involvement, aims and review questions. Chapter 2 describes the methods used to identify describe and quality assess studies. Chapter 3 gives the results of the searching and selection process. Chapter 4 presents the results of non-evaluative studies. These non-evaluative studies were further classified into two main groups, covering private and public sectors. These studies were described based on information such as country, population focus, and topic focus and, in particular, coverage of issues relevant to notification of changes of circumstances. Chapter 5 presents the results of evaluative studies. These are the studies that investigate the impact of actions to reduce fraud and error separated into the two categories of 'intervention studies' and 'Value for Money' reports. Five strategies for tackling fraud and error are identified: prevention, detection, deterrence, integrated strategies, and risk assessment. Chapter 6 presents the conclusions, strengths and limitations, and implications of this systematic map.

2 Methods

2.1 Defining relevant studies: inclusion and exclusion criteria

The project described in this report sought to identify and describe the empirical research evidence that addressed the broad research question described in Section 1.5.

To be included in the systematic map, each study needed to meet **all** predefined **inclusion criteria** and **none** of the **exclusion criteria**. Inclusion criteria provide a framework for the systematic process of selecting studies that are relevant to the review, minimising biases arising from reviewers' pre-determined opinions.

The following **inclusion criteria** were logically derived from the review question/sub-questions, and were used to select studies that were relevant to answer the review questions in this report:

- Studies were published in English.
- Studies were published from 1980 onwards.
- Studies were empirical research.
  - Studies were included in the systematic map if they systematically collected primary data.
  - Studies were **excluded** if they were systematic reviews, literature reviews, overviews, testimonies, policy documents, editorials, book reviews, handbooks, manuals, and methodology papers.
- Studies of non-evaluative[8] research evidence that focused on financial products/services, welfare provision, the taxation, and/or tax credit systems (FWTT).
  - Studies were included in the systematic map if they were non-evaluative research and focused on FWTT. 'Non-evaluative' studies were defined as studies that aimed to uncover people's attitudes, perceptions, beliefs, and experiences within a particular context, or studies that explored relationships between variables.
  - Studies were **excluded** if they were non-evaluative studies that investigated (a) barriers to claiming, or taking up, benefits; (b) people's attitudes towards money, financial risks, and/or investment risks; (c) people's financial decisions and behaviours (i.e. spending, saving, borrowing, money management).

[8] Evaluative study = a study that sought to assess the impact of an action, programme or intervention on one or more outcomes. A non-evaluative study = a study which does not aim to assess the impact of an action, programme or intervention on one or more outcomes, but rather investigated attitudes , perceptions, beliefs, values about FWTT with the exceptions noted.

- Studies reported an evaluation of programmes aiming to reduce the amount of error, fraud, or improper payments within FWTT.
  - The review team included studies that aimed to systematically assess processes and/or outcomes, to make judgement of, and to provide feedback to the programmes/interventions aiming to reduce error or fraud within FWTT. In addition, the review team also included Value for Money (VfM) reports. These aimed to assess the performance of government agencies or government departments in tackling fraud and/or error (or specific programmes in relation to fraud and/or error implemented by these entities).
  - The government agencies or departments of interest are those that (a) provide services to welfare recipients, low-income families, pensioners, or taxpayers, and (b) are responsible for implementation of income maintenance programmes, food programmes, revenue collection systems, and/or healthcare provision. However, annual reports or fiscal year performance reports of these organisations were not within the scope of this systematic map.
- Studies of non-evaluative research evidence carried out in the UK.
  - Non-evaluative studies were **excluded** if they were carried out outside the UK.

For the purpose of this review, the authors defined the scope of FWTT as follows, including, but not limited to:

- Loans or other lending products (i.e. credit cards, store cards, overdraft, leasing, mortgages).
- Insurance (i.e. home insurance, car insurance, travel insurance, private medical insurance, motor insurance, payment protection insurance).
- Saving and short-term investment accounts (i.e. banks and building societies savings accounts, Individual Saving Accounts, bonds, shares, credit unions).
- Bank accounts and their features (i.e. cheque books, debit cards, direct debit services).
- Mutual funds.
- Income-related benefits (e.g. Jobseeker's Allowance (JSA), Pension Credit).
- Non-income-related benefits (e.g. Statutory Sick Pay).
- Income Tax, Inheritance Tax, VAT.
- Working Families' Tax Credit.

Studies of financial statement fraud, auditing fraud, and consumer fraud were not within the scope of this systematic review.

Full details of the inclusion/exclusion criteria are presented in Appendix C.

2.2 Searching for studies

The aim of the literature search was to locate research evidence relevant to answering the review questions. A highly sensitive search strategy was developed using the review questions and the conceptual framework. Full details of the search strategy are given in Appendix B. The following range of sources was used:

- Twelve bibliographic databases.
- Websites of 29 organisations known to have an interest in the topic areas of the review.
- Website search engines (Google and Google Scholar).

The search terms (or keywords) were developed iteratively, using a combination of techniques as follows:

Free-text terms and relevant index terms were identified (both synonyms and antonyms) which could be used to describe the important concepts (e.g., fraud, error, improper payments, welfare/benefit provision, financial products/services, attitudes, perceptions, values).

Pilot searches were undertaken to test the identified terms, which were then refined and used to search the bibliographic databases.

Searches were conducted during the period November–December 2007. All searches covered the period 1980–2007. All citations identified in the above searches were imported into the Evidence for Policy and Practice Information and Co-ordinating Centre (EPPI-Centre's) custom-designed, in-house reviewing software, EPPI-Reviewer, and scanned for relevance against the selection criteria (Thomas and Brunton, 2006).

2.3 Screening

Inclusion criteria were applied first to titles and abstracts of reports that were identified at the screening stage. If there was insufficient information in the titles and abstracts to be sure, full reports were obtained. The inclusion criteria were re-applied to the full reports and those that did not meet the criteria were excluded.

2.4 Coding

Included studies were coded for the contextual (i.e. objectives, characteristics of the intervention, population) and methodological information using the coding tool. The coding tool used in this review used a standard EPPI-Centre coding framework supplemented by additional questions developed specifically for this review, in consultation with the Department for Work and Pensions (DWP). The initial coding of all studies included in the systematic map provided data for the purposes of describing, or mapping, the overall field of research on the topic area, including:

- Types of studies (non-evaluative studies, evaluative studies, or VfM reports).
- Where research has been conducted (i.e. country and other contextual features).
- Research design.
- Who has been studied.
- What has been researched (e.g. types of intervention).
- What kinds of outcomes/results have been investigated.

For full details of the coding tool, see Appendix D.

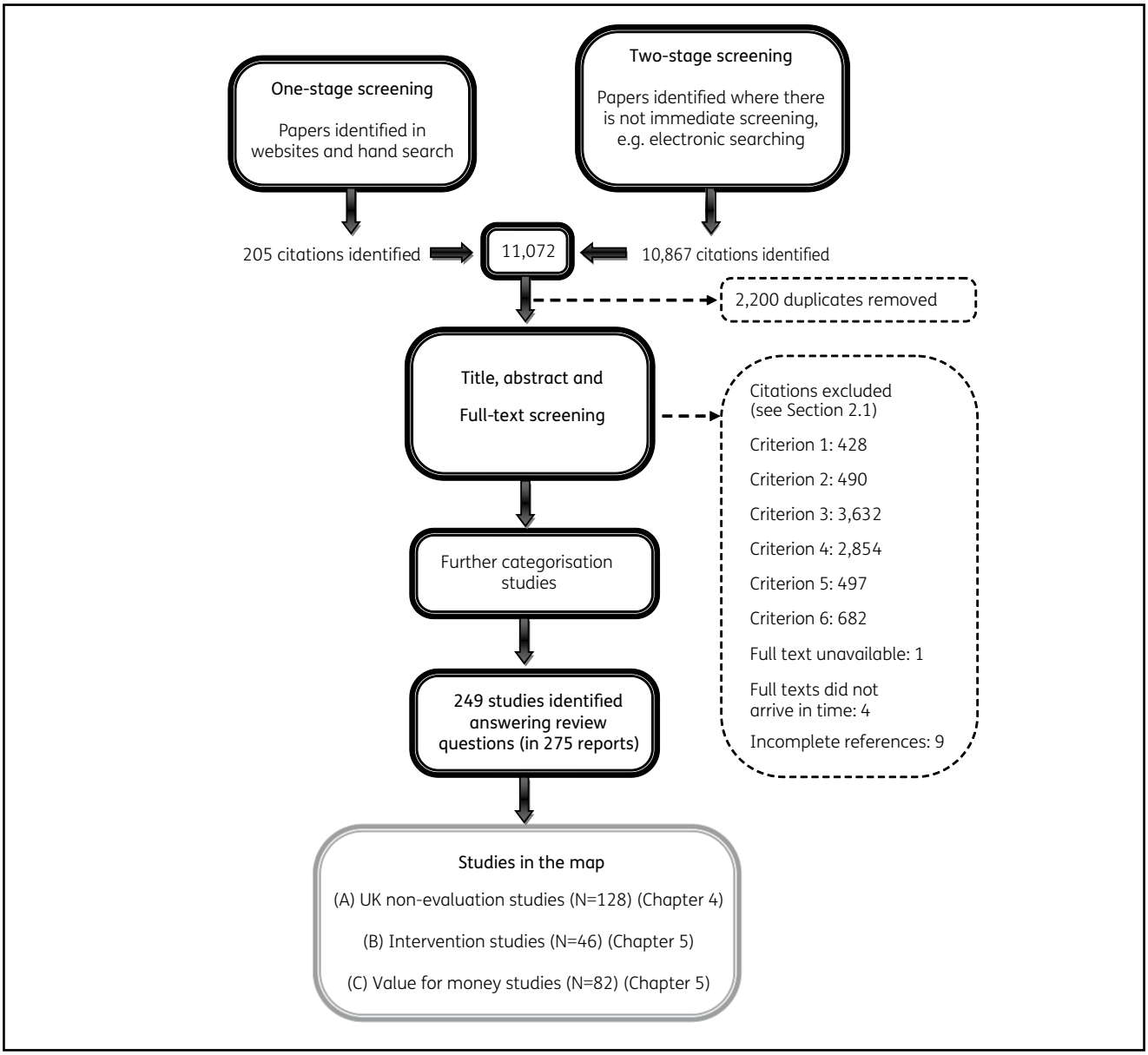
2.5 Quality assurance

All team members involved in screening and coding took part in moderation exercises, during which results were discussed to ensure consistency in interpretations of the review inclusion criteria and the coding tool. Where a reviewer was unable to reach a decision, consensus was reached through discussion with the team leader, and occasionally a third team member. The team leader also carried out independent audits of each team member's screening decisions and coding on a random sample of papers.

3 Results: search and selection of included studies

Our search strategies from the bibliographical databases yielded 10,867 citations. There were 205 reports identified from websites and handsearches. Excluded from the review were 2,200 citations, which were duplicates. In total, 8,872 reports were screened against the pre-defined inclusion/ exclusion criteria. A large proportion of reports (N=3,632, 41 per cent) were excluded because they were not reports of primary research. On the basis of the full texts, 357 reports were retrieved and screened, except for five reports that were either unobtainable or did not arrive in time. Nine studies did not have sufficient information to be screened or full-text retrieved. A total of 249 studies (reported in 275 papers) were identified and included in the map. Of these, seven studies answered more than one of the review sub-questions. The detailed results of the selection process are given in Figure 3.1.

Figure 3.1 Selection of studies



4 Results: UK-evaluative studies

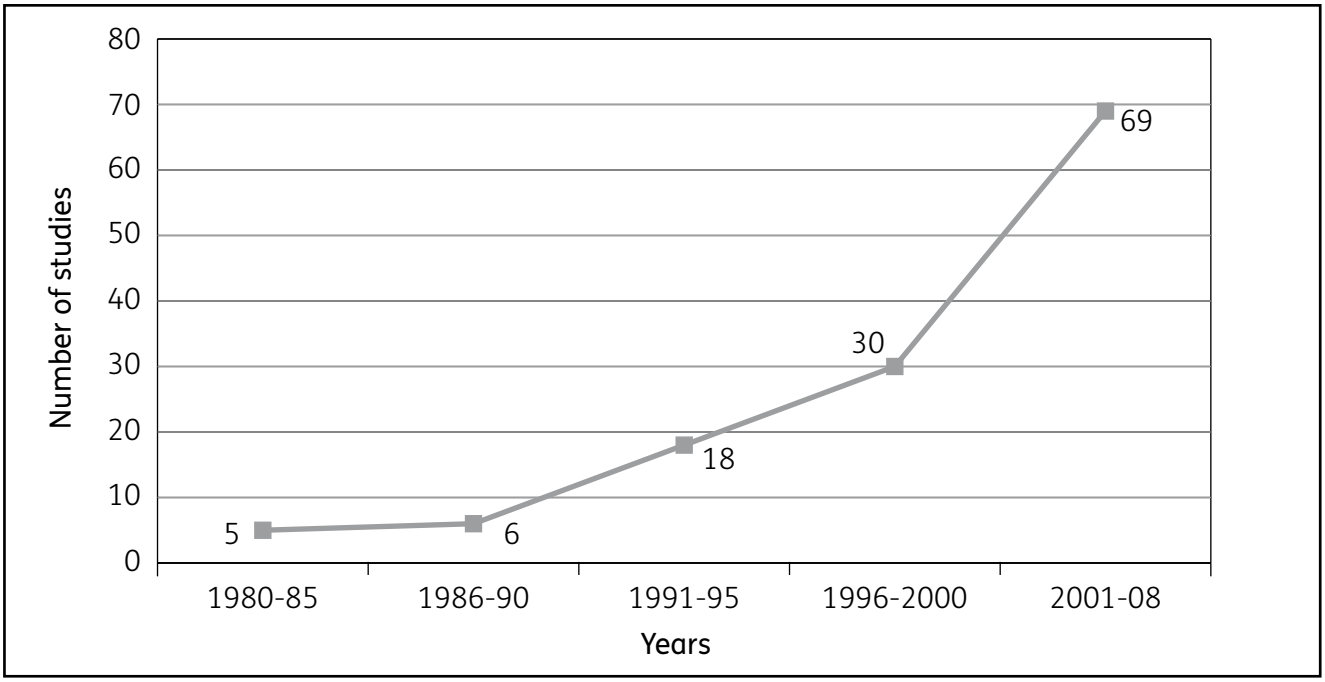
4.1 Overview

This chapter presents results of the non-evaluative studies (N=128) focusing on people's attitudes, perceptions, beliefs, and experiences of financial products/services, welfare provision, the taxation, and/or tax credit systems (FWTT). Of the 128 studies, 12 were cross-national comparison studies, comparing the UK with one or more countries.

4.1.1 Year of publication

Figure 4.1 shows plots the number of publications in four year-periods since 1980. The figure shows that there has been an increase in research activity in this field in the last ten years. Ninety-nine studies (77 per cent) were published after 1996, compared with only 29 between 1980 and 1995.

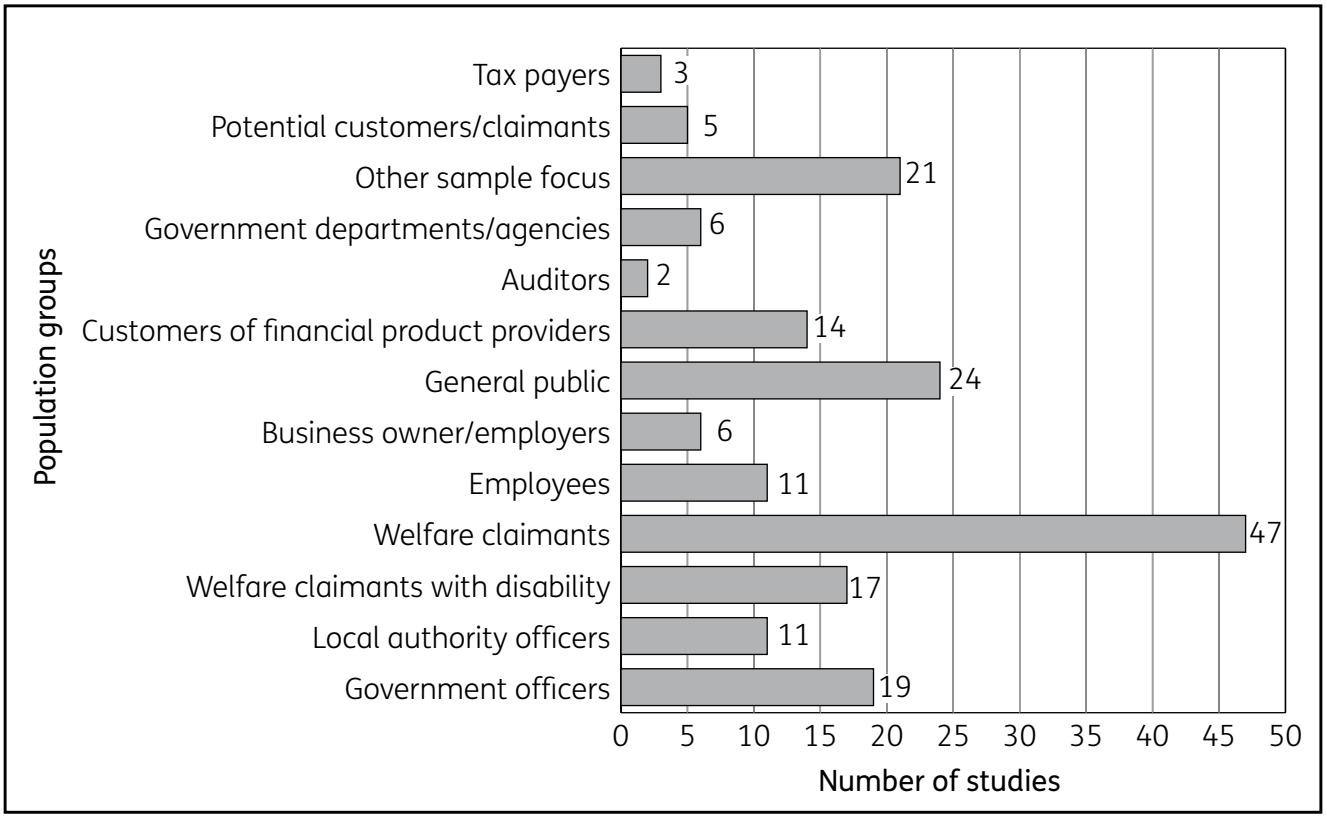
Figure 4.1 Rate of study publication between 1980 and 2008 (128 studies)



4.1.2 Who were included in the studies?

Half of the studies (50 per cent) explored the attitudes of welfare claimants, including welfare claimants with disability. Twenty-four studies focused on the general public, 14 studies had customers of financial product providers or government agencies as a population focus, and 19 studies explored government officers' views. Twenty-one studies were coded as 'other sample focus', such as landlords, fraud investigators, or experts in the topic areas (see Figure 4.2).

Figure 4.2 Population groups (128 studies)



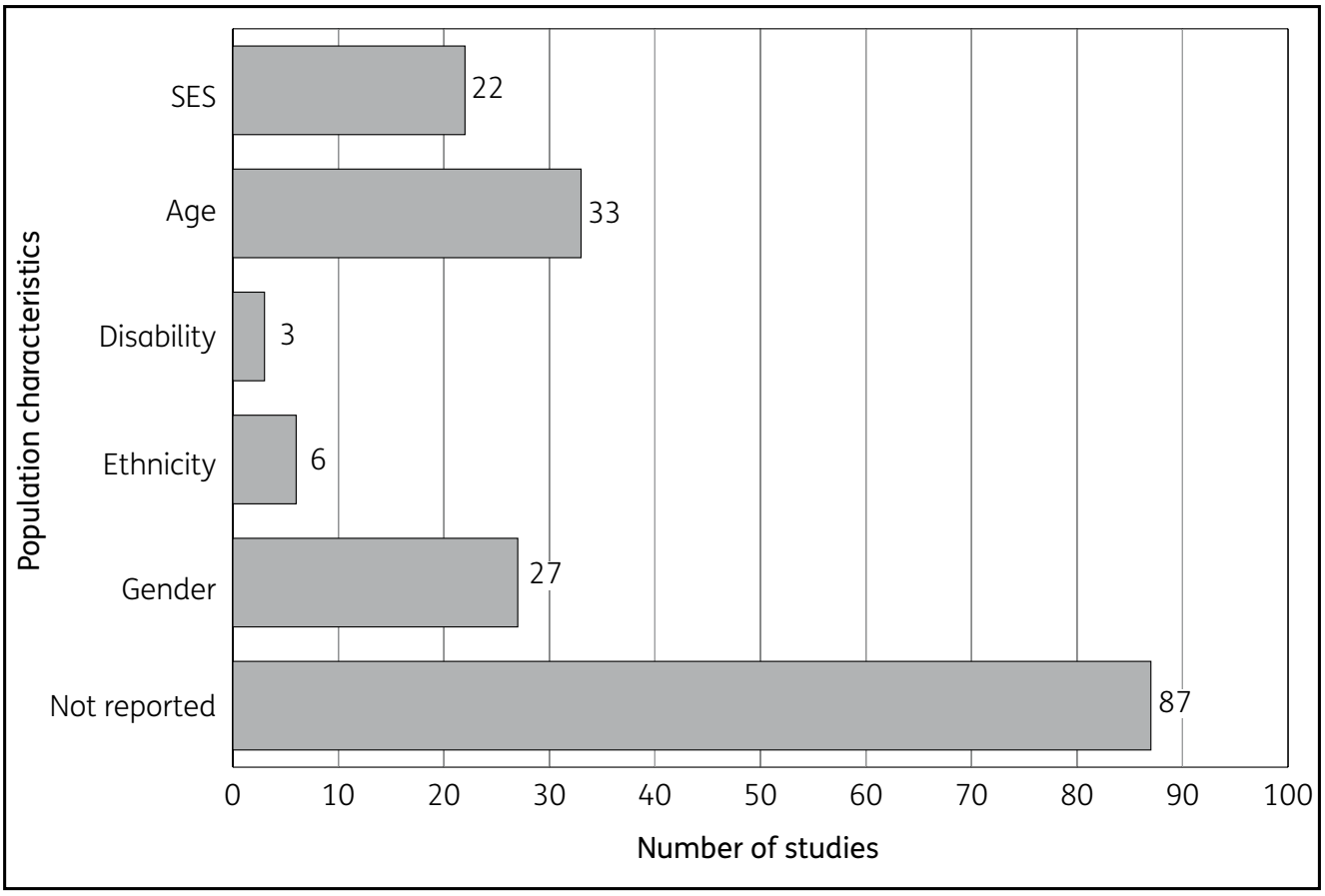
4.1.3 Gender

A majority of the studies included both males and females (63 per cent) and only of two studies appear to focus on with a male-only population (Atkinson and McKay, 2005b; Lewis, 1982). Forty-six studies were coded as 'not stated/unclear' or 'not applicable'. No study that included only female participants was found.

4.1.4 Results reported by population characteristics

As Figure 4.3 shows, the majority of the studies (70 per cent) did not report results by population characteristics. Around one-quarter of the studies (26 per cent) reported outcomes by age. A smaller proportion of the studies reported outcomes by gender (21 per cent), socio-economic status (17 per cent), ethnicity (five per cent), and disability (two per cent).

Figure 4.3 Results reported by population characteristics (128 studies)



4.2 On what did the studies focus?

In the following section, more detailed information is provided about the 128 studies which are grouped according to whether they reported findings related to:

- the private sector; or
- the public sector.

4.2.1 Non-evaluative research on private sector

There were no studies identified that focused on the issue of notification of change of circumstances (CoCs) in the private sector.

Fraud was the main focus of eight non-evaluative studies in the private sector group. Of these eight studies, two studies focused on fraud in the tax and insurance industries (McBarnet, 1991; Morley *et al.*, 2006), while one investigated credit and other card fraud (Levi, 1998). Another study explored possible explanations for ethically questionable consumer behaviour, including the occurrence of insurance fraud (Fukukawa, 2002). Other studies considered British corporate responses to fraud (Levi, 1991), corporate fraud and regulatory failures (Matthews, 2005), and compliance in the financial services industry (Bosworth-Davies, 1993; Edwards and Wolfe, 2007).

Thirty-four studies investigated, in a variety of ways, general attitudes to financial products or services in the private sector. Of these 34 studies, several (N=12) aimed to explore people's attitudes towards pension systems, including pension saving schemes, such as Personal Accounts. Five studies aimed to explore attitudes towards, or perceptions of, loans and credit products. A further five studies focused

on attitudes towards insurance products or services, such as unemployment insurance, life assurance, mortgage protection insurance or experiences of vehicle insurance claiming. Four studies examined customers' attitudes to corporate reputations, such as their approach to service fairness, trust and loyalty. Attitudes to service delivery technology (i.e. Automated Teller Machines (ATMs), internet banking) were explored in three studies. The remaining studies observed customers' attitudes towards bank services (N=3), or saving and investments (N=2).

4.2.2 Non-evaluative research on public sector

Ninety-nine studies explored people's attitudes towards FWTT in the public sector. The studies were sub-classified, based on the main topic foci reported in each study (see Figure 4.4).

Studies focused on notification of 'change of circumstances'

Notification of CoCs was the focus of six studies. Specific areas of investigation included barriers to reporting CoCs (Boath and Wilkinson, 2007; Ritchie and Chetwynd, 1997), modes of contacts with agencies (Howat and Sims, 2006; Russell and Whitworth, 1992), rules and responsibility awareness (Ritchie and Chetwynd, 1997), characteristics of claimants who did not notify or who delayed reporting CoCs (Trott and Lessof, 1998), and policies, procedures, and practices of Local Authorities (LAs) on overpayments in Housing Benefit (HB) and Council Tax Benefit (CTB) (Sainsbury, 2000).

A further ten studies also discussed issues related to reporting CoCs; however, this was not the main topic focus of the studies (Adams *et al*., 2004; Atkinson and McKay, 2005b; Bell *et al*., 2006; Coleman *et al*., 2002; Furnham, 1987; Griggs *et al*., 2005; Irving *et al*., 2003; Pettigrew *et al*., 1999; Stafford *et al*., 2000; Turley and Thomas, 2006).

Studies focused on 'fraud' in relation to welfare support or services in public sector

A total of 31 studies were identified which explored people's attitudes to fraud in relation to public welfare support or services.

Social security/benefit fraud was the focus of ten studies. For example, Rowlingson *et al.* (1997) explored the nature of benefit fraud claimants and their views of benefit fraud. The study by Dean and Melrose (1996) focused on the attitudes and motivations of claimants directly engaged in benefit fraud. The remaining studies in this group were those by Bradshaw and Mayhew (2004), Boon *et al.* (2004), Evason and Woods (1995), Hills (2002), MacDonald (1994), McKenna *et al.* (2005), Sainsbury *et al.* (1998), and Thomas *et al.* (2000).

Nine studies provided estimates of the level of fraud and error in the financial welfare support system (Department for Transport, Local Government and the Regions, 2001; Department for Work and Pensions (DWP), 2005, 2006, 2007a; HM Treasury, 2006; National Audit Office, 1987, 2006; Nam *et al*., 2001; Wilson*et al*., 2006).

People's views on tax morals and evasion were explored in six studies, two of which were cross-national in focus (Alm and Torgler, 2006; Dean *et al*., 1980; Frey and Torgler, 2007; Furnham, 1987; Keenan and Dean, 1980; McBarnet, 1991).

Three studies were identified which had a specific focus on the issue of compliance/non-compliance, in relation to the Poll Tax (Adams and Webley, 2001), VAT (Besley and Preston, 1997) and the Child Support Agency (Atkinson and McKay, 2005a).

One study focused on National Health Service (NHS) fraud (NHS Counter Fraud and Security Management Service, 2007).

Two further studies each focused on the role of agencies fighting fraud against European public funds (Quirke, 1999), and counter-fraud specialists (Button *et al*., 2007).

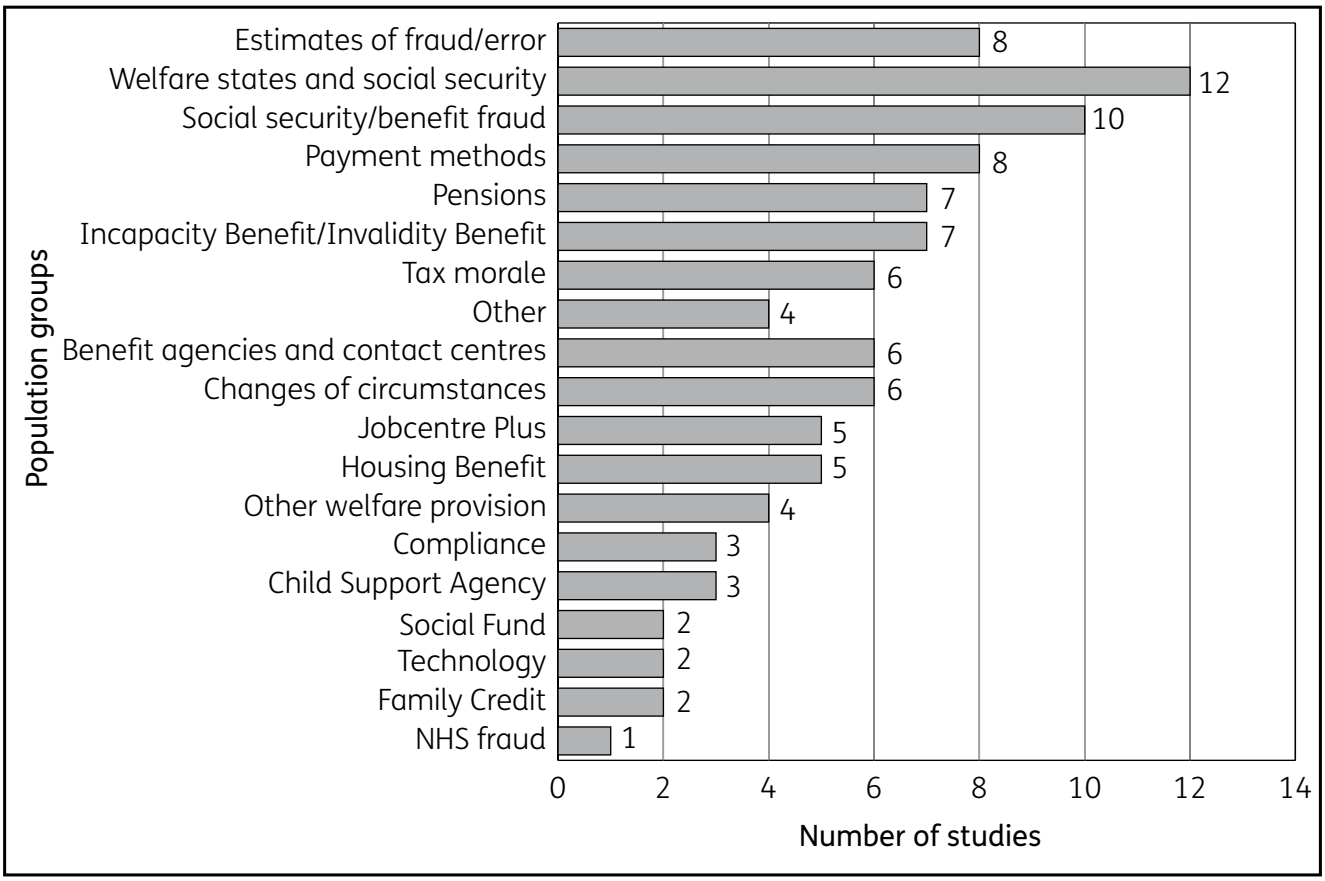
Studies focused on general attitudes to welfare support and services in the public sector

We identified a large number of studies that investigated, in a variety of ways, people's attitudes to welfare support and services in the public sector, but which did not directly focus on the issues of reporting CoCs or fraud.

Twelve studies explored general attitudes towards the welfare state and social security. A further 29 studies studied knowledge, belief and attitudes to specific forms of public welfare benefits. These included attitudes towards publicly funded pensions, Incapacity Benefit, formerly Invalidity Benefit, HB, Family Credit, the Social Fund, tax credits, unemployment benefit and other welfare provision. Government agencies were the main topic focus in 14 studies overall, including the former Benefits Agency, Benefit contact centres, Jobcentre Plus, and the former Child Support Agency.

Payment methods (i.e. direct payments, or Automatic Credit Transfer) were addressed in eight studies, with a further two studies exploring electronic service delivery. Other topic focus included the cost of HB and Council Tax administration, the Independent Case Examiner[9], healthcare rationing, and Active Modern Service (AMS)[10].

Figure 4.4 Topic foci of the non-evaluative studies in the public sector (99 studies)



9 The Independent Case Examiner (ICE) provides an independent investigation for customers who are not satisfied with the way the Government Agencies or businesses treated them or dealt with their cases (Bunt *et al.*, 2007).

10 These included joint customer visits, tele-claiming, joint electronic claim forms, customer kiosks, joint information and advice, integrated working, data-sharing and casework. (Rose, 1999).

4.3 Summary

Of the 128 UK non-evaluative research studies, 12 were cross-national comparison studies, comparing the UK with one or more countries. Over three-quarters of the studies (77 per cent) were published in 1996 or later. Half of the studies had specific focus on welfare claimants, including those with disability.

Thirty-eight studies mainly focused on financial products and services in the private sector, while about three-quarters of the studies (77 per cent) explored people's attitudes towards public welfare support and services.

4.3.1 Changes of circumstances

The 16 studies that included the issue of notification of CoCs explored barriers to reporting CoCs; modes of contacts with agencies; rules and responsibilities awareness in reporting CoCs; and profiles of claimants who did not notify or who delayed reporting CoCs and overpayments in HB/ CTB.

4.3.2 Fraud

The topic of 'fraud' was the main focus of eight studies within the private sector group of studies. These studies covered a wide range of issues, including credit card fraud, fraud in an insurance industry, compliance in the financial service industry, and corporate responses to fraud.

Thirty-one studies focused on 'fraud' in the public sector group of studies. These studies addressed various facets of the issue of fraud, including benefit fraud, people's views on tax morals and evasion, compliance in the Poll Tax, and the roles of anti-fraud specialists and agencies.

4.3.3 General attitudes towards FWTT

A significant body of research identified in the systematic map explored general aspects of FWTT in both public and private sectors, but the main topic foci were not on issues of changes of circumstances or fraud.

5 Results: evaluative studies

This chapter presents the results of the evaluative studies focusing on financial products and services, welfare provision, and the taxation and/or tax credit systems (FWTT) in the systematic map. The 'evaluative studies' were defined, for the purpose of this systematic map, as studies that aimed to systematically assess processes and/or outcomes, to make judgement of, and to provide feedback to the programmes/interventions/policies. In this chapter, the evaluative studies have been categorised into two main groups: (a) intervention studies (Section 5.1) and (b) Value for Money (VfM) reports (Section 5.2). In order to describe the studies in more detail, they were categorised further into five main types of intervention strategy:

- prevention;
- detection;
- deterrence;
- integrated strategies; and
- risk assessment.

5.1 Results: intervention studies

5.1.1 Overview

The authors identified a total of 46 intervention studies. The majority of these studies were conducted in the UK (43 per cent) and the USA (37 per cent) (see Figure 5.1). Of the remaining studies, three were conducted in Spain, three in Canada, and one each in Australia, Taiwan and the Netherlands. The study samples included employers, welfare claimants, landlords, welfare claimants, customers of financial product providers (for example, people who have insurance, loan, or credit cards), and government officers in 11 studies, Local Authority (LA) officers (see Table 5.1). Only ten studies performed sub-group analysis or reported outcomes by ethnicity (N=1), gender (N=3), age (N=4), socio-economic status (N=1), or disability (N=1). Table 5.2 shows the study designs employed in the studies. Eighteen studies used qualitative evaluation methods (for example, focus group interviews, in-depth interviews, or case studies). Another 18 studies employed simulation/ modelling methods in their studies and only two studies used experimental designs with random allocation of participants to groups receiving and not receiving the intervention (Randomised Controlled Trials (RCTs)).

Figure 5.1 Intervention studies by study country (46 studies)

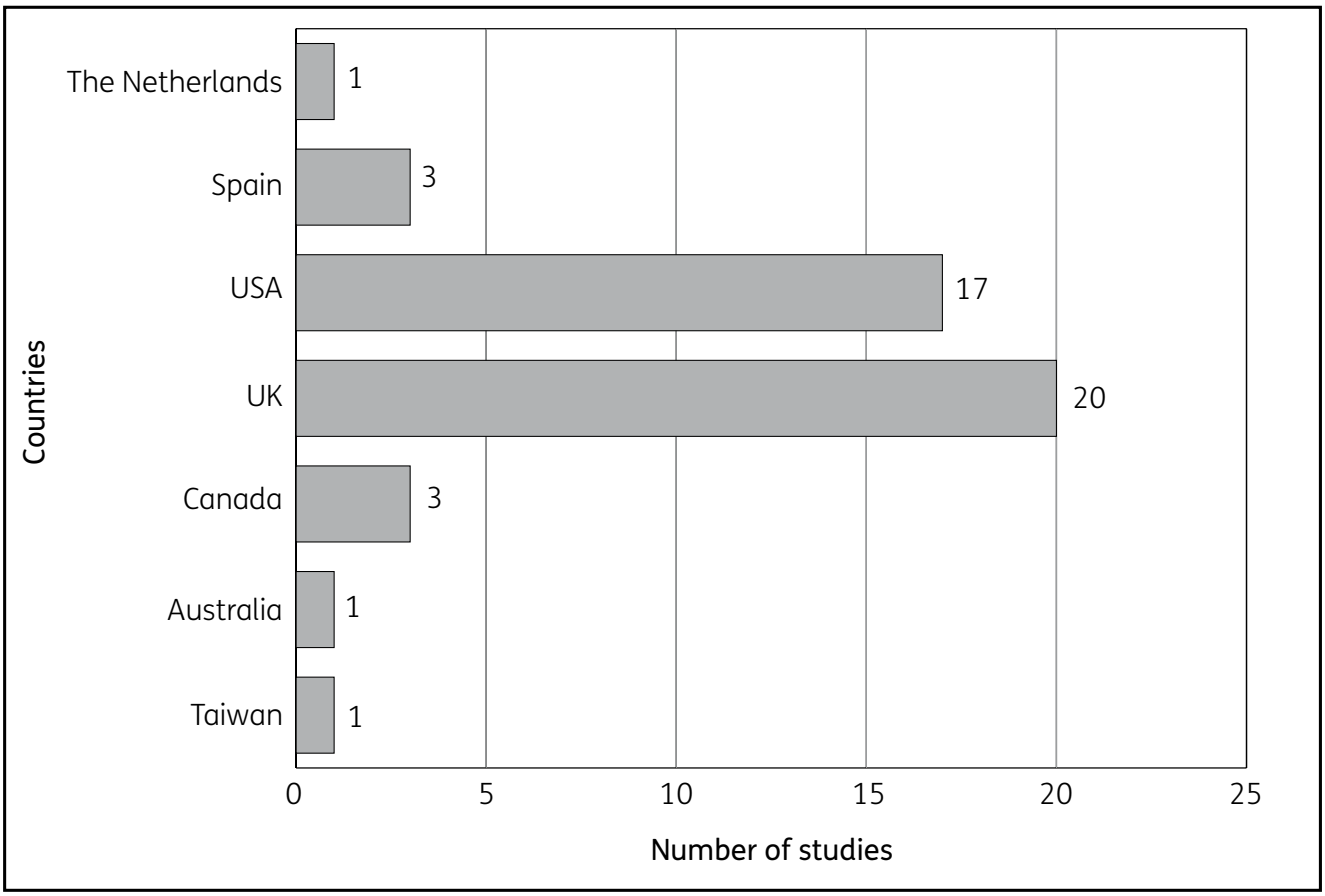


Table 5.1 Population groups in the studies (46 studies)

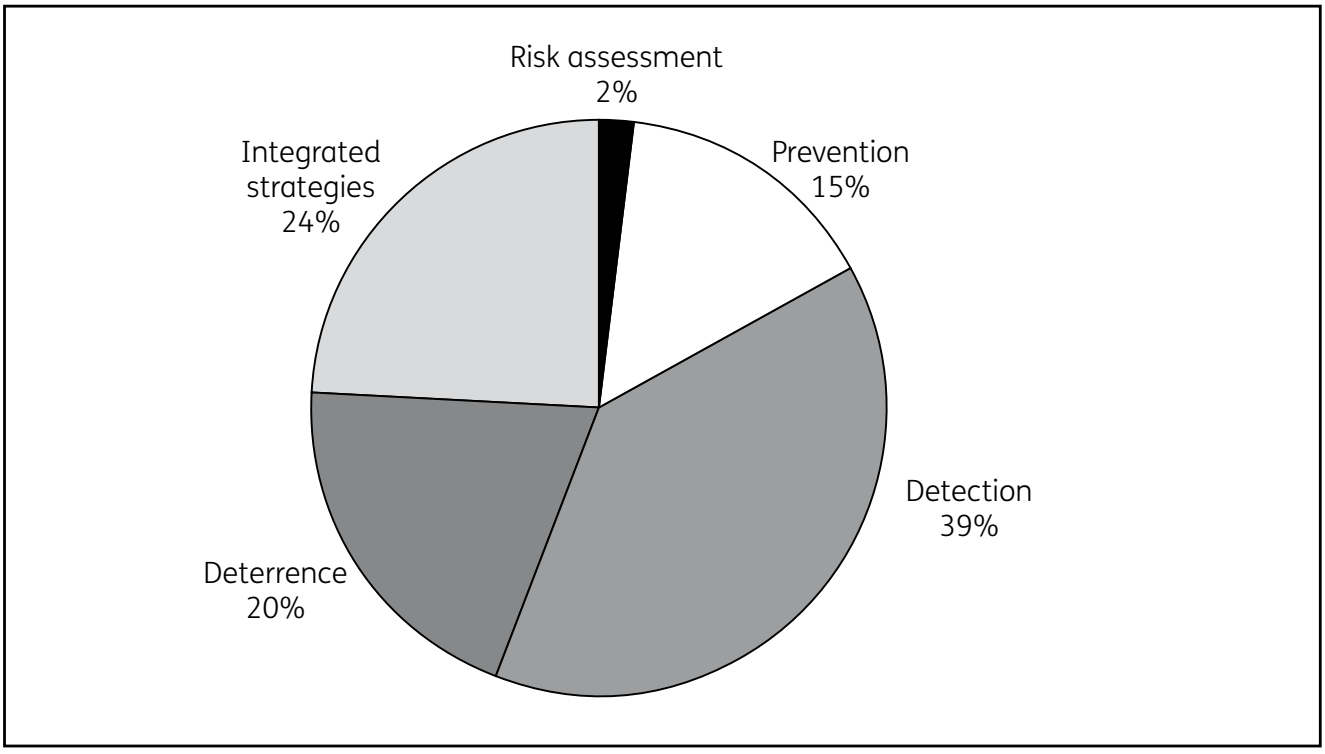
Population focus	Number of studies
Welfare claimants	18
Customers of financial product providers	14
Government officers	11
LA officers	7
Other sample focus	6
Employees	3
Potential customers/claimants	3
Welfare claimants with disability	3
Government departments/agencies	2
Business owner/employers	1
General public	1

Table 5.2 Study designs (46 studies)

Study designs	Number of studies
Cohort study	1
Cross-sectional	5
Document/database/administrative records study	2
Ethnography	1
Experimental with non-random allocation to groups	3
Other	1
Randomised controlled trials	2
Simulation/modelling	18
Single group post-test only (no control groups)	2
Single group pre-post test (no control groups)	1
Views	18

The studies were grouped into five main categories by type of intervention strategy. In each category, the results presented were in both public and private sectors. The characteristics of studies within these groups are also described. These five groups are mutually exclusive. Almost half of the studies evaluated detection strategies (N=18). Seven studies investigated prevention provision. Deterrence strategies were investigated in nine studies. Eleven studies focused on integrated strategies and one on risk assessments (see Figure 5.2).

Figure 5.2 Type of intervention (46 studies)



5.1.2 Prevention interventions

These interventions include actions or mechanisms within an organisation that aim to introduce new preventive measures. Examples include electronic service delivery, employee training and communications; and creating ethical values in the organisation, including programmes or activities that aim to increase public or customers' knowledge, understanding and awareness about welfare/benefits/services/products and service procedures (i.e. claim forms, CoCs, and payment methods) to prevent and minimise risks of fraud and error.

Of the seven studies evaluating prevention interventions, three were carried out in the UK. A further three were conducted in the USA and one in Canada. Participants in these studies were welfare/benefit claimants (N=3), LA officers (N=2), potential customers/claimants (N=2), business owner/employers (N=1), customers of financial product providers (N=1), government officers (N=1), welfare claimants with disability (N=1), and landlords (N=1).

The research conducted on prevention strategies focused mainly on preventing fraud and/or error at the point of entry of a system (i.e. the verification framework, home visit) or, at the other end, on payment methods (i.e. direct payment, electronic benefit transfer card). Within the prevention strategy group, we found only one RCT. This study evaluated personal advisors or caseworkers who act as an agent to remind or encourage participants to report changes in circumstances. Participants (N=961) in the study were randomly allocated into three groups: a) never visited by the caseworker; b) visited only during the application stage; and c) visited at both at the application stage and followed up the forth month (Cox *et al*., 1986).

The preventive studies reported the following outcomes: amount of error or incorrect payments (N=2); satisfaction (N=3); attitudes and experience (N=3); programme performance and integrity (N=2); operational process/information management (N=2); service delivery (N=3); fraud detection and claim classification; and other (N=1).

A summary of preventive strategies reported is as follows:

Financial state welfare/benefit provisions/government agencies

Registered Social Landlord (RSL) Verification Framework Pilot

This pilot enabled RSL's to check claims and verify evidence required under the Housing Benefit/Council Tax Benefit (HB/CTB) verification framework. The Verification Framework (VF) is a voluntary programme. It introduces the minimum standards of evidence and checks required for the administration of HB throughout a claim process. The study by Carlisle and others (2003) aimed to determine the impact of the pilot programme. Interviews were carried out with tenants, RSLs and staff from LAs (Carlisle *et al*., 2003).

Home visit

This study investigated the roles of caseworkers in home visitation in the Aid to Families with Dependent Children (AFDC) programme. Caseworkers exchanged information with clients regarding rights and reporting responsibilities and other relevant information, such as eligibility and changes in regulations (Cox *et al*., 1986).

The Verification Framework

The study explored LAs' experiences of setting up and implementing the VF by carrying out in-depth interviews with staff at 14 LAs in England, Scotland and Wales (Pettigrew *et al*., 2001). The VF programme is designed to prevent fraudulent claims. The VF provides a basis to improve accuracy and reduce error in administration by defining the minimum standards for required evidence when a claim is made for HB and/or CTB, and to implement reviews and follow-up visits.

Electronic Benefit Transfer (EBT) cards

The study investigated the impact of EBT cards for preventing fraud in the Food Stamp programme, using data collected through a structured self-administered mail questionnaire answered by college students in rural Alabama (Zekeri, 2004). The EBT card provides potential to prevent fraud and reduce the cost of administration in the Food Stamp programme in the USA. Food stamp recipients use their EBT cards at food stores and then swipe the card through the card reader and enter their personal identification numbers (PINs) at the terminal.

Direct Payment

The study explored views and experiences of customers who receive benefits and pension payments by Direct Payments, including data on whether they received the correct payments at the correct time. The direct payment system is seen to reduce administrative costs, contributing to a reduction in fraud and error (Adams *et al*., 2004).

Electronic Banking Techniques

The pilot project of electronic transfer system for cash and the Food Stamp in the USA was investigated using three data sources. The electronic transfer system established electronic account balances for benefit recipients to access benefit payment through the use of a debit card at terminals, such as bank ATMs or transaction authorization machines (Harris *et al*., 1997).

Insurance products/services

Deductable contracts

These provide preventive mechanisms to insurance companies, as the contracts allow insurance companies to pay insurance policy-holders only when the total reported loss is more than the deductable. The contract is recognised as a preventive measure especially in the form of build-up[11] because the benefits of doing so are minimised. The study investigated the impact of the deductible contracts that might affect fraudulent claims in automobile insurance (Dionne and Gagne, 2001).

5.1.3 Research conducted on detection strategies

Detection strategies include actions, policies, procedures or techniques designed to address and identify risks of fraud and/or error once customers enter the system. More than half of the studies were carried out in the USA (N=11). Two studies were conducted in Canada, one in Taiwan, one in the UK, and three in other European countries.

Participants in the detection intervention studies were: customers of financial product providers (N=11), welfare claimants (N=3), government officers, LA officers, employees, government departments, and healthcare providers (each N=1).

[11] An attempt by the insured to inflate the damages resulting from a true automobile accident (Dionne and Gagne, 2001).

The studies in the detection strategies category reported the following outcomes: amount of error/ incorrect payment (N=1); revenue from recovery (N=1); cost/benefit (N=5), satisfaction (N=1); attitudes and experience (N=1); programme performance and integrity (N=1); and fraud detection and claim classification (N=14).

A summary of detection strategies reported is as follows:

Insurance products/services

Data mining and statistical computer programme techniques

Data mining is the exploration of existing data sets to detect deviations from 'normal' patterns of relationships between variables that may indicate fraudulent activity. Eleven studies investigated these types of techniques focusing on insurance fraud detection. These techniques included the following:

- Electronic Fraud Detection (EFD), a hybrid knowledge/statistical-based system for fraud detection – the Major and Riedinger study (2002) piloted the system on healthcare providers.
- Statistical modelling such as regression (Belhadji *et al*., 2000).
- Self-Organising Map (Brockett *et al*., 1998).
- Principal component analysis of RIDIT scores (PRIDIT), a statistical technique to detect fraudulent activities (Brockett *et al*., 2002).
- Fuzzy techniques (Derrig and Ostaszewski, 1995).
- Multinomial logit model (Caudill *et al*., 2005).
- Binary classification techniques (Artis *et al*., 2002; Viaene *et al*., 2002).
- Boosting Naïve Bayes (Viaene *et al*., 2004).
- Other data mining techniques (Rejesus *et al*., 2004; Viaene *et al*., 2007; Weisberg and Derrig, 1998).

Financial state welfare/support provision/government agencies

Data matching

The New Jersey programme conducted computer data matching of the Social Security Numbers (SSNs) of welfare claimants against the SSNs of those on public and private payrolls (from the tax records). When suspected cases were detected, an investigation was launched to determine whether earnings had been understated. The study also aimed to investigate the cost-effectiveness of implementing the programme (Englander and Englander, 1985).

The Public Assistance Reporting Information System (PARIS) is a computer data-matching and information exchange administered by the Administration for Children and Families (AFC) in the USA. It was designed to match the enrolment data in one state using SSNs from the Temporary Assistance to Needy Families (TANF) Programme, the Food Stamp programme, and Medicaid, with data from other participating states and from a sample of Federal databases. This allowed for the interstate match. This means that the SSNs were matched with other participating states' data to determine whether recipients registered with more than one benefit programme. The study also aimed to assess the cost benefit of PARIS, as well as to underpin the effectiveness of PARIS implementation (Health Systems Research Inc., 2007).

Financial incentive

This scheme was set up to encourage LAs to be cautious about potential fraudulent claims, by allowing them to share any savings achieved above their share of a national baseline (Smith, 1997).

Health care provision

Expert systems

Martin and Harrison (1993) examined the use of expert systems to detect claims payment error in a healthcare sector.

Data mining

One study conducted in Taiwan proposed a data-mining framework, using the data set from the National Health Insurance programme (Yang and Hwang, 2006).

Bank products/services

Expert systems

The rule-based expert system is designed and used for detection of consumer credit card fraud by carrying out account activity analyses (Leonard, 1995).

5.1.4 Research conducted on deterrence strategies

Deterrence strategies include activities that aim to deter potential fraudsters by imposing penalties, setting up investigation functions, or promoting public awareness of penalties involved in defrauding and its consequences (e.g. the likelihood of detection, sanctions, recovery of debts, and prosecution).

Of the nine studies in this category, five were conducted in the UK, three in the USA and one in Australia. Participants in the deterrence studies were as follows: LA/government officers (N=2); welfare claimants (N=3); customers of financial product providers (N=2); general public, employees; government departments; and attorneys and/or investigators (each N=1).

The deterrence studies reported the following outcomes: cost/benefit of the programme (N=2); sanction and penalty (N=3); compliance (N=1); fraud detection and classification (N=1); attitudes and experience of programmes, relating to accuracy or changes of circumstances (N=4); programme performance and integrity (N=1); and prosecution and recovery (N=2).

The deterrence strategies investigated were as follows:

Financial state welfare/support provision/government agencies

Sanctions

One study evaluated the effectiveness of 'the sanctions regime' imposed on benefit claimants who commit fraud. This provision adopted by the Department for Work and Pensions (DWP) is comprised of three elements: prosecutions for the most serious or persistent fraudsters, administrative penalties, and cautions. The other provision evaluated in this study is 'Two Strikes' provision where customers' benefit entitlement may be reduced or withdrawn, if they are convicted of two separate benefit fraud (Boon *et al*., 2004). The other study by Peters and Joyce (2006) investigated the process and impact of the sanctions on Job Centre Plus programmes (e.g. Jobseeker's Allowance (JSA), New Deal For Young People, New Deal 25 Plus) and aimed to assess to what extent the sanctions act as a deterrent (Peters and Joyce, 2006). These sanctions can be related directly to

employment (for example, sanctions for misconduct or leaving voluntarily) or employability (for example, sanctions for not looking for work or not to improve employability). The benefit entitlement can be removed or reduced for a period of time.

Local Authorities' discretionary powers

This is a range of discretionary powers which LAs can use for administrating HB. The study was focused on the powers in two parts: denying any payment directly to landlords, and withholding payments of benefit to claimants whose entitlement is in doubt (Sainsbury, 1999).

PEACE model of interviewing

This interviewing technique consists of five stages: P (Planning and Preparation), E (Engage and Explain), A (Account, Clarification and Challenge), C (Closure), and E (Evaluation). This interviewing technique was evaluated in two studies (Walsh and Milne, 2007, 2008).

Breaching and financial penalties

The Australian study investigated what impact financial penalties had on claimants' behaviours and their personal circumstances. Moreover, the study also addressed the impact on their compliance with income support requirements after receiving the sanction. This included a probe on whether claimants reported all their earnings (Eardley, 2006).

Insurance products/services

The Special Investigation Units

The units were set up and financed by private insurance companies to protect themselves from fraudulent activities. The investigators were specially trained to detect fraud and examine suspicious cases. In particular, the units had a role to develop informal networks and share technical expertise. The study interviewed 30 staff from three insurance companies to explore why these units were set up, how they operated and their impact on fraudulent activities (Ghezzi, 1983).

Claim settlement

The study investigated insurers using optimal claim settlement strategies to reduce fraudulent claims made by policy-holders (Crocker and Tennyson, 2002).

Antifraud legislation

The study focused on the effect of state legislation on automobile insurance fraud. Between 1988 and 1999, 43 states in the USA enacted 124 new antifraud statues, ranging from increased penalties to funding regulations to combat fraud (Hoyt *et al*., 2006).

5.1.5 Research conducted on integrated strategies

Integrated strategies encompass more than one of the other strategies identified in this report, or strengthening internal environment or business processes, in order to improve not only accuracy, but also efficiency and effectiveness. They are designed to tackle not only fraud and error in welfare benefit systems, but also to simplify business processes aiming to improve efficiency and effectiveness in the delivery of services. This includes a variety of actions, ranging from simplifying claim forms, improving information technology, and strengthening debt recovery strategies to tightening internal environments.

Participants in these studies were as follows: government officers (N=8), welfare claimants (N=9), LA officers (N=3), employees (N=1), potential clients (N=1), and other sample focus (N=2).

The integrated strategies studies reported the following outcomes: satisfaction (N=1); attitudes and experience of programmes, relating to accuracy or changes of circumstances (N=6); programme performance and integrity (N=4); operational process and information management (N=4); and service delivery (N=3).

The integrated strategies investigated were as follows:

Financial state welfare/support provision/government agencies

The Better Evidence Gathering Pilot

This pilot aimed to provide alternative approaches for the provision of medical support evidence for use in determining entitlement to incapacity benefits. The in-depth interviews and group discussions were carried out with claimants, General Practitioners (GPs), administrative staff at GP practices, doctors at the medical centres, processing staff and decision-makers in Jobcentre Plus and Medical Services (Sainsbury *et al*., 2003).

Jobseeker's Allowance Intervention Regime Pilots

These pilots aimed to test different models from the Fortnightly Job Review (FJR) within the first 13-weeks of the JSA regime. The pilots intended to improve efficiency by saving resources without negative consequences, including fraud and the failure to notify CoCs. Two studies evaluated the pilots but employed different research designs: quantitative evaluation (Middlemas, 2006) and qualitative evaluation (Eccles and Lloyd, 2005).

Telephone intervention pilot

This pilot aimed to test whether additional telephone contacts between FJRs would have an impact on claimants sign-off rates, sanctions received, compliance, and whether there was any saving recognised (Lloyd and Jerkins, 2007).

Housing Benefit Review

The 'two-tier appeal structure' in HB administered by LAs required claimants to write to the authorities if they were dissatisfied with benefit decisions in order to be reviewed by the internal review and/or review boards. This would highlight issues on inaccurate payments (Sainsbury and Eardley, 1991).

The Business Delivery Target (BDT)

The BDT is part of Jobcentre Plus target structure. BDT covered accuracy, efficiency, and standards of specified business processes. The Income Support (IS) and JSA accuracy components were included to ensure that Jobcentre Plus customers received the benefits correctly and in time. The BDT accuracy target might also contribute to reduction in error in the system (GHK Consulting Ltd, 2005).

The new Performance Measure (PM10)

This new output measure is based on the number of reductions in benefit processed by LAs. It is believed that the new PM10 measure will improve LAs performance in reducing overpayments. The study investigated performance of LAs against this new measure. This aimed to identify good practice strategies that might encourage claimants to report CoCs (Boath and Wilkinson, 2007).

Jobcentre Plus Vision

The initiative aimed to deliver integrated, efficient services to people of working age. Two studies carried out qualitative evaluations aiming to investigate and explore the role of the contact centre's First Contact Officer, the role of Financial Assessors (FAs) in relation to their ability to determine the accuracy of claims, and potential fraudulent claims and claimants' views (including non-JSA customers) on the services (Davies *et al*., 2004; McKenna *et al*., 2005).

The Lone Parent Prototype (LPP)

The initiative was set up to experiment with various alternatives to the delivery of welfare services. The main elements of the LPP, conceptualised by the 'Active Modern Service' approach, included tele-claiming, case management, integrated services, single point of contact, data sharing, and location of services The LPP initiative was studied by Thomas and others using interviews and group discussion to explore attitudes of claimants and staff towards the LPP services (Thomas *et al*., 1999).

The Standard Operating Model (SOM) Process Review (SPR) pilot

This pilot programme focused on improving customer service and staff experience, providing more efficient new claim processes (i.e. in terms of accuracy, clearance time, amount of reworking). The evaluation study by Aylen and others (2007) used both quantitative and qualitative methods, and aimed to provide key aspects, identify issues or problems of the SOM/SPR model and its impact on staff and customers (Aylen *et al*., 2007).

5.1.6 Research conducted on risk-assessment strategies

Risk assessment includes activities or measurements used to analyse programmes' operations to determine whether risks exist, and the nature and the extent of risks identified. Risk assessment activities play a major role in planning and developing business strategies. They also provide baseline information to evaluate achievement of the organisation in tackling fraud and error.

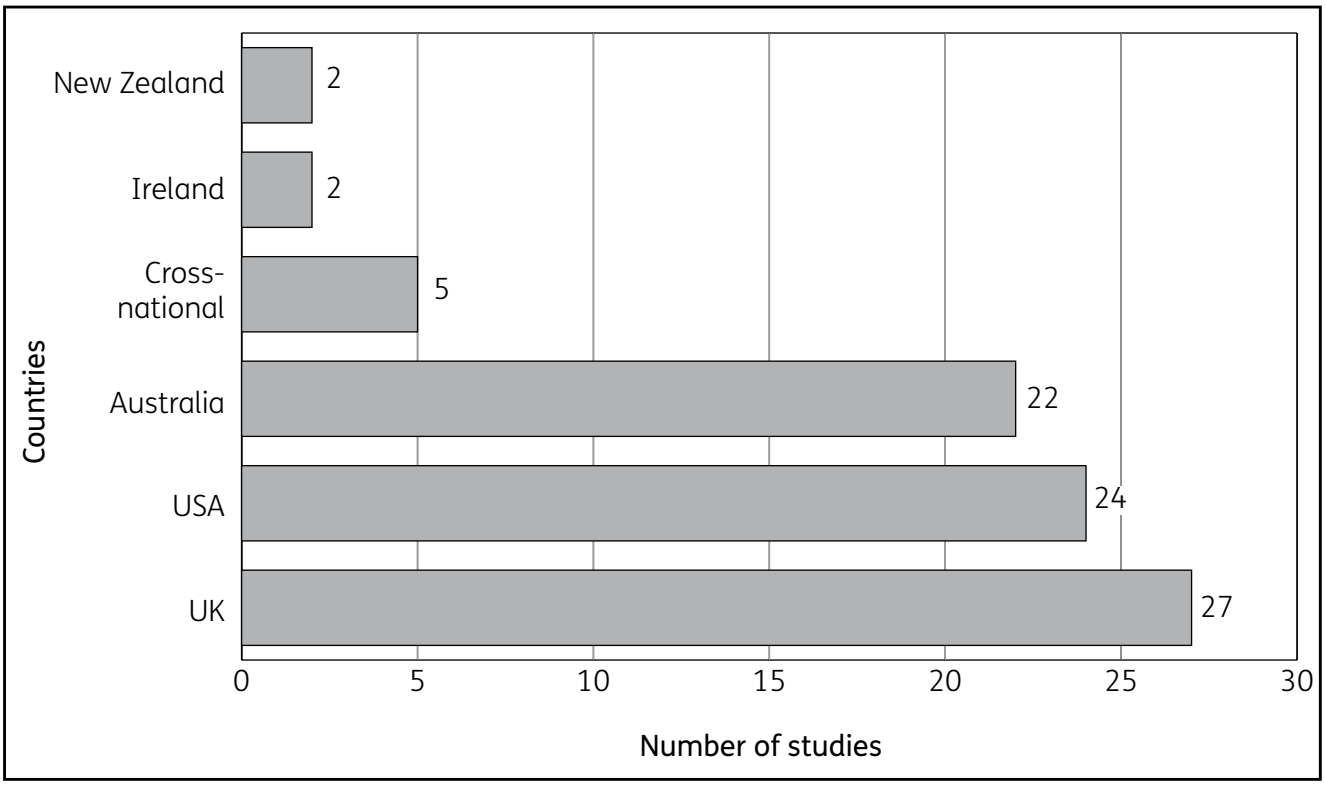
The only study investigating risk assessment was carried out in the Netherlands. The main population focus in the study was welfare claimants. The study aimed to assess the consequences of using computer-based self-interview surveys compared with home interviews in a fraud survey (Lensvelt-Mulders *et al*., 2006).

5.2 Results: Value for Money reports

5.2.1 Overview

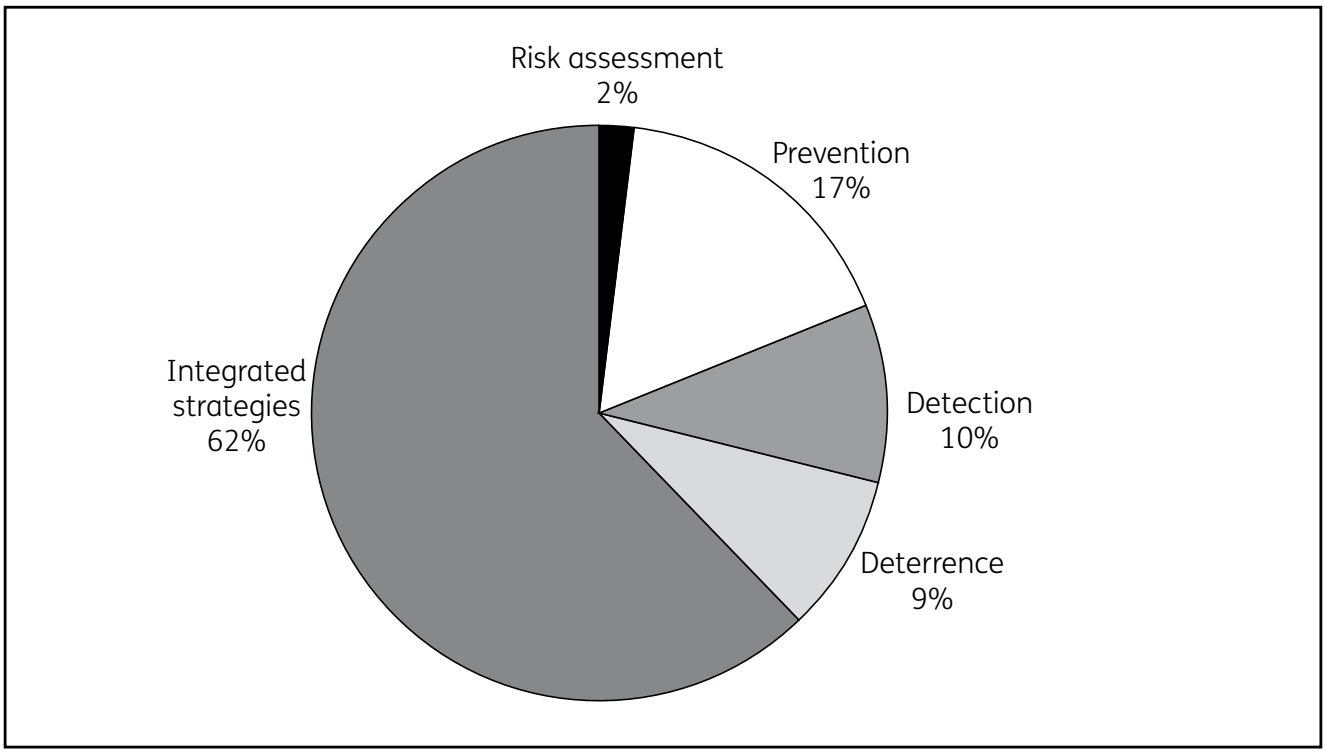
Eighty-two VfM reports were identified. Figure 5.3 shows the countries in which VfM were carried out. The majority were conducted in the UK (N=27), the US (N=24) and Australia (N=22). Two were conducted in New Zealand and two in Ireland. The remaining five reports were cross-national.

Figure 5.3 VfM reports by study country (82 studies)



The majority of the reports focused on integrated strategies, which aimed to tackle fraud and error or improve efficiency (N=51, 62 per cent). Fourteen studies (17 per cent) focused on prevention and eight (ten per cent) on detection schemes. Deterrence strategies were investigated in seven studies (nine per cent) and a further two (two per cent) focused on risk assessment (see Figure 5.4).

Figure 5.4 Type of strategies in VfM reports (82 studies)



In addition, these VfM reports were coded to identify which government departments/agencies or programmes were investigated. Twenty-six reports examined programmes or activities in revenue-collection entities. Approximately one-fifth of the reports (22 per cent) audited financial state welfare initiatives, ten reports assessed performances of the government agencies, 11 focused on healthcare provision and 17 investigated across government departments or entities.

Results for the outcomes reported in the studies included monetary outcomes (N=23) and non-monetary outcomes (N=78).

5.2.2 VfM reports on prevention strategies

Eight reports were conducted in the UK. Six reports were carried out in the revenue collection entities. The main outcomes identified in this group of VfM reports included: cost/benefit (N=1); programme performance and integrity (N=13), satisfaction (N=1); accessibility (N=1); attitudes and experience of programmes, relating to accuracy or changes of circumstances (N=1); operational process (N=4); service delivery (N=4); compliance (N=3); and other (N=1).

A number of reports focused on preventive strategies that aimed to improve information processes implemented by the entities, including the processes of entering, recording and administering customer records in determining customers' entitlements. For example, 'Cuba' is the primary electronic database used by the Child Support Agency (CSA) and the Department of Human Services in Australia to support the administration of the Child Support Scheme. It incorporates financial accounting, customer information, customer relationship information, collections and disbursement, and administrative support. It also exchanges data with other government agencies (i.e. Centrelink, Australian Tax Office).

Eight National Audit Office (NAO) reports focused on preventive strategies that aimed to minimise risk of fraud and error by improving service delivery or the way customers interact with agencies, for example:

1. introduction of administrative controls, such as using life certificates to confirm the continuity of claimants and computerisation of benefit entitlements and payments service to customers living overseas (the Department of Social Security, the UK);
2. how government agencies design their forms and leaflets to reduce error;
3. how the revenue offices improve income tax assessment processes; and
4. using electronic service delivery.

Other prevention initiatives reported in the VfM reports included the following: the use of Complex Assessment Officers (CAOs) as a specialist in Centrelink to assist in determining a customer's benefit entitlement in the Age Pension Programme, in Australia; and the Special Compliance Office implementation to prevent internal fraud and corruption in the Inland Revenue office, in the UK.

5.2.3 VfM reports on detection strategies

Three studies were conducted in Australia, two in the USA and one each in the UK and New Zealand. One report was a cross-national study. The main outcomes identified in the reports were: cost/benefit (N=1); programme performance and integrity (N=8); operational process/information management (N=2); service delivery (N=2); security (N=1); fraud detection/claim classification (N=2); and other (N=1).

Revenue collection entities, such as HM Customs and Excise and Inland Revenue in the UK and the Australian Taxation Office, implemented a number of strategies to detect suspicious claims. For example, in the UK, HM Customs and Excise operated a computer-assisted system to check

VAT repayment. The Australian Tax Office used tax file numbers, identification numbers issued to a person by the Commissioner of Taxation, to match data and then to verify client identity and undeclared income.

In the USA, EBT was used to detect and record food stamp trafficking, where recipients exchanged food stamp benefit for cash with storeowners.

In addition, the Random Sample Survey programme (RSS) was evaluated to determine effectiveness and efficiency in detecting payment error in Centrelink, Australia. The RSS is an analysis of sampled customers' circumstances, designed to establish whether customers are being correctly paid. The RSS system also provides error payment data to Centrelink, which plays an important role in planning and developing internal control fraud strategy.

5.2.4 VfM reports on deterrence strategies

Three reports were carried out in the UK, three in the USA and one report was carried out across Europe. The main outcomes identified in the reports were: amount of fraud/error identified (N=1); amount of error/incorrect payment (N=1); revenue from penalty and sanctions (N=1); revenue from recovery (N=1); programme performance and integrity (N=7); prosecution and recovery (N=1); sanction and penalty (N=1).

Examples of deterrence strategies used were as follows:

- Financial penalties issued to storeowners to maintain the integrity of the Food Stamp in the USA.
- Integrated debt management systems to manage the collection and enforcement of debts, or management of debt-collection procedures.
- The European Anti-Fraud Office (OLAF) aimed to increase effectiveness of the fight against illegal activities by using administrative investigation work.
- Financial management programmes[12] to collect unpaid federal taxes from the US Department of Defence contractors.

5.2.5 VfM reports on integrated strategies

The reports in this category investigated a combination of strategies used to tackle fraud and error. As a whole, the assessment of the performance of the entities in tackling fraud were based on their overall 'actions', 'procedure', or 'efforts', rather than on one distinct strategy. However, where possible, an attempt was made to identify the specific strategies used to address issues on fraud and error. It should be noted that these identified strategies have not been evaluated individually, but were presented as an overall effort to strengthen programme integrity. This is, in part, due to difficulties in isolating the results of individual strategies.

The main outcomes reported in the integrated strategies VfM reports were as follows:

- the amount of error/incorrect payment (N=5);
- amount of fraud identified (N=10);
- cost/benefit (N=8);

[12] Such as the Treasury Offset Program (TOP) and Federal Payment Levy Program (FPLP). TOP is a centralised debt-collection programme designed to assist agencies in the collection of delinquent debts owed to the Federal Government. FPLP is a levy programme designed to collect overdue taxes through a continuous levy on certain federal payments disbursed by Financial Management Service (Government Accountability Office, 2004).

- revenue from penalties and sanctions (N=5);
- revenue from recovery (N=5);
- accessibility (N=3);
- attitudes and experience of programmes, relating to accuracy or changes of circumstances (N=3);
- compliance (N=7);
- fraud detection/claim classification (N=4);
- operational process/information management(N=10);
- programme performance and integrity (N=47);
- prosecution or recovery (4);
- sanction and penalty (N=6);
- security (N=2); and
- service delivery (N=4).

Fourteen reports focused on financial state welfare support programmes. Of these, seven reports were conducted in the USA, four in Australia and three in the UK.

In the USA, the Social Security Administration (SSA) performance was assessed on their progress and effectiveness of implementing the Supplementary Security Income in reducing fraud, waste and error (Government Accountability Office,1999, 2001). Overall, strategies and efforts to prevent and detect fraud and abuse in Crop Insurance, the Food Stamp, the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), the Child and Adult Care Food programme, and the single-family mortgage insurance program have been reviewed.

In the UK, the measures for tackling HB fraud implemented by DSS and LAs were assessed. Financial control targets called 'the 100 Per Cent Plan' were used to ensure that financial control strategies in the Training and Enterprise Councils in England have been implemented effectively.

Family Tax Benefit (FTB) administered by the Australian Family Assistance Office (FAO) employed strategies to manage debts by implementing debt prevention, debt identification, raising debt, and recovery debt strategies. These included Working Credit and personal advisor initiatives. Working Credit aimed to encourage customers to report all earnings (including casual income), as the working credits can be used directly to offset employment income, rather than having benefit cut. Personal advisors provided services and advice to eligible or high-risk customers. These included reminding customers of their obligations to report CoCs in order to avoid incurring debt. In addition, Centrelink introduced the Assistance to Families at Risk of Overpayment (AFRO) aiming to help families who were at risk of incurring debt, to estimate their income correctly.

Within the revenue collection initiatives, the majority of the reports focused on tax schemes (i.e. inheritance tax, income tax, VAT, goods and service tax, off-shore tax). Three reports assessed TV licence fee collection, one assessed vehicle excise duty, and one assessed dutiable goods. Detection and deterrence strategies were commonly used, including penalties, prosecutions and compliance. Educating customers or officers was also seen as the main approach of prevention initiatives. Other examples of identified strategies were as follows:

- recovery of outstanding debt;
- risk assessment;

- quality monitoring;
- business process re-engineering;
- automated system;
- integrating customer data;
- working with other agencies;
- specialist intelligence staff;
- anti-smuggling staff; and
- data-matching systems.

Seventeen reports aimed to assess fraud control arrangements (such as, recovery strategies, fraud control monitoring, risk assessments, working in partnership with other government departments) in government agencies. Many government departments introduced staff training and customer fraud awareness programmes. For example, the Department of Veteran Affairs in Australia conducted the Training and Information Program (TIP), which aimed to educate staff who provided services to veterans and advised them of their entitlements.

The other types of fraud control arrangements investigated in government agencies were as follows:

- Prevention strategies, such as the proof of identity procedures in Centrelink, Australia and the Commercial Education Programme (CEP) used in the Australian Customs Service.
- Corporate Governance by creating an ethical workplace culture; control planning; fraud awareness training for staff; fraud management manual.
- Detection, including data matching; targeted enquiry work; data mining; Computer-Assisted Audit Techniques, such as the Selection, Monitoring and Review system (SEMORE) used in the Australian Department of Employment, Education, Training and Youth Affairs.
- Fraud investigations and prosecutions, such as the Fraud Case Management System in the Australian Department of Veterans' Affairs.

The majority of **healthcare provision** reports were conducted in the USA (88 per cent) and one in Australia. Four reports assessed the implementation of the Medicare Integrity Program and other control activities to control Medicare contractors. These activities were, for example, medical review, audit of provider cost report, or fraud unit investigation. One USA study investigated compliance programmes, such as training/education on codes/standards; reporting mechanisms; audits; and background checks in Medicare. Fraud control activities implemented by the Medicare Benefits Scheme and the Pharmaceutical Benefits Scheme in Australia included investigation and prosecution of service providers; fraud detection (data-mining and neural net techniques); prevention strategies (i.e. education initiatives using database to provide feedback to practitioners); and risk assessment.

5.2.6 VfM reports on risk-assessment strategies

Two studies assessed government agencies on their performance in estimating and monitoring of fraud and error in the system. These strategies were as follows:

- The Centres for Medicare and Medicaid Service (CMS) in the USA established the Comprehensive Error Rate Testing (CERT) programme and the Hospital Payment Monitoring Programme (HPMP) to monitor and estimate accuracy of claims.
- Australian Customs Service introduced the Customs Compliance Strategy to determine accuracy of reporting of cargo information.

5.3 Summary of intervention studies

- The majority of the 46 studies were conducted in two countries, the UK (43 per cent) and the USA (37 per cent). Five studies were cross-national studies.
- Qualitative and simulation/modelling methods were commonly used to investigate the impact of the interventions. Of 46 intervention studies, only two experiments with random allocation to study groups were identified.
- Of the seven studies investigating prevention strategies, only one evaluated an intervention aiming to provide support or encouragement for participants to report CoCs. Other prevention strategies identified in the public sector included Social Landlord Verification, and Electronic Benefit Transfer Cards.
- Eighteen studies evaluated interventions aimed to detect fraud or error. The main intervention types were data matching and data mining, and statistical computer programme techniques (e.g. Electronic Fraud Detection).
- Nine studies evaluated deterrence strategies. The majority of interventions aimed to influence individual views and behaviour by imposing sanctions or penalties.
- All of the 11 integrated strategy studies were carried out in the UK. Nine studies evaluated integrated strategies in financial state welfare programmes; the other two studies focused on initiatives implemented in the UK government departments. All interventions intended to modify or simplify business processes in order to improve accuracy, or to reduce fraud and error.
- Only one evaluation study of risk assessment was identified.

5.4 Summary of Value for Money reports

- The majority of VfM reports were conducted in the UK (33 per cent), the USA (29 per cent), and Australia (27 per cent).
- The majority of the 14 reports on prevention strategies focused on how to prevent fraud or error by improving information management to determine customers' benefit entitlements, or improving customers' interaction with government agencies.
- The main detection strategies used by government departments were to detect fraudulent claims, including tax file numbers, electronic card transfer, computer-assisted system, and random survey.
- Deterrence strategies were identified in seven reports. The majority of these reports focused on debt recovery management.
- Integrated strategies were investigated in 51 reports. Of these, 14 reports focused on financial state welfare support initiatives. Tax schemes (i.e. inheritance tax, income tax, VAT, Goods and Services Tax, off-shore tax) were the main focus of the VfM reports in the revenue collection system. Seventeen reports aimed to assess the fraud control arrangements in the government agencies. Eight reports focused on healthcare provision.
- Only two reports assessed government agencies on implementing risk assessment strategies to estimate and monitor fraud and error in their systems.

6 Discussion and implications

6.1 Discussion: potential to provide evidence for policy decisions

Policy-makers want to know whether the existing empirical research literature identified in this map has the potential to provide useful evidence to guide policy development. The way that the systematic mapping process does this is to identify which, if any, policy questions the identified literature might address through an in-depth review. The results suggest that there might be sufficient existing research to address the following in-depth review questions.

- What are the different views/values held about personal responsibility and the responsibilities of others in relation to financial services and do these vary depending on the type of services and individuals relationship to them (e.g. whether they 'gain' or 'lose')?

Based on the findings of the systematic map, there are potentially 128 studies that explore people's attitudes, experiences and perceptions of financial products/services, welfare benefit, the taxation, and tax credit systems (FWTT) in the UK. Further investigation would be required to determine whether such studies are sufficiently homogeneous to synthesise or whether more than one review would be required.

- What are the different views/values about personal responsibility and the responsibilities of others in relation to the specific issue of notification of changes of circumstances in relation to financial service use?

Six studies had a main focus on notification of CoCs in public benefit systems and a further ten studies addressed this particular issue. This is quite a small number of studies but as they all specifically address this issue, an-in-depth review and synthesis may yield useful knowledge for the design of policy interventions.

In addition, any in-depth review on these questions could build on the recent review carried out by Mitton (2009) which explored benefit fraud by reviewing research from social policy, public economics, law and psychology literature. The study found that the reasons for conducting fraudulent activities are multifaceted, and motivated by several individual and contextual factors, such as poverty, personal beliefs and social norms, as well as attitudes towards, and perceptions of, the benefit system (Mitton, 2009). However, the Mitton review is limited in that it only provided a narrative summary of research findings. The systematic methods of synthesising qualitative research findings (such as meta-ethnography and realist synthesis - see Noblit and Hare, 1998; Pawson *et al*., 2005, respectively) could provide new insights that may be not evident in the individual primary studies (Campbell *et al*., 2003).

- What is the impact of **different** strategies for tackling fraud/error?

There were 46 studies that evaluated interventions and 82 Value for Money (VFM) reports that audited programmes or systems that aimed to eradicate error or fraud. These studies aimed to investigate the impact of an action, programme or intervention on one or more outcomes and are further categorised into one or more of the five strategies for tackling fraud and error. The largest proportion of studies aims to evaluate detection strategies. However, the majority of these studies were carried out in the USA. This may raise a question whether their findings are relevant to the UK context. In addition, few of these studies used the most rigorous form of research design for minimising and controlling biases, which generate the most reliable and generalisable outcomes (Bégin and Kaegi, 1999; Steckler *et al*., 1992). Indeed, of the intervention studies, 18 employed

qualitative data collection and analysis methods to assess the impact or to explore processes of such interventions: for example, exploring how people feel about the implemented interventions by using interviews and/or participant observations.

So, despite the apparent volume of relevant research, careful consideration would need to be given to the nature of the actual questions that could be addressed by these studies. For example, it is apparent that quantitative meta-analytic synthesis of individual study results would not be possible and therefore, if impact were interpreted to mean estimate of the size of any effect from such interventions, this would not be possible.

However, given that, according to our best knowledge, to date there is no existing systematic review addressing the research question on this topic, it is possibly justifiable to carry out one or more mixed methods in-depth reviews to establish what the existing evidence tells us about the effect of interventions in this area.

6.2 Discussion: where should policy-makers commission further research?

A second question that policy-makers may wish to address is where in the field to target new primary research activity and what kind of research would be most helpful? The systematic map helps to identify gaps in the empirical research evidence for the field. It is difficult to be certain about the gaps in the existing evidence base without detailed investigation of the studies that have been identified. For example, the apparently quite large number of studies may transpire to be less useful if a large number of studies were weak in either their design and/or execution. However, a few notable gaps in the literature are immediately evident. Although a number of the UK non-evaluative studies in financial services and welfare provision were identified, few studies were specifically focused on issues relating to fraud or notification of CoCs. The map highlights that research studies of the issues and, in particular in the private sector, are scarce or are not publicly available.

Furthermore, there are relatively few evaluations of any specific strategy, in particular of strategies that aim to prevent or minimise the risks of fraud and error. In addition, while almost half of the intervention studies evaluated detection strategies, only one detection study from the UK was identified. Therefore, there is a need for future research on prevention, risk assessment and UK detection strategies.

It is also evident that there is a lack of rigorous prospective evaluations designed to generate confident conclusions about cause and effect relationships between interventions and outcomes, and to provide quantitative estimates of effect.

6.3 Strengths and limitations

The systematic map described in this report follows the standard procedure of conducting systematic reviews developed at the Evidence for Policy and Practice Information and Co-ordinating Centre (EPPI-Centre). Searches carried out are designed to locate relevant research studies both manually and electronically. They are extensive and as exhaustive as possible, given the resources available, covering a wide range of databases and websites.

However, a number of caveats must be taken into consideration. First, the results of this systematic map are based on English language publications due to the limited amount of time and resource available. In addition, our searches were carried out during the period November–December 2007. During the preparation of this report, the authors identified more studies that might be relevant

to the systematic map but were published after the timescale of conducting the systematic map (e.g. Davidson and Sainsbury, 2008; Irevine *et al.*, 2008). Therefore, relevant studies published after December 2007 were not included in this report. In ideal circumstances, any in-depth reviews that were undertaken should therefore be supplemented with some additional focused searching to update their respective specific portion of the map. Finally, at the systematic mapping stage, the coding tool is designed to provide descriptive illustration of relevant studies in the field. Consequently, it is not possible to give any observation relating to the quality and relevance of the studies; these issues will be considered at the in-depth review stage.

Appendices Introduction

These appendices contain further information to support the main report.

Appendix A provides details of the standard systematic review process developed at the Evidence for Policy and Practice Information and Co-ordinating Centre (EPPI-Centre), which the systematic map report follows.

Appendix B contains details of the search strategy used in the systematic map. The electronic databases and specialist registers used in the systematic map were ASSIA, Psychinfo, Business Source Premier, IBSS, ABI INFORM, Social Service Abstracts, Science Direct, Econlit, Sociological Abstracts, Social Science Citation Index, Zetoc, and Emerale. Websites and search engines that were searched are also listed. 'Search strategies' used in each databases were also reported.

Appendix C provides details of inclusion and exclusion criteria developed specifically for the systematic map.

Appendix D contains the coding tool used to extract data from the full report in the systematic map.

Appendix E contains details of the non-evaluative studies included in the systematic map.

Appendix F contains details of the intervention studies included in the systematic map.

Appendix G contains descriptive summary of Value for Money (VFM) reports in the systematic map.

Appendix H contains the references for the studies included in the systematic map.

Appendix A
The standard EPPI-Centre Systematic Review process

Stages and procedures in a standard EPPI-Centre Review

Formulate review question and develop protocol.

- Define studies to be included with inclusion criteria.
- Search for studies: a systematic search strategy including multiple sources is used.
- Screen studies for inclusion.
- Inclusion criteria should be specified in the review protocol.
- All identified studies should be screened against the inclusion criteria.
- The results of screening (number of studies excluded under each criterion) should be reported.

Describe studies (keywording and/or in-depth data-extraction).

- Bibliographic and review management data on individual studies.
- Descriptive information on each study.
- The results or findings of each study.
- Information necessary to assess the quality of the individual studies.

At this stage, the review question may be further focused and additional inclusion criteria applied to select studies for an 'in-depth' review.

Assess study quality (and relevance).

A judgement is made by the review team about the quality and relevance of studies included in the review.

The criteria used to make such judgements should be transparent and systematically applied and may include published quality assessment scales).

Synthesise findings

The results of individual studies are brought together to answer the review question(s).

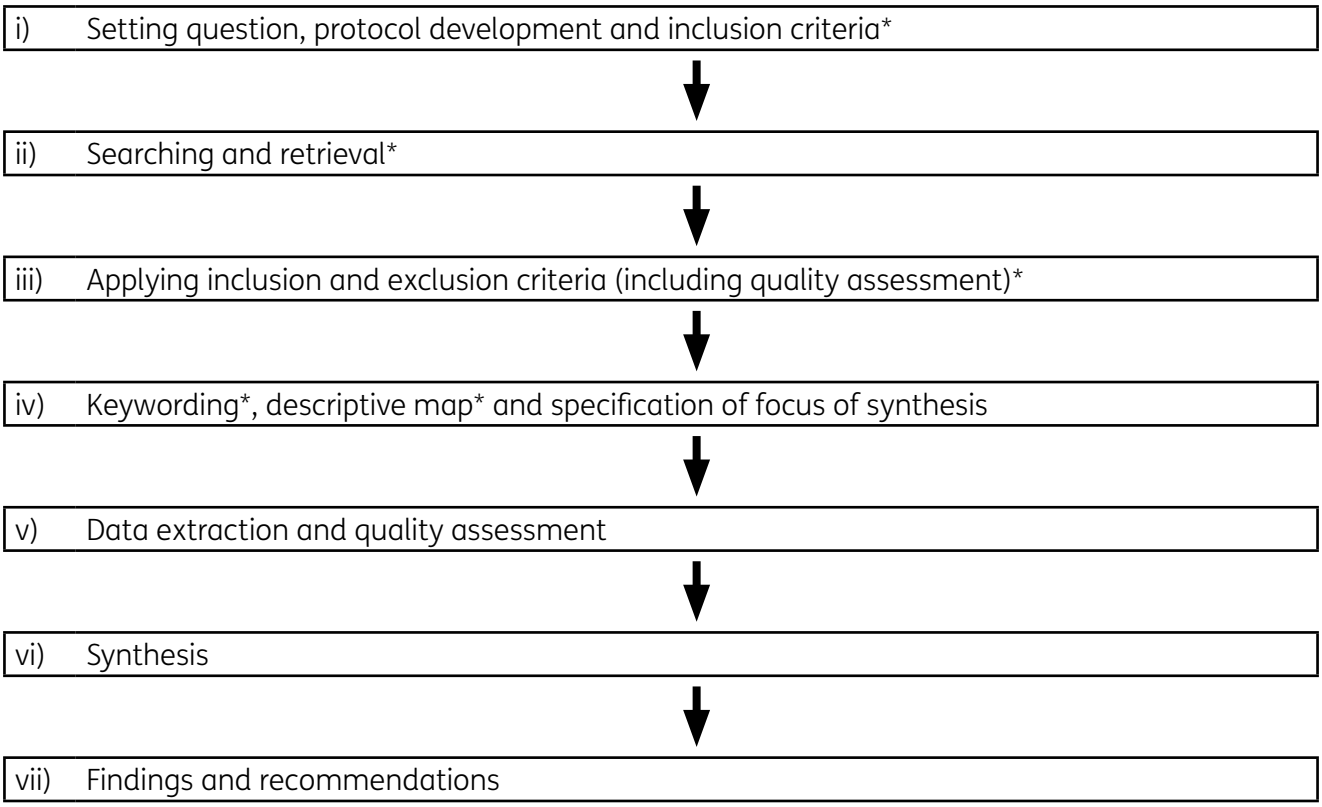
A variety of approaches can be used to synthesise the results. The approach used should be appropriate to the review question and studies in the review.

The review team interpret the findings and draw conclusions implications from them.

Quality assurance can check the execution of the methods of the review, just as in primary research, such as:

- Internal QA: individual reviewer skill; moderation; double-coding.
- External QA: Audit/editorial process; moderation; double-coding.
- Peer referee of: protocol; draft report; published report feedback.
- Editorial function for report: by review specialist; peer review; non-peer review.

Figure A.1 Stages of an EPPI-Centre systematic review



* Stages used in this systematic review

Appendix B
Search strategy

Electronic databases and specialist registers, 1980-present

Database	Number of imported items
ASSIA	901
PsycINFO	1,432
Business Source Premier	736
IBSS	727
ABI INFORM	736
Social Service Abstracts	596
Science Direct	490
Econlit	703
Sociological Abstracts (CSA)	1,849
Social Science Citation Index	1,261
Zetoc	1,068
Emerale	350
Google	18
Total	**10,867**

Websites and search engines

- Local and regional government research (http://www.communities.gov.uk/localgovernment/publications/)
- Home Office (http://www.homeoffice.gov.uk/)
- HM-Treasury (http://www.hm-treasury.gov.uk/)
- Department for Work and Pensions (http://www.dwp.gov.uk/)
- National Audit Office (NAO) (www.nao.org.uk/)
- House of Commons (http://www.publications.parliament.uk/)
- Centre for Labour Market Studies (http://www.clms.le.ac.uk/)
- Institute for Public Policy and Research (http://www.ippr.org.uk/)
- Joseph Rowntree Foundation (http://www.jrf.org.uk/)
- European Centre for Social Welfare Policy and Research (http://www.euro.centre.org/)
- Policy studies Institute (http://www.psi.org.uk/)
- Google and Google scholar (www.google.com/)
- National Centre of Social Research (http://www.natcen.ac.uk/)

- The Police Foundation (http://www.police-foundation.org.uk/)
- Serious Fraud Office (http://www.sfo.gov.uk/)
- Counter Fraud and Security Management Service (http://www.cfsms.nhs.uk/)
- Ipsos MORI Social Research Institute (http://www.ipsos-mori.com)
- Center on Budget and Policy Priority (USA) (http://www.cbpp.org/)
- Taxpayers Against Fraud Education Fund, The False Claims Act Legal Center (TAF) (http://www.taf.org/publications.htm)
- The U.S. Government Accountability Office (GAO) (http://www.gao.gov/)
- Altrrum (http://www.altarum.org/)
- Insurance Fraud Bureau (http://www.insurancefraudbureau.org/)
- Australian National Audit office (Australia) (http://www.anao.gov.au)
- Human resource and social development Canada(http://www.hrsdc.gc.ca/)
- Canadian Research Institute for Law and the Family (http://www.ucalgary.ca/)
- Controller and Auditor General (New Zealand) (http://www.oag.govt.nz/)
- Ministry of Social Development (New Zealand) (http://www.msd.govt.nz/)
- Financial Service Agency (http://www.fsa.gov.uk)
- Comptroller and Auditor-General of Ireland (http://www.audgen.gov.ie/)

Search strategies

Search conducted between 23 November 2007 and 4 December 2007.

PsycINFO Ovid (3 December 2007)

Search Strategies 1

1) fraud.ab,ti.
2) fraud/ or dishonesty/
3) “change$ circumstance$”.mp. [mp=ab, ti, sh, gh, hw, tc, id]
4) “customer error$”.mp. [mp=ab, ti, sh, gh, hw, tc, id]
5) “claim$ error$”.mp. [mp=ab, ti, sh, gh, hw, tc, id]
6) “claim$ process$”.mp. [mp=ab, ti, sh, gh, hw, tc, id]
7) “official error$”.mp. [mp=ab, ti, sh, gh, hw, tc, id]
8) defraud$.ti,ab.
9) “improper payment$”.mp. [mp=ab, ti, sh, gh, hw, tc, id]
10) overpayment$.mp. [mp=ab, ti, sh, gh, hw, tc, id]
11) “undeclared income”.mp. [mp=ab, ti, sh, gh, hw, tc, id]

12) "verification framework".mp. [mp=ab, ti, sh, gh, hw, tc, id]

13) 1 or 2 or 3 or 4 or 5 or 6 or 8 or 9 or 10 or 11 or 12

14) limit 13 to English language

Search strategies 2

1) social security/ or government programs/ or insurance/ or Medicaid/ or Medicare/
2) "welfare services (government)"/
3) financial services/ or banking/ or finance/
4) financial service$.mp. [mp=ab, ti, sh, gh, hw, tc, id]
5) "welfare payment$".mp. [mp=ab, ti, sh, gh, hw, tc, id]
6) "benefit payment$".mp. [mp=ab, ti, sh, gh, hw, tc, id]
7) "pension credit$".mp. [mp=ab, ti, sh, gh, hw, tc, id]
8) "child benefit$".mp. [mp=ab, ti, sh, gh, hw, tc, id]
9) "housing benefit$".mp. [mp=ab, ti, sh, gh, hw, tc, id]
10) "incapacity benefit$".mp. [mp=ab, ti, sh, gh, hw, tc, id]
11) "income support$".mp. [mp=ab, ti, sh, gh, hw, tc, id]
12) "tax credit".mp. [mp=ab, ti, sh, gh, hw, tc, id]
13) "unemployment benefit$".mp. [mp=ab, ti, sh, gh, hw, tc, id]
14) attitudes/ or adolescent attitudes/ or client attitudes/ or community attitudes/ or consumer attitudes/ or employee attitudes/ or employer attitudes/ or female attitudes/ or health attitudes/ or health personnel attitudes/ or male attitudes/
15) perception/ or risk perception/ or role perception/ or self perception/ or social perception/
16) awareness/
17) comprehension/
18) honesty/ or integrity/
19) dishonesty/ or deception/
20) ethics/ or social responsibility/
21) morality/ or personal values/ or social values/
22) corruption.mp. [mp=ab, ti, sh, gh, hw, tc, id]
23) bribery.mp. [mp=ab, ti, sh, gh, hw, tc, id]
24) compliance/
25) 14 or 15 or 16 or 17 or 18 or 19 or 20 or 21 or 22 or 23 or 24
26) 1 and 25
27) 2 and 25
28) 3 and 25

29) 4 and 25

30) 11 and 25

31) 14 and 25

32) 15 and 25

ASSIA on CSA (23 November 2007)

1) KW= ("fine defaulters" or "arrears" or "rent arrears" or "rent arrears" or "financing" or "capitation financing" or "consumer credit" or "cost sharing agreements" or "coupons" or "credit" or "interest rates" or "low interest loans" or "credit cards" or "donations" or "emergency funds" or "fees" or "capitalization fees" or "contingency fees" or "fixed fees" or "standard fees" or "fellowships" or "forward funding" or "fundholding" or "fundraising" or "funds" or "central funds" or "global funds" or "pension funds" or "grants" or "block grants" or "discharge grants" or "government grants" or "improvement grants" or "means tests" or "hiring" or "income generation" or "joint financing" or "leasing" or "loans" or "bad debts" or "business loans" or "interest free loans" or "personal loans" or "mortgages" or "philanthropy" or "prospective payment" or "regional development fund" or "reimbursement" or "renting" or "scholarships" or "stakeholding" or "structural fund" or "tax increment financing" or "tolls" or "usury" or "voucher schemes" or "loans" or "bad debts" or "business loans" or "interest free loans" or "low interest loans" or "personal loans" or "debts" or "consumer debts" or "national debt" or "personal debts" or "consumer debts" or "national debt" or "personal debts" or "financial services" or "banking" or "agricultural banking" or "investment banking" or "islamic banking" or "offshore financial services" or "banking" or "agricultural banking" or "investment banking" or "islamic banking" or "offshore financial services" or "insurance" or "credit insurance" or "health insurance" or "corporate health insurance" or "health maintenance organizations" or "industrial injury insurance" or "managed care" or "prepaid managed care" or "mandatory health insurance" or "national health insurance" or "statutory health insurance" or "preferred provider organizations" or "social health insurance" or "uninsured patients" or "indemnity insurance" or "life insurance" or "annuities" or "mutual benefit societies" or "provident funds" or "social insurance" or "unemployment benefit" or "unemployment insurance")

2) KW= ("social security" or "attendance allowances" or "child benefit" or "disability allowances" or "disability living allowance" or "domestic assistance allowances" or "energy allowances" or "family allowances" or "family credit" or "furniture allowances" or "housing benefits" or "housing grants" or "incapacity benefit" or "independent living fund" or "industrial injury benefits" or "invalidity benefit" or "maternity benefits" or "Medicaid" or "Medicare" or "mobility allowances" or "national provident funds" or "severe weather payments" or "sickness benefits" or "social fund" or "emergency social funds" or "attendance allowances" or "child benefit" or "disability allowances" or "disability living allowance" or "domestic assistance allowances" or "energy allowances" or "family allowances" or "family credit" or "furniture allowances" or "housing benefits" or "housing grants" or "incapacity benefit" or "independent living fund" or "industrial injury benefits" or "invalidity benefit" or "maternity benefits" or "Medicaid" or "Medicare" or "mobility allowances" or "national provident funds" or "severe weather payments" or "sickness benefits" or "social fund" or "emergency social funds" or "pensions" or "retirement pensions" or "personal retirement pensions" or "state retirement pensions" or "widows pensions" or "welfare benefits" or "family fund" or "food stamps" or "income support" or "nonincome tested transfers" or "supplementary benefits" or "unclaimed benefits" or "local authorities" or "council tax")

3) DE=(“lying” or “deception” or “lies” or “disguise” or “faking” or “social responsibility” or “dishonesty” or “cheating” or “social responsibility” or “respect” or “self-respect” or “gratitude” or “social responsibility” or “ethical aspects” or “moral affect” or “compliance” or “noncompliance” or “circumstances” or “conspiracy to defraud” or “serious fraud” or “corruption” or “bribery”)

4= KW= (fraud* or defraud* or overpayment* or (“improper payments”) or (“official error*”) or (“changes of circumstance*”) or (“customer error*”) or (“client error*”) or (“claimant error*”) or (“claiming process*”) or (“undeclared income”) or (“verification framework”))

5= (((kw=(“social security” or “attendance allowances” or “child benefit” or “disability allowances” or “disability living allowance” or “domestic assistance allowances” or “energy allowances” or “family allowances” or “family credit” or “furniture allowances” or “housing benefits” or “housing grants” or “incapacity benefit” or “independent living fund” or “industrial injury benefits” or “invalidity benefit” or “maternity benefits” or “Medicaid” or “Medicare” or “mobility allowances” or “national provident funds” or “severe weather payments” or “sickness benefits” or “social fund” or “emergency social funds” or “attendance allowances” or “child benefit” or “disability allowances” or “”emergency social funds” or “pensions” or “retirement pensions” or “personal retirement pensions” or “state retirement pensions” or “widows pensions” or “welfare benefits” or “family fund” or “food stamps” or “income support” or “nonincome tested transfers” or “supplementary benefits” or “unclaimed benefits” or “local authorities” or “council tax”)) or (KW=(“fine defaulters” or “arrears” or “rent arrears” or “rent arrears” or “financing” or “capitation financing” or “consumer credit” or “cost sharing agreements” or “coupons” or “credit” or “interest rates” or “low interest loans” or “credit cards” or “donations” or “emergency funds” or “fees” or “capitalization fees” or “contingency fees” or “fixed fees” or “standard fees” or “fellowships” or “forward funding” or “fundholding” or “fundraising” or “funds” or “central funds” or “global funds” or “pension funds” or “grants” or “block grants” or “discharge grants” or “government grants” or “improvement grants” or “means tests” or “hiring” or “income generation” or “joint financing” or “leasing” or “loans” or “bad debts” or “business loans” or “interest free loans” or “personal loans” or “mortgages” or “philanthropy” or “prospective payment” or “regional development fund” or “reimbursement” or “renting” or “scholarships” or “stakeholding” or “structural fund” or “tax increment financing” or “tolls” or “usury” or “voucher schemes” or “loans” or “bad debts” or “business loans” or “interest free loans” or “low interest loans” or “personal loans” or “debts” or “consumer debts” or “national debt” or “personal debts” or “consumer debts” or “national debt” or “personal debts” or “financial services” or “banking” or “agricultural banking” or “investment banking” or “islamic banking” or “offshore financial services” or “banking” or “agricultural banking” or “investment banking” or “islamic banking” or “offshore financial services” or “insurance” or “credit insurance” or “health insurance” or “corporate health insurance” or “health maintenance organizations” or “industrial injury insurance” or “managed care” or “prepaid managed care” or “mandatory health insurance” or “national health insurance” or “statutory health insurance” or “preferred provider organizations” or “social health insurance” or “uninsured patients” or “indemnity insurance” or “life insurance” or “annuities” or “mutual benefit societies” or “provident funds” or “social insurance” or “unemployment benefit” or “unemployment insurance”))) and (DE=(“lying” or “deception” or “lies” or “disguise” or “faking” or “social responsibility” or “dishonesty” or “cheating” or “respect” or “self-respect” or “gratitude” o or “ethical aspects” or “ethics” or “moral affect” or “compliance” or “noncompliance” or “circumstances” or “conspiracy to defraud” or “serious fraud” or corruption or bribery)))

6) (DE=(opinions or beliefs or “value judgements” or “moral judgements” or “morality” or “immorality” or “moral responsibility” or “moral development” or “moral behaviour” or “moral education”) or DE=(principles or understanding or misunderstandings or integrity or honesty) or DE=(awareness or perceptions or attitudes)) and ((kw=(“social security” or “attendance allowances” or “child benefit” or “disability allowances” or “disability living allowance” or “domestic assistance allowances” or “energy allowances” or “family allowances” or “family credit” or “furniture allowances” or “housing benefits” or “housing grants” or “incapacity benefit” or “independent living fund” or “industrial injury benefits” or “invalidity benefit” or “maternity benefits” or “Medicaid” or “Medicare” or “mobility allowances” or “national provident funds” or “severe weather payments” or “sickness benefits” or “social fund” or “emergency social funds” or “attendance allowances” or “child benefit” or “disability allowances” or “disability living allowance” or “domestic assistance allowances” or “energy allowances” or “family allowances” or “family credit” or “furniture allowances” or “housing benefits” or “housing grants” or “incapacity benefit” or “independent living fund” or “industrial injury benefits” or “invalidity benefit” or “maternity benefits” or “Medicaid” or “Medicare” or “mobility allowances” or “national provident funds” or “severe weather payments” or “sickness benefits” or “social fund” or “emergency social funds” or “pensions” or “retirement pensions” or “personal retirement pensions” or “state retirement pensions” or “widows pensions” or “welfare benefits” or “family fund” or “food stamps” or “income support” or “nonincome tested transfers” or “supplementary benefits” or “unclaimed benefits” or “local authorities” or “council tax”)) or (KW=(“fine defaulters” or “arrears” or “rent arrears” or “rent arrears” or “financing” or “capitation financing” or “consumer credit” or “cost sharing agreements” or “coupons” or “credit” or “interest rates” or “low interest loans” or “credit cards” or “donations” or “emergency funds” or “fees” or “capitalization fees” or “contingency fees” or “fixed fees” or “standard fees” or “fellowships” or “forward funding” or “fundholding” or “fundraising” or “funds” or “central funds” or “global funds” or “pension funds” or “grants” or “block grants” or “discharge grants” or “government grants” or “improvement grants” or “means tests” or “hiring” or “income generation” or “joint financing” or “leasing” or “loans” or “bad debts” or “business loans” or “interest free loans” or “personal loans” or “mortgages” or “philanthropy” or “prospective payment” or “regional development fund” or “reimbursement” or “renting” or “scholarships” or “stakeholding” or “structural fund” or “tax increment financing” or “tolls” or “usury” or “voucher schemes” or “loans” or “bad debts” or “business loans” or “interest free loans” or “low interest loans” or “personal loans” or “debts” or “consumer debts” or “national debt” or “personal debts” or “consumer debts” or “national debt” or “personal debts” or “financial services” or “banking” or “agricultural banking” or “investment banking” or “islamic banking” or “offshore financial services” or “banking” or “agricultural banking” or “investment banking” or “islamic banking” or “offshore financial services” or “insurance” or “credit insurance” or “health insurance” or “corporate health insurance” or “health maintenance organizations” or “industrial injury insurance” or “managed care” or “prepaid managed care” or “mandatory health insurance” or “national health insurance” or “statutory health insurance” or “preferred provider organizations” or “social health insurance” or “uninsured patients” or “indemnity insurance” or “life insurance” or “annuities” or “mutual benefit societies” or “provident funds” or “social insurance” or “unemployment benefit” or “unemployment insurance”)))

Social services abstracts on CSA (23 November 2007)

1) (((kw=("social security" or "attendance allowances" or "child benefit" or "disability allowances" or "disability living allowance" or "domestic assistance allowances" or "energy allowances" or "family allowances" or "family credit" or "furniture allowances" or "housing benefits" or "housing grants" or "incapacity benefit" or "independent living fund" or "industrial injury benefits" or "invalidity benefit" or "maternity benefits" or "Medicaid" or "Medicare" or "mobility allowances" or "national provident funds" or "severe weather payments" or "sickness benefits" or "social fund" or "emergency social funds" or "attendance allowances" or "child benefit" or "disability allowances" or "disability living allowance" or "domestic assistance allowances" or "energy allowances" or "family allowances" or "family credit" or "furniture allowances" or "housing benefits" or "housing grants" or "incapacity benefit" or "independent living fund" or "industrial injury benefits" or "invalidity benefit" or "maternity benefits" or "Medicaid" or "Medicare" or "mobility allowances" or "national provident funds" or "severe weather payments" or "sickness benefits" or "social fund" or "emergency social funds" or "pensions" or "retirement pensions" or "personal retirement pensions" or "state retirement pensions" or "widows pensions" or "welfare benefits" or "family fund" or "food stamps" or "income support" or "nonincome tested transfers" or "supplementary benefits" or "unclaimed benefits" or "local authorities" or "council tax")) or (KW=("fine defaulters" or "arrears" or "rent arrears" or "rent arrears" or "financing" or "capitation financing" or "consumer credit" or "cost sharing agreements" or "coupons" or "credit" or "interest rates" or "low interest loans" or "credit cards" or "emergency funds" or "fees" or "capitalization fees" or "contingency fees" or "fixed fees" or "standard fees" or "fellowships" or "forward funding" or "fundholding" or "fundraising" or "funds" or "central funds" or "global funds" or "pension funds" or "grants" or "block grants" or "discharge grants" or "government grants" or "improvement grants" or "means tests" or "income generation" or "joint financing" or "leasing" or "loans" or "bad debts" or "business loans" or "interest free loans" or "personal loans" or "mortgages" or "philanthropy" or "prospective payment" or "regional development fund" or "reimbursement" or "renting" or "scholarships" or "stakeholding" or "structural fund" or "tax increment financing" or "tolls" or "usury" or "voucher schemes" or "loans" or "bad debts" or "business loans" or "interest free loans" or "low interest loans" or "personal loans" or "debts" or "consumer debts" or "national debt" or "personal debts" or "consumer debts" or "national debt" or "personal debts" or "financial services" or "banking" or "agricultural banking" or "investment banking" or "islamic banking" or "offshore financial services" or "banking" or "agricultural banking" or "investment banking" or "islamic banking" or "offshore financial services" or "insurance" or "credit insurance" or "health insurance" or "corporate health insurance" or "health maintenance organizations" or "industrial injury insurance" or "managed care" or "prepaid managed care" or "mandatory health insurance" or "national health insurance" or "statutory health insurance" or "preferred provider organizations" or "social health insurance" or "uninsured patients" or "indemnity insurance" or "life insurance" or "annuities" or "mutual benefit societies" or "provident funds" or "social insurance" or "unemployment benefit" or "unemployment insurance"))) and (KW=("lying" or "deception" or "lies" or "disguise" or "faking" or "social responsibility" or "dishonesty" or "cheating" or "respect" or "self-respect" or "gratitude" or "ethical aspects" or "ethics" or "moral affect" or "compliance" or "noncompliance" or "circumstances" or "conspiracy to defraud" or "serious fraud" or corruption or bribery or consciousness or goodness or integrity or honest* or moral*)))

2) (DE=(opinions or beliefs or respect or values or comprehension) or DE=(principles or misunderstandings) or DE=(awareness or perceptions or attitudes)) and ((kw=("social security" or "attendance allowances" or "child benefit" or "disability allowances" or "disability living allowance" or "domestic assistance allowances" or "energy allowances" or "family allowances" or "family credit" or "furniture allowances" or "housing benefits" or "housing grants" or "incapacity benefit" or "independent living fund" or "industrial injury benefits" or "invalidity benefit" or "maternity benefits" or "Medicaid" or "Medicare" or "mobility allowances" or "national provident funds" or "severe weather payments" or "sickness benefits" or "social fund" or "emergency social funds" or "attendance allowances" or "child benefit" or "disability allowances" or "disability living allowance" or "domestic assistance allowances" or "energy allowances" or "family allowances" or "family credit" or "furniture allowances" or "housing benefits" or "housing grants" or "incapacity benefit" or "independent living fund" or "industrial injury benefits" or "invalidity benefit" or "maternity benefits" or "Medicaid" or "Medicare" or "mobility allowances" or "national provident funds" or "severe weather payments" or "sickness benefits" or "social fund" or "emergency social funds" or "pensions" or "retirement pensions" or "personal retirement pensions" or "state retirement pensions" or "widows pensions" or "welfare benefits" or "family fund" or "food stamps" or "income support" or "nonincome tested transfers" or "supplementary benefits" or "unclaimed benefits" or "local authorities" or "council tax")) or (KW=("fine defaulters" or "arrears" or "rent arrears" or "rent arrears" or "financing" or "capitation financing" or "consumer credit" or "cost sharing agreements" or "coupons" or "credit" or "interest rates" or "low interest loans" or "credit cards" or "emergency funds" or "fees" or "capitalization fees" or "contingency fees" or "fixed fees" or "standard fees" or "fellowships" or "forward funding" or "fundholding" or "fundraising" or "funds" or "central funds" or "global funds" or "pension funds" or "grants" or "block grants" or "discharge grants" or "government grants" or "improvement grants" or "means tests" or "income generation" or "joint financing" or "leasing" or "loans" or "bad debts" or "business loans" or "interest free loans" or "personal loans" or "mortgages" or "philanthropy" or "prospective payment" or "regional development fund" or "reimbursement" or "renting" or "scholarships" or "stakeholding" or "structural fund" or "tax increment financing" or "tolls" or "usury" or "voucher schemes" or "loans" or "bad debts" or "business loans" or "interest free loans" or "low interest loans" or "personal loans" or "debts" or "consumer debts" or "national debt" or "personal debts" or "consumer debts" or "national debt" or "personal debts" or "financial services" or "banking" or "agricultural banking" or "investment banking" or "islamic banking" or "offshore financial services" or "banking" or "agricultural banking" or "investment banking" or "islamic banking" or "offshore financial services" or "insurance" or "credit insurance" or "health insurance" or "corporate health insurance" or "health maintenance organizations" or "industrial injury insurance" or "managed care" or "prepaid managed care" or "mandatory health insurance" or "national health insurance" or "statutory health insurance" or "preferred provider organizations" or "social health insurance" or "uninsured patients" or "indemnity insurance" or "life insurance" or "annuities" or "mutual benefit societies" or "provident funds" or "social insurance" or "unemployment benefit" or "unemployment insurance")))

3) KW= (fraud* or defraud* or overpayment* or ("improper payments") or ("official error*") or ("changes of circumstance*")) or KW=(("customer error*") or ("client error*") or ("claimant error*")) or KW=(("claiming process*") or ("undeclared income") or ("verification framework"))

Sociological abstracts on CSA (29 November 2007)

1) KW=(fraud* or defraud* or overpayment* or (“improper payments”) or (“official error*”) or (“changes of circumstance*”)) or KW=((“customer error*”) or (“client error*”) or (“claimant error*”)) or KW=((“claiming process*”) or (“undeclared income”) or (“verification framework”))

2) (DE=(opinions or beliefs) or DE=(principles or consciousness or values) or DE=(perceptions or attitudes or knowledge or comprehension)) or (DE=(“deception” or “lies” or “self esteem” or “social responsibility” or “ethics” or “cheating” or “respect” or “gratitude” or “morality” or “compliance” or “circumstances” or “corruption” or “moral development” or “moral education” or “moral judgement” or “shame” or “white collar crime”)))and ((kw=(“social security” or “attendance allowances” or “child benefit” or “disability allowances” or “disability living allowance” or “domestic assistance allowances” or “energy allowances” or “family allowances” or “family credit” or “furniture allowances” or “housing benefits” or “housing grants” or “incapacity benefit” or “independent living fund” or “industrial injury benefits” or “invalidity benefit” or “maternity benefits” or “Medicaid” or “Medicare” or “mobility allowances” or “national provident funds” or “severe weather payments” or “sickness benefits” or “social fund” or “emergency social funds” or “attendance allowances” or “child benefit” or “disability allowances” or “disability living allowance” or “domestic assistance allowances” or “energy allowances” or “family allowances” or “family credit” or “furniture allowances” or “housing benefits” or “housing grants” or “incapacity benefit” or “independent living fund” or “industrial injury benefits” or “invalidity benefit” or “maternity benefits” or “Medicaid” or “Medicare” or “mobility allowances” or “national provident funds” or “severe weather payments” or “sickness benefits” or “social fund” or “emergency social funds” or “pensions” or “retirement pensions” or “personal retirement pensions” or “state retirement pensions” or “widows pensions” or “welfare benefits” or “family fund” or “food stamps” or “income support” or “nonincome tested transfers” or “supplementary benefits” or “unclaimed benefits” or “local authorities” or “council tax”)) or (KW=(“fine defaulters” or “arrears” or “rent arrears” or “rent arrears” or “financing” or “capitation financing” or “consumer credit” or “cost sharing agreements” or “coupons” or “credit” or “interest rates” or “low interest loans” or “credit cards” or “emergency funds” or “fees” or “capitalization fees” or “contingency fees” or “fixed fees” or “standard fees” or “fellowships” or “forward funding” or “fundholding” or “fundraising” or “funds” or “central funds” or “global funds” or “pension funds” or “grants” or “block grants” or “discharge grants” or “government grants” or “improvement grants” or “means tests” or “income generation” or “joint financing” or “leasing” or “loans” or “bad debts” or “business loans” or “interest free loans” or “personal loans” or “mortgages” or “philanthropy” or “prospective payment” or “regional development fund” or “reimbursement” or “renting” or “scholarships” or “stakeholding” or “structural fund” or “tax increment financing” or “tolls” or “usury” or “voucher schemes” or “loans” or “bad debts” or “business loans” or “interest free loans” or “low interest loans” or “personal loans” or “debts” or “consumer debts” or “national debt” or “personal debts” or “consumer debts” or “national debt” or “personal debts” or “financial services” or “banking” or “agricultural banking” or “investment banking” or “islamic banking” or “offshore financial services” or “banking” or “agricultural banking” or “investment banking” or “islamic banking” or “offshore financial services” or “insurance” or “credit insurance” or “health insurance” or “corporate health insurance” or “health maintenance organizations” or “industrial injury insurance” or “managed care” or “prepaid managed care” or “mandatory health insurance” or “national health insurance” or “statutory health insurance” or “preferred provider organizations” or “social health insurance” or “uninsured patients” or “indemnity insurance” or “life insurance” or “annuities” or “mutual benefit societies” or “provident funds” or “social insurance” or “unemployment benefit” or “unemployment insurance”)))

3) (DE=(opinions or beliefs) or DE=(principles or consciousness or values) or DE=(perceptions or attitudes or knowledge or comprehension)) or (DE=("deception" or "lies" or "self esteem" or "social responsibility" or "ethics" or "cheating" or "respect" or "gratitude" or "morality" or "compliance" or "circumstances" or "corruption" or "moral development" or "moral education" or "moral judgement" or "shame" or "white collar crime")))

ABI Inform on Proquest (29 November 2007)

LSU({FRAUD}) AND LSU({STUDIES})

((LSU({WELFARE}) OR LSU({SOCIAL WELFARE}) OR LPER({WELFARE SERVICES})) AND LSU({FRAUD})) AND NOT AT (book review))

LSU({OVERPAYMENT}) OR LSU ({IMPROPER PAYMENT*})

TITLE(attitude*) OR TITLE(perception*) OR TITLE(belief*) OR TITLE(awareness) AND ((financ*) OR (insurance)) AND NOT AT(book review)

TITLE(attitude*) OR TITLE(perception*) OR TITLE(belief*) OR TITLE(awareness) AND ((welfare payment*) OR (benefit payment*)) AND NOT AT(book review)

Business source complete on EBESCO (29 & 30 November 2007)

AB (defraud* or overpayment*) or AB ("claim* error*" or "claim* process*" or "client error*") or AB ("customer error*" or "improper payment*" or "undeclared income") or AB ("official error*" or "verification framework") OR KW "fraud"

AB (financ*) or (welfare payment*) or (benefit payment*) AND TI (attitude*) or (perception*) or (awareness) or (belief*)

Econlit (29 November 2007)

((defraud*)or("improper payment*")) or ((fraud*) in TI) or ((fraud*)and(claim*)) or ((welfare*)and(fraud*)) or (overpayment*) or ("undeclared income")

Science Direct (29 November 2007 & 3 December 2007)

fraud* or defraud* or overpayment* or "improper payment*"

financ* AND perception*

financ* AND attitude*

financ* AND belief*

financ* AND awareness*

"welfare payment*" or "benefit payment*"

IBSS on Ovid (3 December 2007)

Search 1

1) fraud.ab,ti.
2) fraud/ or dishonesty/
3) "change$ circumstance$".mp. [mp=ab, ti, sh, gh, hw, tc, id]
4) "customer error$".mp. [mp=ab, ti, sh, gh, hw, tc, id]
5) "claim$ error$".mp. [mp=ab, ti, sh, gh, hw, tc, id]
6) "claim$ process$".mp. [mp=ab, ti, sh, gh, hw, tc, id]
7) "official error$".mp. [mp=ab, ti, sh, gh, hw, tc, id]
8) defraud$.ti,ab.
9) "improper payment$".mp. [mp=ab, ti, sh, gh, hw, tc, id]
10) overpayment$.mp. [mp=ab, ti, sh, gh, hw, tc, id]
11) "undeclared income".mp. [mp=ab, ti, sh, gh, hw, tc, id]
12) "verification framework".mp. [mp=ab, ti, sh, gh, hw, tc, id]
13) 1 or 2 or 3 or 4 or 5 or 6 or 8 or 9 or 10 or 11 or 12
14) limit 13 to English language [Limit not valid in: International Bibliography of the
15) remove duplicates from 14

Search 2

1) social security/ or government programs/ or insurance/ or Medicaid/ or Medicare/
2) "welfare services (government)"/
3) financial services/ or banking/ or finance/
4) financial service$.mp. [mp=ab, ti, sh, gh, hw, tc, id]
5) "welfare payment$".mp. [mp=ab, ti, sh, gh, hw, tc, id]
6) "benefit payment$".mp. [mp=ab, ti, sh, gh, hw, tc, id]
7) "pension credit$".mp. [mp=ab, ti, sh, gh, hw, tc, id]
8) "child benefit$".mp. [mp=ab, ti, sh, gh, hw, tc, id]
9) "housing benefit$".mp. [mp=ab, ti, sh, gh, hw, tc, id]
10) "incapacity benefit$".mp. [mp=ab, ti, sh, gh, hw, tc, id]
11) "income support$".mp. [mp=ab, ti, sh, gh, hw, tc, id]
12) "tax credit".mp. [mp=ab, ti, sh, gh, hw, tc, id]
13) "unemployment benefit$".mp. [mp=ab, ti, sh, gh, hw, tc, id]
14) attitudes/ or adolescent attitudes/ or client attitudes/ or community attitudes/ or consumer attitudes/ or employee attitudes/ or employer attitudes/ or female attitudes/ or health attitudes/ or health personnel attitudes/ or male attitudes/

15) perception/ or risk perception/ or role perception/ or self perception/ or social perception/
16) awareness/
17) comprehension/
18) honesty/ or integrity/
19) dishonesty/ or deception/
20) ethics/ or social responsibility/
21) morality/ or personal values/ or social values/
22) corruption.mp. [mp=ab, ti, sh, gh, hw, tc, id]
23) bribery.mp. [mp=ab, ti, sh, gh, hw, tc, id]
24) compliance/
25) 14 or 15 or 16 or 17 or 18 or 19 or 20 or 21 or 22 or 23 or 24
26) 1 and 25
27) 2 and 25
28) 3 and 25
29) 4 and 25
30) 11 and 25
31) 14 and 25
32) 15 and 25

Zetoc (3 December 2007)

	AND	OR
Child benefit	Fraud	Knowledge
Council tax benefit	Overpayment	Attitudes
Job seeker allowance	Change of circumstance	Perceptions
Local authority	Compliance	Awareness
Pension credit	Costumer error	Understanding
Tax credit	Client error	Opinions
Income support	Claimant error	
Social security	Official error	
Disability allowances	Moral	
Family allowances	Ethical	
Housing benefits	Social responsibility	
Incapacity benefits	Disputable behaviour	

Invalidity benefits	Gratitude
Maternity benefits	Respect
Sickness benefits	Improper behaviour
Welfare benefits	Dishonesty
Unemployment benefit	Cheating
Unemployment insurance	Deception
	Lying
	Lies
	Disguise
	Faking
	Self-respect
	Non-compliance
	Defraud
	Claiming
	Verification framework
	Undeclared income
	White collar crime

SSCI (4 December 2007)

#9 #5 AND #1

#8 #4 AND #5

#7 #1 AND #4

#6 #1 AND #3

#5 TI= (moral* OR ethic* OR "social responsibility" OR "disputable behaviour*" or gratitude OR dishonest* or disguise OR faking OR "self-respect" or cheat* OR deception OR lying OR lies or noncompliance OR attitude* OR perception* OR awareness OR understanding OR opinion* or belief* or comprehension or honest* or bribery)

#4 TS= ("financial service*" or "debt*" or "credit card*" or "consumer credit*" or arrears or "fine default*" or insurance)

#3 TS= ("Welfare benefit*" or "attending allowance*" or "child benefit*" or "council tax benefit*" or "disability allowance*" or "disability living allowance*" or "family allowance*" or "family credit*" or "family fund*" or "food stamp*" or "housing benefit*" or "incapacity benefit*" or "income support*" or "independent living fund*" or "invalidity benefit*" or "mean test*" or Medicare or Medicaid or "pension credit*" or "social fund*" or "social security*" or "unemployment benefit*" or insurance or "tax credit*")

#2 TS=overpayment* or “change* of circumstance*” or defraud* or “undeclared income” or “improper payment* or “claim* error*” or “customer error*” or “client error*” or “official error*” or “verification framework*”

#1 TS=fraud* or “tax evasion” or “claim* process*” or corruption

Emerald (4 December 2007)

‘All fields’ searches
Customer error or improper payment* or overpayment* or undeclared income

‘All fields except full-text’ searches
change* of circumstance* or defraud or fraud

‘Keyword’ searches:

(attitude* or views*) and (benefit* or credit* or banking or finance or insurance or pension* or loan*)

compliance (All fields except full-text)
and (benefits* or credit* or banking or finance) KW

Appendix C
Inclusion and exclusion criteria

Inclusion Criteria	Exclusion Criteria
1. Studies were published in English.	EXC1 = Studies were not published in English.
2. Studies were published from1980 onwards.	EXC2 = Studies were published before 1980.
3. Studies were based on empirical research.	EXC3 = Studies were reviews, overviews, testimonies, policy documents, editorials, book reviews, handbooks, manuals, and methodology papers.
4. Studies were non-evaluative research evidence and focused on financial products/services, welfare provision, the taxation, and/or tax credit systems (FWTT).	EXC4= Studies were non-evaluative research (that is, not focused on FWTT). Studies were **excluded** if they were non-evaluative studies that aimed to explore a) barriers to claiming, or taking up, benefits; b) people's attitudes towards money, financial risks, and/or investment risks; c) people's financial decisions and behaviours (i.e. spending, saving, borrowing, money management.
5. Studies were an evaluation of programmes aiming to reduce the amount of error and/or fraud within FWTT.	EXC5 = Studies were an evaluation of programmes **not** aiming to reduce the amount of error and/or fraud within FWTT. *Studies that were annual reports or fiscal year performance reports of these organisations were not in the scope of the systematic map.*
6. Studies were non-evaluative research evidence carried out in the UK.	EXC6 = Studies were non-evaluative research carried out outside the UK.

Appendix D
Coding tool

Changes of circumstances guideline

Section A: DWP core keywords

A.1 Identification of report(s) *Please use as many keywords as apply.*	A.1.1 Website A.1.2 Citation *Please use this keyword if the report was identified from the bibliographic list of another report.* A.1.3 Contact *Please use this keyword if the report was found through a personal/professional contact.* A.1.4 Handsearch Please use this keyword if the report was found through hand searching a journal. A.1.5 Electronic database *Please use this keyword if the report was found through searching on an electronic bibliographic database.* *In addition, if the report was found on an electronic database please use ONE OR MORE of the following keywords to indicate which database it was found on:* *ASSIA* *ABI INFORM* *Business Source Premier* *Econlit* *Emerald* *IBSS* *PsycINFO* *Sciencedirect* *Social Science Citation Index* *Social Services Abstracts* *Sociological Abstracts* *Zetoc* A.1.6 Unknown *Please use this keyword if it is unknown how the report was found.*

A.2 Status *Please use one keyword only.*	A.2.1 Published *Please use this keyword if the report has an ISBN or ISSN number.* A.2.2 In press *Please use this keyword if the report has been accepted for publication but has not yet been published.* A.2.3 Unpublished *Please use this keyword for reports which do not have an ISBN or ISSN number (e.g. 'internal' reports; conference papers).* A.2.4 Not known
A.3 Linked reports *Is this report linked to one or more other reports in such a way that they also report the same study?* *Please also see the information contained above and in the help files for how to deal with linked reports on EPPI-Reviewer.*	A.3.1 Not linked *(Please provide bibliographical details and/or unique identifier)* A.3.2 Linked A.3.3 Not known
A.4 In which country/countries was the study carried out? *Please tick only one.*	A.4.1 UK A.4.2 Europe *Not Scandinavian countries and Russia* A.4.3 Scandinavian *Denmark, Sweden, Finland, Norway, Iceland* A.4.4 USA A.4.5 Canada A.4.6 Australia A.4.7 New Zealand A.4.8 Asia A.4.9 Africa A.4.10 Central/South America A.4.11 Russia A.4.12 A cross-national study (including UK) A.4.13 A cross-national study (non-UK) A.4.14 Other

Section B: Study intention and methods

B.1 What does the study explore/investigate? Please use as many as keywords as apply.	B.1.1 Attitude/perception/belief of financial services/welfare or benefit or credit systems *A range of study methods may be used.* B.1.2 An intervention *An interventions is defined as any policy, programme, procedure or actions with intention to cause a change to outcomes of interests (reduce/prevent/deter error, fraud or improve accuracy in financial/tax/benefit/credit system that require notification of change).* B.1.3 Value for money *Please use this code if the study aims to assess/ audit performance/accountability in government departments/agencies/public bodies.*
B.2 What is the study design? *NB: Studies may use more than one method. Please code each method used for which data extraction is being completed and the respective outcomes for each method.* *Intervention study is:* *a study in which an INTERVENTION is assigned to subjects and the frequency of outcome(s) of interest is measured to assess the impact of the intervention.* *Observational study is:* *a study in which the distribution of both exposures and outcomes of interest are measured without the researcher attempting to manipulate them.* *Randomised controlled Trails (RCT) (intervention study): Please use this code if the outcome evaluation employed the design of a randomised controlled trial. To be classified as an RCT, the evaluation must:* *i) Compare two or more groups which receive different interventions or different intensities/ levels of an intervention with each other; and/ or with a group which does not receive any intervention at all.* *AND*	B.2.1 Randomised Controlled Trial B.2.2 Experimental with non-random allocation to groups B.2.3 Single group pre-post test (no control groups) B.2.4 Single group post-test only (no control groups) B.2.5 Cohort study B.2.6 Longitudinal study (i.e. panel, trend study- other than a cohort study) B.2.7 Cross-sectional B.2.8 Case control B.2.9 Views B.2.10 Ethnography B.2.11 Case study B.2.12 Action research B.2.13 Systematic review B.2.14 Review

ii) Allocate participants (individuals, groups, classes, schools, LEAs etc) or sequences to the different groups based on a fully random schedule (e.g. a random numbers table is used). If the report states that random allocation was used and no further information is given, then please keyword as RCT. If the allocation is NOT fully randomised (e.g. allocation by alternate numbers by date of birth), then please keyword as a non-randomised controlled trial. *Non-RCT (intervention study): Please use this code if the evaluation compared two or more groups which receive different interventions, or different intensities/levels of an intervention with each other and/or with a group which does not receive any intervention at all BUT DOES NOT allocate participants (individuals, groups, classes, schools, LEAs etc) or sequences in a fully random manner. This keyword should be used for studies which describe groups being allocated using a quasi-random method (e.g. allocation by alternate numbers or by date of birth) or other non-random method.* *Single group pre-post test (Intervention study): Please use this code where a group of subjects (e.g. a class of school children) is tested on outcome of interest before being given an intervention which is being evaluated. After receiving the intervention, the same test is administered again to the same subjects. The outcome is the difference between the pre- and post- test scores of the subjects.* *Single group post-test (Intervention study): Please use this code where one group of subjects is tested on outcome of interest after receiving the intervention which is being evaluated.* *Cohort study (Observational study): Please use this code where researchers prospectively study a sample with common characteristics (e.g. age), collect data on the different aspects of policies/ programmes experienced by members of the sample(smoking, non-smoking), look forward in time to measure their later outcomes (e.g. health outcomes) and relate the experiences to the outcomes achieved. The purpose is to assess the effect of the different experiences on outcomes.*	B.2.15 Document/database/administrative records study B.2.16 Methodological study B.2.17 Audit B.2.18 Simulation/modelling B.2.19 Other

Longitudinal study *Repeated measures design which data collected at different points of time: e.g. British Household Panel Survey – Families and Children Study (here the same people are followed at each wave, with new people added to refresh the sample each year).* *Please use a cohort study answer, if it is a cohort study design.* *Cross-sectional study (Observational study): Please use this code where researchers have collected data at one point in time over a whole population (e.g. a national survey).* *Case-control (Observational study): Please use this code where researchers compare two or more groups of individuals on the basis of their current situation (e.g. 16- year-old pupils with high current educational performance compared with those with average educational performance), and look back in time to examine the statistical association with different policies or practices which they have experienced (e.g. class size; attendance at single sex or mixed sex schools; non-school activities, etc).* *Views: Please use this code where the researchers try to understand a phenomenon from the point of the 'worldview' of a particular, group, culture or society. In these studies, there is attention to subjective meaning, perspectives and experience.* *Ethnography: Please use this code when the researchers present a qualitative description of human social phenomena, based on fieldwork.* *Case study: Please use this code when researchers refer specifically to their design/ approach as a 'case study'. Where possible, further information about the methods used in the case study should be coded.*	

Action research: Please use this code where practitioners or institutions (with or without the help of researchers) have used research as part of a process of development and/or change. Where possible, further information about the research methods used should be coded. *Systematic review: Please use this code if the review is explicit in its reporting of a systematic strategy used for (i) searching for studies (i.e. it reports which databases have been searched and the keywords used to search the database, the list of journals handsearched, and describes attempts to find unpublished or 'grey' literature); (ii) the criteria for including and excluding studies in the review; and (iii) methods used for assessing the quality and collating the findings of included studies. Review: Please use this code for cases where the review discusses a particular issue bringing together the opinions/findings/ conclusions from a range of previous studies but where the review does not meet the criteria for a systematic review (as defined above).* *Document study: Please use this code where researchers have used documents/databases/ administrative records as a source of data (e.g. newspaper reports/databases within an organisation).* *Methodological study: Please use this keyword for studies which focus on the development or discussion of methods; for example discussions of a statistical technique, a recruitment or sampling procedure, a particular way of collecting or analysing data etc. It may also refer to a description of the processes or stages involved in developing an 'instrument' (e.g. an assessment procedure).*	
B.3 When was the study carried out? *If the authors give a year/or a range of year, then put that in; if not, give a 'not later than' date by looking for a date of first submission to the journal or the publication dates.*	B.3.1

Section C: Population

C.1 Who or what is/are the sample/subjects in the study? *Please use as many codes as apply to describe the nature of the sample of the report.*	C.1.1 Government officers *Please use this code if the sample focus of the study is representatives from government agencies/bodies(e.g. DWP, Inland Revenue, DCSF).* C.1.2 Local Authority officers *Please use this code if the sample focus of the study is people who work in a local authority.* C.1.3 Welfare claimants with disability C.1.4 Welfare claimants *Please use this code if the sample focus of the study is welfare claimants/benefit recipients.* C.1.5 Employees *Please use this code if the sample focus of the study is employee of financial institutions or non-government departments.* C.1.6 Business owner/employers C.1.7 General public C.1.8 Customers of financial product providers *Please use this code if the sample focus of the study is customers of entities from a private sector (e.g. insurance companies, banks).* C.1.9 Auditors C.1.10 Government departments/agencies C.1.11 Potential customers/claimants C.1.12 Taxpayers C.1.13 Other sample focus
C.2 What is the total number of participants/ cases in the study? *Please report number used in analyses, attrition, number recruited, etc. if reported.*	C.2.1 Details *Please give details, if available, of number recruited; number of participants; number used in analyses and attrition rates.* C.2.2 Not stated/unclear C.2.3 Not applicable
C.3 Age	C.3.1 Under 16 C.3.2 16-59 C.3.3 60 and over C.3.4 Not stated/unclear C.3.5 Not applicable (e.g. study of government polices/financial institutions/documents)

C.4 What is the sex of participants?	C.4.1 Single sex C.4.2 Mixed sex C.4.3 Not stated/unclear C.4.4 Not applicable (e.g. study of government polices/financial institutions/documents)
C.5 Was analysis/sub-group analysis performed on these variables? *Please use this code ONLY if it is explicitly stated in the study.*	C.5.1 Ethnicity C.5.2 Gender C.5.3 Age C.5.4 SES C.5.5 Disability C.5.6 No

Section D: Non-evaluative study

D.1 What is the focus of study?	D.1.1 Attitude/perception/belies/experience of welfare/benefit/credit systems/financial services/institutions *(For example, understanding circumstances of households in receipt benefits, attitudes to credit, loan, attitudes to direct debit)* D.1.2 Attitude/perceptions/belief/experience of benefit/credit systems/financial services/ institutions in relation to 'notification of change' *(For example, experiences of system process in relation to notification of change, attitude toward internet uses in relation to notify changes of circumstance, aspects of how system works to reduce error/fraud)* D.1.3 Attitude/perception/belief/experience of fraud, non-compliance, corruption, misrepresentation in benefit/credit systems/ financial products/services D.1.4 Attitude/perception/belief/experience of fraud, non-compliance, corruption, misrepresentation in benefit/credit systems/ financial products in relation to notify changes of circumstances D.1.5 An estimate/identification of fraud, error, incorrectness, in the systems

D.2 What is the service/benefit/system?	D.2.1 Bank products/services *(i.e. loan, credit card)* D.2.2 Insurance products/services *(i.e. car insurance, life insurance, private health insurance)* D.2.3 Financial state Welfare/Support – *Jobseeker Allowance* – *UK-Income related benefits* – *Back to Work Bonus* – *Extended Payment of Council Tax Benefit, Council Tax Benefit* – *Extended Payment of Housing Benefit, Housing Benefit* – *Income Support (including Minimum Income Guarantee)* – *Disability Working Allowance* – *Social fund grant for funeral expenses* – *Social fund grant for maternity expenses* – *Community care grants* UK non-income related benefit – *Statutory Sick Pay* – *Statutory Maternity Pay* – *Maternity Allowance* – *Guardian Allowance* – *Child Benefit* – *Incapacity Benefit (Sickness Benefit and Invalidity Benefit)* – *Disability Living Allowance* – *Severe Disablement Allowance* – *Industrial Injuries Disablement Benefit* – *Widow Pension/Bereavement Allowance* – *Bereavement Benefits (Widows' Benefits)* – *Widowed Mother's Allowance/Widowed Parent's Allowance* – *Widow Payment/Bereavement Payment* – *Invalid Care Allowance* – *Attendance Allowance Credit* – *Working Families Tax Credit* – *Disabled Person's Tax Credit* – *Retirement Pension* – *War Disablement Pension* – *War Widow's Pension*

	D.2.4 Revenue collection *(For example, VAT, Income Tax, Commercial Tax, Council Tax, stamp duty, TV license fee)* D.2.5 Non-state pension – *Occupational pension* – *Personal pension* D.2.6 Healthcare provision *Prescription provision* D.2.7 Across services/departments *(i.e. social security system, benefit system) Please use this code if there is no separate analysis for each departments/systems.* D.2.8 Government agencies/units/departments *(i.e. Child Support Agency, Job Centre Plus, the Pension Centre, Disability and Carers Service, Call Centre)* D.2.9 Financial institutions

Section E: Intervention and Value for Money (VfM) study

E.1 Type of intervention/strategy/policy *Please tick only one.*	E.1.1 Risk assessment – *Estimate the scale and aiming to understand types/characteristics of fraud/error* – *Tools or techniques to measure fraud/ error/compliance (i.e. databases comparison, modelling techniques)* – *Risk assessment* E.1.2 Prevention – *Information campaigns* – *Staff training* – *Improvement of existing process or service delivery (i.e. simplify forms)* – *Introduction of measures to prevent fraud/ error (i.e. a new claim system, electronic payment system, a new call centre)* – *Social care programmes to assist non-coping families to deal with benefit systems*

	E.1.3 Detection – *Gathering information from the public* – *Data matching, data mining, neutral networks, scoring systems* – *Regular payment checks* – *Random and time-based reviews* – *Inter-agency compliance activities* – *Using modelling/software* – *Internal auditing/internal control* – *Legislation* – *Hotlines* – *Data management* – *Improvement of management structures* – *Identity check* E.1.4 Deterrence – *Sanctions(i.e. fines, penalties)* – *Investigation and prosecution* – *Recovery of assets* E.1.5 Integrated strategic approach *Please use this code if the programme is a mult-component intervention.* E.1.6 Other
E.2 What is programme/intervention being studied? Does it have a formal name?	E.2.1 Yes E.2.2 No E.2.3 Not stated/unclear
E.3 Target of intervention	E.3.1 Claimants/customers E.3.2 Government officers/employees E.3.3 Programmes/organisations/systems
E.4 What is the service/benefit/system? *Please tick as many keywords as apply.*	E.4.1 Bank products/services *(i.e. loan, credit card)* E.4.2 Insurance products/services *(i.e. car insurance, life insurance, private health insurance)* E.4.3 Government agencies/units/departments *(i.e. Child support agency, Job Centre Plus, Disability and carer services, the Pension Centre, Fraud Investigation Unit)* E.4.4 Financial institutions *(i.e. bank, insurance company)*

	E.4.5 Financial state, Welfare/Support – *Retirement Pension* – *War Disablement Pension* – *War Widow's Pension* *UK-income related benefits* *For example* – *Back to Work Bonus* – *Extended payment of Council Tax Benefit, Council Tax Benefit* – *Extended Payment of Housing Benefit, Housing Benefit* – *Income Support (including Minimum Income Guarantee)* – *Disability Working Allowance* – *Social fund grant for funeral expenses* – *Social fund grant for maternity expenses* – *Community care grants* *UK non-income related benefit i.e.* – *Statutory Sick Pay* – *Statutory Maternity Pay* – *Maternity Allowance* – *Guardian Allowance* – *Child Benefit* – *Incapacity Benefit (Sickness Benefit and Invalidity Benefit)* – *Disability Living Allowance* – *Severe Disablement Allowance* – *Industrial Injuries Disablement Benefit* – *Widow Pension/Bereavement Allowance* – *Bereavement Benefits (Widows' Benefits)* – *Widowed Mother's Allowance/Widowed Parent's Allowance* – *Widow Payment/Bereavement Payment* – *Invalid Care Allowance* – *Attendance Allowance* – *Jobseeker Allowance* – *Working Families Tax Credit*

	Australia – *Family Tax Benefit* – *Child Care Benefit* – *Baby Bonus* – *Maternity Immunisation Allowance* – *Job Education Training Childcare* – *Childcare Tax Rebate* – *Baby Bonus* – *Rent Assistance* – *Double Orphan Pension* *Before 2006* – *Childcare Tax Rebate* *USA* – *Food Stamp* – *Food Assistance* – *Special Supplemental Nutrition Program for Women, Infants, and Children* – *Earn Income Tax Credit* E.4.6 Revenue Collection *(i.e. VAT, Income Tax, Commercial Tax, Council Tax, Stamp Duty, TV license fee)* E.4.7 Health care provision – *Medicare* – *Medicaid* – *Prescription provision* E.4.8 Non-state pension – *Occupational pension* – *Personal pension* E.4.9 Across services/departments *Please use this code if there is no separate analysis of each benefit/system.* E.4.10 Other
E.5 Is there any other useful information about interventions/programmes/policies?	E.5.1 Yes E.5.2 No

Section F: Intervention and Value for Money (VfM) reports

F.1 What variables/concepts, if any, does the study aim to measure or examine?	F.1.1 Monetary outcomes F.1.2 Non-monetary outcomes
F.2 Monetary outcomes	F.2.1 Amount of fraud identified *(i.e. Amount of fraud identified, but not the amount saved or the reduction from fraud)* F.2.2 Amount of error/incorrect payment F.2.3 Revenue from penalty and sanction *(i.e. amount raised by imposition of penalty charges)* F.2.4 Revenue from recovery *(i.e. Amount of fraud recovered, Amount of assets seized, Amount of confiscation orders and recover, debt outstanding)* F.2.5 Cost/Benefit *(For example, cost, saving, yield, benefit identified due to intervention – including cost benefit analysis)* F.2.6 Other
F.3 Non-monetary outcomes	F.3.1 Satisfaction F.3.2 Accessibility *(i.e. claim forms, internet usage)* F.3.3 Attitude/perception/knowledge/awareness F.3.4 Operational process/Information management *(i.e. changes of circumstances, decision making, numbers of caseloads)* F.3.5 Service delivery *(i.e. claimants received payment on time)* F.3.6 Programme performance and integrity *(i.e. Implementation of required/recommended controls and strategy to prevent/reduce incorrectness payment/fraud)* – *Programme weaknesses/strengths* F.3.7 Prosecution or recovery *(i.e. Number of cases recommended for criminal prosecution, Number of convictions achieved)*

	F.3.8 Sanction and penalty *(i.e. Number of formal cautions given. Number of penalty charges imposed.)* F.3.9 Compliance F.3.10 Security *(i.e. information system, fraud detection.)* F.3.11 Other F.3.12 Fraud detection/claim classification

Appendix E
Descriptive summary of key characteristics of non-evaluative studies

Studies	Countries	Study designs	Samples	Systems/Government departments/ agencies
Adams *et al.* (2004)	UK	Cross-sectional	Welfare claimants with disability Welfare claimants	Across services/benefit systems:
Adams and Webley (2001)	UK	Views	Business Owner/employers	Revenue collection – VAT
Alm and Torgler (2006)	A cross-national study (including UK)	Cross-sectional	Taxpayers	Revenue collection – Tax
Askham *et al.* (1995)	UK	Longitudinal study (i.e. panel, trend study- other than a cohort study)	General public	Revenue collection – Taxation Across services/benefit systems: – State pension – Social Benefits (for disabled people, children, unemployed, single parents)
Atkinson and McKay (2005b)	UK	Views	CSA customers	Government agencies/units/departments – Child Support Agency
Atkinson and McKay (2005a)	UK	Views	Government officers CSA customers	Government agencies/units/departments – Child Support Agency
Bean and Papadakis (2003)	A cross-national study (including UK) 1985: GB, USA, West Germany, Italy, Australia, Austria 1990: GB, USA, West Germany, Italy, Australia, Norway	Longitudinal study (i.e. panel, trend study – other than a cohort study)	Other sample focus: – unclear; uses ISSP 'Role of Government' surveys	Across services/benefit systems: – Attitudes towards the welfare state (e.g. statutory intervention and government spending on social welfare - health, education, pensions, unemployment benefits)
Bebbington *et al.* (1991)	UK	Cross-sectional	General public	Bank products/services – The study explored use of various banking services, including home and office banking systems, and ATMs – The study explored factors influencing the choice of bank
Becker (1987)	UK	Cross-sectional	Local authority officers social workers	Financial state Welfare/Support Social fund

Studies	Countries	Study designs	Samples	Systems/Government departments/ agencies
Bell *et al.* (2006a)	UK	Cross-sectional	Other sample focus parents in Child Support Agency's database	Government agencies/units/departments Child Support Agency (Maintenance Direct)
Bell *et al.* (2006b)	UK	Views	Customers CSA parents	Government agencies/units/departments Child Support Agency
Bennett and Gabriel (2001)	UK	Cross-sectional	General public: Group 1 – young professional Group 2 – university staff, NHS staff Group 3 – train commuters	Financial Institutions - Insurance companies
Besley and Preston (1997)	UK	Simulation/modelling	Taxpayers householders liable for poll tax	Revenue collection – Poll tax
Blekesaune and Quadagno (2003)	A cross-national study (including UK) 24 national contexts	Cross-sectional	General public – Data from International Social Survey Programs (ISSP) 'Role of Government'	Across services/benefit systems – Welfare state policies (toward the unemployed, the sick and the old)
Boath *et al.* (2006)	UK	Case study	Government officers Local Authority officers	Financial state Welfare/Support – Housing Benefit and Council Tax Benefit
Boath and Wilkinson (2007)	UK	Views	Local Authority officers	Government agencies/units/departments – Local Authorities
Bond and Stone (2004)	UK	Cross-sectional Views	Employees Insurance claimants	Insurance products/services – Automotive insurance
Boon *et al.* (2004)	UK	Views	Welfare claimants General public	Across services/benefit systems – All benefits. When administrative sanctions are used, 66 per cent of cases are Income Support, 26 per cent Jobseeker's Allowance, and eight per cent 'other benefits'

Studies	Countries	Study designs	Samples	Systems/Government departments/ agencies
Bosworth-Davies (1993)	UK	Cross-sectional	Employees – Compliance officers employed by the British Financial services	Bank products/services – Financial service industry
Bradshaw and Mayhew (2004)	UK	Longitudinal Study (i.e. panel, trend study- other than a cohort study) 1983-2001 Cross-sectional 2001	General public	Across services/benefit systems attitudes to the welfare state/social security benefits – including retirement pensions, benefits for disabled people, benefits for the unemployed, child benefits, benefits for single parents
Bunt *et al.* (2007)	UK	Views	Welfare claimants with disability Welfare claimants	Government agencies/units/departments – Department for Work and Pension agencies
Bunt *et al.* (2004)	UK	Views	Employees Business owner/ employers	Financial state Welfare/Support – State pension – Non-state pension
Bunt *et al.* (1998)	UK	Views	Welfare claimants Pensioners Customers – Private pension scheme Other sample focus: trustees, administrators of pension scheme	Non-state pension – Private pension schemes
Button *et al.* (2007)	UK	Cross-sectional	Government officers Local authority officers Employees Auditors	Government agencies/units/departments DWP, Local Authorities, NHS
Callender *et al.* (1994)	UK	Cross-sectional with follow up interviews	Business owner/ employers	Financial state Welfare/Support – Family Credit
Cebulla (2001)	A Cross-national study (including UK)	Cross-sectional Views	Potential customers/ claimants – Potential insurance customers	Insurance products/services – Private unemployment insurance

Studies	Countries	Study designs	Samples	Systems/Government departments/ agencies
Christie and Munro (2003)	UK	Views	Other sample focus university students	– Student loan
Clery *et al.*(2007)	UK	Cross-sectional	General public	Financial state Welfare/Support – Non-state pension
Coast *et al.* (2002)	UK	Views	Employees – Individuals who have a role in the provision or delivery of health services General public	Healthcare provision
Coleman *et al.* (2002)	UK	Cross-sectional	Welfare claimants	Across services/benefit systems
Corden and Sainsbury (2001)	UK	Views	Government officers Benefits Agency Employment Personal Service Advisers Welfare claimants	Financial state Welfare/Support – Incapacity Benefits
Corden and Nice (2006a)	UK	Longitudinal study (i.e. panel, trend study- other than a cohort study)	Welfare claimants	Financial state Welfare/Support – Incapacity Benefits
Corden and Craig (1991)	UK	Views	Welfare claimants Potential customers/ claimants	Financial state Welfare/Support – Family Credit
Corden and Nice (2006b)	UK	Views	Welfare claimants	Financial state Welfare/Support
Dean *et al.* (1980)	UK	Cross-sectional	General public	Revenue collection – Tax
Dean and Melrose (1996)	UK England	Views	Welfare claimants	Across services/benefit systems – Benefit systems/Social security fraud
Department for Transport, Local Government and the Regions (2001)	UK	Views	Local authority officers Auditors Government departments/agencies	Financial state Welfare/Support – the Private Sector Housing Renewal (PSHR) and Disabled Facilities Grants (DFG) programmes run by Local Authorities

Studies	Countries	Study designs	Samples	Systems/Government departments/ agencies
Department for Work and Pensions (2005)	UK	Cross-sectional Document/database/ administrative records study	Government departments/agencies	Financial state Welfare/Support – Disability Living Allowance
Department for Work and Pensions (2006)	UK	Cross-sectional Document/database/ administrative records study	Welfare claimants	Financial state Welfare/Support State pension
Department for Work and Pensions (2007)	UK	Cross-sectional Document/database/ administrative records study	Welfare claimants	Across services/benefit systems
Dwyer (2002)	UK	Views	Welfare claimants	Across services/benefit systems – Welfare rights and responsibilities
Edwards and Wolfe (2007)	UK	Case study	Employees Business owner/ employers	Financial institutions – Insurance company
Elam and Ritchie (1997)	UK	Views	Welfare claimants with disability Welfare claimants Potential customers/ claimants	Government agencies/units/departments – Benefit Agency local offices
Erens and Ghate (1993)	UK	Cohort study	Welfare claimants with disability	Financial state Welfare/Support – Invalidity Benefit
Evason and Woods (1995)	UK	Views	Welfare claimants Potential customers/ claimants low wage workers	Across services/benefit systems
Farrell *et al.* (2005)	UK	Views	Welfare claimants	Financial state Welfare/Support – Social and loan
Financial Service Authority (2002a)	UK	Views	Customers	Bank products/services
Financial Service Authority (2002b)	UK	Cross-sectional	Customers	Bank products/services
Financial Services Authority (2005)	UK	Views	Customers	Bank products/services

Studies	Countries	Study designs	Samples	Systems/Government departments/ agencies
Financial Services Authority (2006)	UK	Cross-sectional	Customers	Bank products/services
Ford and Kempson (1997)	UK	Cross-sectional Views	Customers Other sample focus – Lenders for mortgages (i.e. banks, etc.) – Insurers	Insurance products/services – Private provision for mortgage protection (MPPI) Financial state Welfare/Support – State provision for mortgage protection (ISMI)
Ford (2006)	UK	Cross-sectional 3 years of BSA data pooled to provide sample	General public	Across services/benefit systems – Welfare support generally (e.g. towards the poor, the unemployed)
Fraile and Ferrer (2005)	A Cross-national study (including UK) Austria, West Germany, Britain, USA, Italy, Ireland, Norway, Sweden, New Zealand, Canada, Spain, France, Japan	Cross-sectional	General public	Financial state Welfare/Support – Unemployment benefits
Franses and Thomas (2004)	UK	Views	Government officers Welfare claimants with disability Welfare claimants	Government agencies/units/departments – Jobcentre Plus (new tax credit)
Frey and Torgler (2007)	A cross-national study (including UK)	Simulation /modelling	Taxpayers	Revenue collection – Tax
Fukukawa (2002)	UK	Views	General public	Across services/benefit systems
Furnham (1983)	UK	Cross-sectional	General public	Across services/benefit systems – Social security benefits (focus on unemployed people receiving benefits, including lone parents)
Furnham (1987)	UK	Cross-sectional	General public	Revenue collection – Taxation Across services/benefit systems – Social security

Studies	Countries	Study designs	Samples	Systems/Government departments/ agencies
Furnham and Goletto-Tankel (2002)	UK	Cross-sectional	General public	Bank products/services – Saving Financial state Welfare/Support – State pension – Non-state pension
Gelade and Young (2005)	UK	Cross-sectional	Employees	Financial institutions – Retail-banking sector
George (1996)	A Cross-national study (including UK) Denmark, France, Germany, Greece, the Netherlands, and the UK	Views	Business owner/ employers Other sample focus: – Trade unions – Welfare pressure groups – Representatives of the mass media – Civil servants	Financial state Welfare/Support – Retirement pensions – Non-state pension
Goldstone and Douglas (2003)	UK	Views	Government officers: – Jobcentre Plus staff Welfare claimants with disability – Incapacity Benefits customers	Financial state Welfare/Support – Incapacity Benefits
Goode and Moutinho (1995)	UK	Cross-sectional simulation/modelling	Customers Other sample focus: students	Bank products/services – Choice of ATMs
Goodfellow (1987)	UK	Views	Other sample focus 'customers' (no further details)	Bank products/services – Savings, investments, credit, and financial management
Gough and Sozou (2005)	UK	Cross-sectional	Potential customers/ claimants	Non-state pension
Griggs *et al.* (2005)	UK	Cross-sectional	Welfare claimants	Financial state Welfare/Support – Tax credits
Hall *et al.* (2006)	UK	Views	General public	Non-state pension – Personal accounts

Studies	Countries	Study designs	Samples	Systems/Government departments/ agencies
Hawkes and Garman (1995)	UK	Views	General public	Financial state Welfare/Support Non-state pension – All types of pension and retirement savings schemes: occupational and state pensions
Hills (2002)	UK	Longitudinal Study (i.e. panel, trend study- other than a cohort study) BSA surveys	General public	– Social security and related policies since 1997 (e.g. benefits for carers, disabled persons, retirees, low income parents, single parents, the unemployed; spending on police and prisons, housing, industry, transport, education, overseas aid, defence)
HM Treasury (2006)	UK	Document/database/ administrative records study	Government departments/ agencies: Central Government bodies, including all the main departments	Across services/benefit systems
Howat and Sims (2006)	UK	Cross-sectional	Welfare claimants	Financial state Welfare/Support – State pension
Howat *et al.* (2007)	UK	Views	Welfare claimants	Government agencies/units/departments – International Pension Service
Hudson *et al.* (2006)	UK	Views Case study	Government officers Welfare claimants	Government agencies/units/departments Jobcentre Plus
Hutton and Corden (1998)	UK	Views	Customers Child Support Agency Clients	Government agencies/units/departments Child Support Agency
Irvine *et al.* (2007)	UK	Views	Welfare claimants	Financial state Welfare/Support – Housing Benefit
Irving *et al.* (2003)	UK	Views	Welfare claimants	Across services/benefit systems
Johnson and Fidler (2006)	UK	Cross-sectional	Welfare claimants with disability Welfare claimants	Government agencies/units/departments – Jobcentre Plus

Studies	Countries	Study designs	Samples	Systems/Government departments/ agencies
Joseph *et al.* (2005)	UK	Cross-sectional	Customers	Bank products/services – Banking technology
Keenan and Dean (1980)	UK	Cross-sectional	General public	Revenue collection – Tax
Kemp (1997)	A Cross-national study (including UK) Australia, Britain, Canada, Germany, Netherlands, New Zealand, Sweden	Views	Other sample focus National officials and policy experts	Financial state Welfare/Support Housing allowances
Kempson and Whyley (2001)	UK	Cross-sectional	Welfare claimants with disability Welfare claimants	– The State Retirement Pension (RP); Child Benefit (ChB); Incapacity Benefit (IB); Disability Living Allowance (DLA); Income Support (IS) and Jobseeker's Allowance (JSA)
Kempson *et al.* (1999)	UK	Cross-sectional Views	Welfare claimants Customers	Insurance products/services – Mortgage Payment Protection Insurance (private insurance safety-net for mortgagors) Financial state Welfare/Support – State safety-net support for mortgagors (ISMI)
Levi (1998)	UK	Views	Government officers Other sample focus: fraudsters	Bank products/services – Credit cards and other cards
Levi (1991)	UK	Cross-sectional	Employees	Financial institutions
Lewis and Vanvenrooij (1995)	UK	Cross-sectional	Other sample focus: first year university students (main sample), sixth form students, fourth year university students	Bank products/services – Loans
Lewis (1982)	UK England	Views	General public	Bank products/services Financial institutions

Studies	Countries	Study designs	Samples	Systems/Government departments/ agencies
Lonsdale (1993)	UK	Views	Welfare claimants	Financial state Welfare/Support – Invalidity Benefit
Loretto *et al.* (2000)	UK	Cross-sectional	Employees	Non-state pension
MacDonald (1994)	UK	Views	Government officers Welfare claimants Employees	Financial state Welfare/Support – Unemployment benefits
Mannion *et al.* (1994)	UK	Cross-sectional Views	Government officers Welfare claimants Other sample focus: Staff from third-party creditors (e.g. gas company) and money advisors	Financial state Welfare/Support – Direct payments from Income Support (for electricity debts, etc.)
Matthews (2005)	UK	Case study	Other sample focus Bank	– Financial institutions
Mayhew (2000)	UK	Cross-sectional	General public	Financial state Welfare/Support pensions Non-state pension
McBarnet (1991)	UK	Views	Government officers Employees Other sample focus: Accountants, city solicitors, barristers, judges, merchant bankers, insurers, tax consultants scheme promoters	Insurance products/services Revenue collection – Tax
McKenna *et al.* (2005)	UK	Views	Government officers Welfare claimants with disability Welfare claimants	Government agencies/units/departments – Jobcentre Plus
Morley *et al.* (2006)	UK	Ethnography	Other sample focus insurance company	Insurance products/services – Motor insurance

Studies	Countries	Study designs	Samples	Systems/Government departments/ agencies
Nam *et al*. (2001)	A Cross-national study (including UK) EU member states	simulation/modelling	Other sample focus: – National accounts and tax revenue statistics of the investigated countries	Revenue collection – VAT
National Audit Office (1998)	UK	Views	Government officers Government departments/agencies	Financial state Welfare/Support – Invalidity Benefit Non-state pension – Occupational pensions
National Audit Office (2006)	A Cross-national study (including UK)	Document/database/ administrative records study	Government departments/agencies	Across services/benefit systems
National Audit Office (1994)	UK	Audit	Government officers Welfare claimants	Across services/benefit systems
National Audit Office (1987)	UK	Audit	Government departments/agencies	Social security benefits
NHS Counter Fraud and Security Management Service (2007)	UK	Cross-sectional	General public	Healthcare provision Across services/benefit systems
Nove (1995)	UK	Cross-sectional	Welfare claimants with disability Welfare claimants	Government agencies/units/departments – War pension agency
Papadakis and Taylor-Gooby (1987)	UK	Views	Other sample focus: sub-group of 'national sample' (no further details)	Across services/benefit systems – State welfare
Peacey and Rainford (2004)	UK	Cross-sectional	General public	Financial state Welfare/Support – Child support maintenance payments Revenue collection – Child Support contributions
Peters and Joyce (2006)	UK	Cross-sectional Views	Welfare claimants	Financial state Welfare/Support – Jobseeker's Allowance

Studies	Countries	Study designs	Samples	Systems/Government departments/ agencies
Pettigrew and Thomas (2002)	UK	Views	Government officers Welfare claimants Other sample focus: private landlords	Financial state Welfare/Support – Housing Benefits
Pettigrew *et al.* (1999)	UK	Views	Welfare claimants with disability Welfare claimants	Financial state Welfare/Support – Housing Benefits – Council Tax Benefit
Quirke (1999)	A cross-national study (including UK)	Views Document/database/ administrative records study	Government officers	Across services/benefit systems
Ritchie and Chetwynd (1997)	UK	Views	Welfare claimants with disability Welfare claimants	Government agencies/units/departments – Benefits Agency
Rose (1999)	UK	Views	Welfare claimants with disability Welfare claimants	Across services/benefit systems
Rowlingson *et al.* (1997)	UK	Views	Welfare claimants	Across services/benefit systems
Russell and Whitworth (1992)	UK	Cross-sectional	Welfare claimants with disability Welfare claimants	Government agencies/units/departments – Benefits Agency
Sainsbury (2000)	UK	Views	Local Authority officers	Government agencies/units/departments Local Authorities (HB and CTB)
Sainsbury *et al.* (1998)	UK	Views	Local Authority officers	Financial state Welfare/Support – Housing Benefit and Council Tax Benefit
Sanderson *et al.* (2005)	UK	Cross-sectional	Welfare claimants with disability Welfare claimants	Government agencies/units/departments – Jobcentre Plus
Stafford *et al.* (2000)	UK	Cross-sectional	Local Authority officers	Financial state Welfare/Support – Housing Benefit
Stafford *et al.* (1997)	UK	Cross-sectional Views group discussions	Welfare claimants with disability Welfare claimants	Government agencies/units/departments – Benefits Agency

Studies	Countries	Study designs	Samples	Systems/Government departments/ agencies
Stephenson (2001)	UK	Views	Welfare claimants	Financial state Welfare/Support – Family Credit and Income Support provision
Svallfors (2004)	A cross-national study (including UK) Sweden, Britain, Germany, USA	Cross-sectional	Other sample focus unclear – uses International Social Survey Programme (Role of Government)	Across services/benefit systems The Welfare State (covers government responsibility for the unemployed, sick, poor, pensioners)
Thomas and Pettigrew (1999)	UK	Views	Welfare claimants with disability Welfare claimants	Mechanism for paying and utilising all welfare benefits
Thomas *et al.* (2000)	UK	Views	Government officers BA staff	Benefits Agency
Trott and Lessof (1998)	UK	Cross-sectional	Welfare claimants	Housing Benefit and Council Tax Benefit
Turley and Thomas (2006)	UK	Views	Government officers Jobcentre Plus staff Local Authority officers Welfare claimants	Housing Benefit Council Tax Benefit
Turnbull (1983)	UK	Cross-sectional	Other sample focus Medium sized companies	Bank products/services – Cash transmission, short term and long-term finance, business travel services Insurance products/services
Walker and Niner (2003)	UK	Views Case study Document/database/ administrative records study	Local Authority officers	Financial state Welfare/Support – Discretionary Housing Payments
Whitehouse (2006)	UK	Views	Business owner/ employers	Companies from a variety of UK sectors, including retail, mining, financial services and mobile telephony
Williams *et al.* (1995)	UK	Cross-sectional Views	Government officers Welfare claimants	Government agencies/units/departments – Benefits Agency

Studies	Countries	Study designs	Samples	Systems/Government departments/ agencies
Wilson *et al.* (2006)	UK	Cross-sectional Document/database/ administrative records study	Welfare claimants General public	Bank products/services – Plastic, non-plastic card Financial state Welfare/Support – Income Support/Jobseeker's Allowance /pension – Credit/minimum income guarantee – Housing Benefit/Council Tax Benefit – Disability living allowance – Retirement pension – Carer's allowance – Incapacity Benefit – Instrument of payment fraud Revenue collection – Tax – VAT Health care provision Financial institutions insurance

Appendix F
Descriptive summary of key characteristics of intervention studies

Prevention studies

Studies	Population details	Study details	Intervention details
Adams *et al.* (2004)	**Who or what is/are the sample/subjects in the study?** Welfare claimants with disability Welfare claimants **Was analysis/sub-group analysis performed on these variables?** Age	**What is the study design?** Cross-sectional **When was the study carried out?** March and April 2004 **In which country/countries was the study carried out?** UK	**Type of intervention/strategy/policy** Prevention – Direct payment is seen to offer in term of reducing administrative costs, contributing to a reduction in fraud. **Target of intervention** Programmes/organisations/systems **What is the service/benefit/system?** Financial state Welfare/Support/government agencies
Carlisle *et al.* (2003)	**Who or what is/are the sample/subjects in the study?** Local Authority officers Welfare claimants Housing Benefit claimants Other sample focus Registered Social Landlords **Was analysis/sub-group analysis performed on these variables?** No	**What is the study design?** Views **When was the study carried out?** 2001-2002 **In which country/countries was the study carried out?** UK	**Type of intervention/strategy/policy** Prevention The 'RSL VF Pilot' **Target of intervention** Claimants/customers **What is the service/benefit/system?** Financial state Welfare/Support/government agencies – Housing Benefit/Council Tax Benefit
Cox *et al.* (1986)	**Who or what is/are the sample/subjects in the study?** Potential customers/ claimants **Was analysis/sub-group analysis performed on these variables?** No	**What is the study design?** Randomised Controlled Trial **When was the study carried out?** 1980-1981 **In which country/countries was the study carried out?** USA	**Type of intervention/strategy/policy** Prevention – Home visit programme **Target of intervention** Claimants/customers **What is the service/benefit/system?** Financial state Welfare/Support/government agencies – The Aid to Families with Dependent Children (AFDC)

Studies	Population details	Study details	Intervention details
Dionne and Gagne (2001)	**Who or what is/are the sample/subjects in the study?** Customers' claim files **Was analysis/sub-group analysis performed on these variables?** No	**What is the study design?** Simulation/modelling **When was the study carried out?** 2001 **In which country/countries was the study carried out?** Canada	**Type of intervention/strategy/policy** Prevention – Deductible contracts **Target of intervention** Claimants/customers **What is the service/benefit/system?** Insurance products/services – Automobile insurance
Harris *et al.* (1997)	**Who or what is/are the sample/subjects in the study** Government officers – State administrative personnel – Social service caseworkers Welfare claimants Business owner/employers **Was analysis/sub group analysis performed on these variables?** No	**What is the study design?** Experimental with non-random allocation to groups **When was the study carried out?** Pilot project conducted 1989-1990 Publication date: 1997 **In which country/countries was the study carried out?** USA	**Type of intervention/strategy/policy** Prevention – Electronic banking techniques to deliver public assistance benefits (prevents sale of food stamps, etc.) **Target of intervention** Programmes/organisations/systems **What is the service/benefit/system?** Financial state Welfare/Support/government agencies
Pettigrew *et al.* (2001)	**Who or what is/are the sample/subjects in the study?** Local Authority officers **Was analysis/sub-group analysis performed on these variables?** No	**What is the study design?** Views **When was the study carried out?** 1999-2000 **In which country/countries was the study carried out?** UK	**Type of intervention/strategy/policy** Prevention – The Verification Framework (VF) **Target of intervention** – Government officers/employees – Programmes/organisations/systems **What is the service/benefit/system?** Financial state Welfare/Support/government agencies – Housing Benefit and Council Tax Benefit

Studies	Population details	Study details	Intervention details
Zekeri (2004)	**Who or what is/are the sample/subjects in the study?** Potential customers/ claimants Analysis of data from a sample of college students from Alabama who are food stamp recipients **Was analysis/sub-group analysis performed on these variables?** No	**What is the study design?** Single group post-test only (no control groups) **What is the study design?** Ethnography **When was the study carried out?** 2004 **In which country/countries was the study carried out?** USA, Alabama	**Type of intervention/strategy/policy** Prevention – The adoption of electronic benefit transfer (EBT) card for delivering food stamp benefits **Target of intervention** – Programmes/organisations/systems **What is the service/benefit/system?** Financial state Welfare/Support/government agencies – Food stamp benefits

Detection studies

Studies	Population details	Study details	Intervention details
Artis *et al.* (2002)	**Who or what is/are the sample/subjects in the study?** Customers **Was analysis/sub-group analysis performed on these variables?** No	**What is the study design?** Simulation/modelling **When was the study carried out?** 2002 **In which country/countries was the study carried out?** Europe Spain	**Type of intervention/strategy/policy** Detection The binary choice models: the performance of binary choice models for fraud detection and implements models for misclassification in the response variable **Target of intervention** Programmes/organisations/systems **What is the service/benefit/system?** Insurance products/services – Automobile insurance

Studies	Population details	Study details	Intervention details
Belhadji *et al.* (2000)	**Who or what is/are the sample/subjects in the study** Customers **Was analysis/sub group analysis performed on these variables?** No	**What is the study design?** Simulation/modelling **When was the study carried out?** Survey 1995 Publication date: 2000 **In which country/countries was the study carried out?** Canada	**Type of intervention/strategy/policy** Detection – Model to aid insurance companies in their decision-making – The tool is based on the systematic use of fraud indicators. **Target of intervention** Programmes/organisations/systems **What is the service/benefit/system?** Insurance products/services – Automobile
Brockett *et al.* (2002)	**Who or what is/are the sample/subjects in the study?** Customers' claim files **Was analysis/sub-group analysis performed on these variables?** No	**What is the study design?** Simulation/modelling **When was the study carried out?** 2002 **In which country/countries was the study carried out?** USA	**Type of intervention/strategy/policy** Detection – Fraud detection using PRIDIT technique **Target of intervention** Programmes/organisations/systems **What is the service/benefit/system?** Insurance products/services – Insurance
Brockett *et al.* (1998)	**Who or what is/are the sample/subjects in the study** Customers' claim data **Was analysis/sub-group analysis performed on these variables?** No	**What is the study design?** Simulation/modelling **When was the study carried out?** 1998 **In which country/countries was the study carried out?** USA	**Type of intervention/strategy/policy** Detection – Self-organising feature maps: detection using neural network approach **Target of intervention** Programmes/organisations/systems **What is the service/benefit/system?** Insurance products/services – Insurance claims
Caudill *et al.* (2005)	**Who or what is/are the sample/subjects in the study?** Customers Claimant data **Was analysis/sub-group analysis performed on these variables?** No	**What is the study design?** Simulation/modelling **When was the study carried out?** 2005 **In which country/countries was the study carried out?** Europe Spain	**Type of intervention/strategy/policy** Detection – Multinomial logit model **Target of intervention** Programmes/organisations/systems **What is the service/benefit/system?** Insurance products/services

Studies	Population details	Study details	Intervention details
Derrig and Ostaszewski (1995)	**Who or what is/are the sample/subjects in the study?** Welfare claimants **Was analysis/sub-group analysis performed on these variables?** No	**What is the study design?** Simulation/modelling **When was the study carried out?** 1995 **In which country/countries was the study carried out?** USA	**Type of intervention/strategy/policy** Detection – Fuzzy pattern recognition techniques **Target of intervention** Programmes/organisations/systems **What is the service/benefit/system?** Insurance products/services – Automobile insurance
Englander and Englander (1985)	**Who or what is/are the sample/subjects in the study?** Welfare claimants AFDC caseloads **Was analysis/sub-group analysis performed on these variables?** No	**What is the study design?** Simulation/modelling **When was the study carried out?** 1985 **In which country/countries was the study carried out?** USA	**Type of intervention/strategy/policy** Detection – Computer matching of the social security numbers of welfare recipients against the social security numbers of those on public and private payrolls **Target of intervention** – Programmes/organisations/systems **What is the service/benefit/system?** Financial state Welfare/Support/government agencies – Aid to Families with Dependent Children (AFDC)
Health Systems Research Inc. (2007)	**Who or what is/are the sample/subjects in the study?** Government officers Government departments/ agencies **Was analysis/sub-group analysis performed on these variables?** No	**What is the study design?** Cross-sectional **What is the study design?** Document/database/administrative records study **When was the study carried out?** 2006 **In which country/countries was the study carried out?** USA	**Type of intervention/strategy/policy** Detection – The Public Assistance Reporting Information System (PARIS) **Target of intervention** Programmes/organisations/systems **What is the service/benefit/system?** Financial state Welfare/Support/government agencies

Studies	Population details	Study details	Intervention details
Leonard (1995)	**Who or what is/are the sample/subjects in the study?** Customers Credit card consumer data **Was analysis/sub-group analysis performed on these variables?** No	**What is the study design?** Simulation/modelling **When was the study carried out?** 1993 **In which country/countries was the study carried out?** Canada	**Type of intervention/strategy/policy** Detection – Rule-based expert system model **Target of intervention** Programmes/organisations/systems **What is the service/benefit/system?** Bank products/services – Consumer credit card fraud
Major and Riedinger (2002)	**Who or what is/are the sample/subjects in the study?** Other sample focus healthcare provider **Was analysis/sub-group analysis performed on these variables?** No	**What is the study design?** Simulation/modelling Electronic Fraud Detection (EFD) **When was the study carried out?** 2002 **In which country/countries was the study carried out?** USA	**Type of intervention/strategy/policy** Detection – Electronic Fraud Detection (EFD) scans a large population of health insurance claims in search of likely fraud **Target of intervention** Programmes/organisations/systems – Healthcare providers **What is the service/benefit/system?** Healthcare provision – General claims coming from health care providers
Martin and Harrison (1993)	**Who or what is/are the sample/subjects in the study?** Employees **Was analysis/sub-group analysis performed on these variables?** No	**What is the study design?** Simulation/modelling **When was the study carried out?** 1989-1991 **In which country/countries was the study carried out?** USA	**Type of intervention/strategy/policy** Detection Expert system: monitoring the claims administrators – to ensure that payments are made according to the requirements of the plan **Target of intervention** Programmes/organisations/systems **What is the service/benefit/system?** Health care provision – self-funded medical insurance administered by outside parties in US – employee health care cost

Studies	Population details	Study details	Intervention details
Rejesus *et al.* (2004)	**Who or what is/are the sample/subjects in the study?** Customers crop insurers **Was analysis/subgroup analysis performed on these variables?** No	**What is the study design?** Simulation/modelling **When was the study carried out?** 2004 though data from 1998 **In which country/countries was the study carried out?** USA, Texas	**Type of intervention/strategy/policy** Detection – Data mining techniques **Target of intervention** Programmes/organisations/systems **What is the service/benefit/system?** Insurance products/services – Agricultural insurance
Smith (1997)	**Who or what is/are the sample/subjects in the study?** Local Authority officers **Was analysis/sub group analysis performed on these variables?** No	**What is the study design?** Cross-sectional **When was the study carried out?** August September 1994 **In which country/countries was the study carried out?** UK	**Type of intervention/strategy/policy** Detection – Anti-fraud incentive scheme-to encourage LAs to be vigilant regards potential fraudulent claims. LAs should share in any savings achieved above and beyond their share of a national baseline **Target of intervention** – Claimants/customers **What is the service/benefit/system?** Financial state Welfare/Support/government agencies HB and CTB
Viaene *et al.* (2004)	**Who or what is/are the sample/subjects in the study?** Customers automobile insurance claims where information was collected by the automobile insurers bureau of Massachusetts **Was analysis/sub-group analysis performed on these variables?** No	**What is the study design?** Simulation/modelling **When was the study carried out?** 1993 **In which country/countries was the study carried out?** USA	**Type of intervention/strategy/policy** Detection – Fraud detection, using a mathematical model (Boosting Naive Bayes) to simulate the work of expert assessment on the suspicion of fraud **Target of intervention** – Programmes/organisations/systems **What is the service/benefit/system?** Insurance products/services – Evidence is tested against automobile insurance claims, but could apply across insurance claims

Studies	Population details	Study details	Intervention details
Viaene *et al.* (2007)	**Who or what is/are the sample/subjects in the study?** Customers **Was analysis/sub-group analysis performed on these variables?** Gender Age	**What is the study design?** Simulation/modelling **When was the study carried out?** Data from accidents in 2000 Publication date: 2005 **In which country/countries was the study carried out?** Europe Spanish data used in analysis	**Type of intervention/strategy/policy** Detection – Claim fraud screening **Target of intervention** – Programmes/organisations/systems **What is the service/benefit/system?** Insurance products/services – Automobile
Viaene *et al.* (2002)	**Who or what is/are the sample/subjects in the study?** Customers **Was analysis/sub-group analysis performed on these variables?** No	**What is the study design?** Simulation/modelling **When was the study carried out?** 2002, although data is from 1993 **In which country/countries was the study carried out?** USA, Massachusetts	**Type of intervention/strategy/policy** Detection – Using different algorithms and statistical techniques for fraud classification **Target of intervention** Claimants/customers **What is the service/benefit/system?** Insurance products/services – Automobile insurance claims: personal injury protection claims
Weisberg and Derrig (1998)	**Who or what is/are the sample/subjects in the study?** Customers **Was analysis/sub-group analysis performed on these variables?** No	**What is the study design?** Cross-sectional **When was the study carried out?** 1998 **In which country/countries was the study carried out?** USA	**Type of intervention/strategy/policy** Detection – Red flag indicators, which quantify the effectiveness of the standard investigation techniques **Target of intervention** Programmes/organisations/systems – Detection techniques **What is the service/benefit/system?** Insurance products/services – Detecting fraudulent automobile bodily injury claims

Studies	Population details	Study details	Intervention details
Yang and Hwang (2006)	**Who or what is/are the sample/subjects in the study?** Welfare claimants hospital patients (claiming National Health insurance) **Was analysis/sub group analysis performed on these variables?** No	**What is the study design?** Simulation/modelling **When was the study carried out?** Evaluation used patient data July 2001-June 2002 Publication date: 2006 **In which country/countries was the study carried out?** Asia, Taiwan	**Type of intervention/strategy/policy** Detection – The approach is to apply process-mining techniques to gather clinical-instance data to construct a model that distinguishes fraudulent behaviours from normal activities **Target of intervention** – Programmes/organisations/systems **What is the service/benefit/system?** Healthcare provision – National Health Insurance Program in Taiwan

Deterrence studies

Studies	Population details	Study details	Intervention details
Boon *et al.* (2004)	**Who or what is/are the sample/subjects in the study?** Welfare claimants General public **Was analysis/sub-group analysis performed on these variables?** No	**What is the study design?** Views **When was the study carried out?** 2003 **In which country/countries was the study carried out?** UK	**Type of intervention/strategy/policy** Deterrence Sanctions regime **Target of intervention** Claimants/customers **What is the service/benefit/system?** Financial state Welfare/Support/government agencies
Crocker and Tennyson (2002)	**Who or what is/are the sample/subjects in the study?** Customers **Was analysis/sub-group analysis performed on these variables?** No	**What is the study design?** Simulation/modelling **When was the study carried out?** 2002 **In which country/countries was the study carried out?** USA	**Type of intervention/strategy/policy** Deterrence Optimal claim settlement strategies **Target of intervention** Claimants/customers **What is the service/benefit/system?** Insurance products/services

Studies	Population details	Study details	Intervention details
Eardley (2006)	**Who or what is/are the sample/subjects in the study?** Welfare claimants Government departments/ agencies **Was analysis/sub-group analysis performed on these variables?** Gender Age SES Disability	**What is the study design?** Single group post-test only (no control groups) Views **When was the study carried out?** 2002 **In which country/countries was the study carried out?** Australia	**Type of intervention/strategy/policy** Deterrence **Target of intervention** Claimants/customers **What is the service/benefit/system?** Financial state Welfare/Support/government agencies – Income Support: Newstart Allowance, Youth Allowance
Ghezzi (1983)	**Who or what is/are the sample/subjects in the study?** Employees Other sample focus attorneys, investigators **Was analysis/sub-group analysis performed on these variables?** No	**What is the study design?** Views **When was the study carried out?** 1980 **In which country/countries was the study carried out?** USA	**Type of intervention/strategy/policy** Deterrence Insurance investigation Units **Target of intervention** Claimants/customers **What is the service/benefit/system?** Insurance products/services
Hoyt *et al.* (2006)	**Who or what is/are the sample/subjects in the study?** Customers **Was analysis/sub group analysis performed on these variables?** No	**What is the study design?** Simulation/modelling **When was the study carried out?** Data from 1988-1999 Publication date: 2006 **In which country/countries was the study carried out?** USA	**Type of intervention/strategy/policy** Deterrence – The focus is on the mitigating effects of state legislation on moral hazard (insurance fraud) **Target of intervention** Programmes/organisations/systems – State legislation **What is the service/benefit/system?** Insurance products/services – Automobile insurance

Studies	Population details	Study details	Intervention details
Peters and Joyce (2006)	**Who or what is/are the sample/subjects in the study?** Welfare claimants **Was analysis/sub-group analysis performed on these variables?** No	**What is the study design?** Cross-sectional Views **When was the study carried out?** 2005 **In which country/countries was the study carried out?** UK	**Type of intervention/strategy/policy** Deterrence – Sanction regime **Target of intervention** – Claimants/customers – Programmes/organisations/systems **What is the service/benefit/system?** Financial state Welfare/Support/government agencies
Sainsbury (1999)	**Who or what is/are the sample/subjects in the study?** Local Authority officers **Was analysis/sub-group analysis performed on these variables?** No	**What is the study design?** Views **When was the study carried out?** 1999 **In which country/countries was the study carried out?** UK	**Type of intervention/strategy/policy** Deterrence **Target of intervention** Programmes/organisations/systems – Local Authorities **What is the service/benefit/system?** Financial state Welfare/Support/government agencies – Housing Benefit
Walsh and Milne (2007)	**Who or what is/are the sample/subjects in the study?** Government officers **Was analysis/sub-group analysis performed on these variables?** No	**What is the study design?** Cohort study Views **When was the study carried out?** 2007 **In which country/countries was the study carried out?** UK	**Type of intervention/strategy/policy** Deterrence PEACE interview technique being applied in benefit fraud interviews: Changing the nature of the interviews undertaken with suspected benefit fraudsters **Target of intervention** Government officers/employees **What is the service/benefit/system?** Financial state Welfare/Support/government agencies – Benefit fraud from DWP services

Studies	Population details	Study details	Intervention details
Walsh and Milne (2008)	**Who or what is/are the sample/subjects in the study?** Other sample focus Fraud investigation service investigators **Was analysis/sub-group analysis performed on these variables?** No	**What is the study design?** Experimental with non-random allocation to groups **When was the study carried out?** 1999-2001 **In which country/countries was the study carried out?** UK	**Type of intervention/strategy/policy** Deterrence – Interview ability of benefit fraud investigation (PEACE) **Target of intervention** Government officers/employees – Benefit fraud investigators **What is the service/benefit/system?** Financial state Welfare/Support/government agencies

Integrated strategy studies

Studies	Population details	Study details	Intervention details
Aylen *et al.* (2007)	**Who or what is/are the sample/subjects in the study?** Government officers Welfare claimants **Was analysis/sub-group analysis performed on these variables?** No	**What is the study design?** Single group pre-post test (no control groups) **What is the study design?** Views Document/database/administrative records study **When was the study carried out?** 2006 **In which country/countries was the study carried out?** UK	**Type of intervention/strategy/policy** Integrated strategic approach – The Standard Process Review (SPR) **Target of intervention** Programmes/organisations/systems –Jobcentre Plus **What is the service/benefit/system?** Financial state Welfare/Support/government agencies
Boath and Wilkinson (2007)	**Who or what is/are the sample/subjects in the study** Local Authority officers **Was analysis/sub-group analysis performed on these variables?** No	**What is the study design?** Views **When was the study carried out?** 2007 **In which country/countries was the study carried out?** UK	**Type of intervention/strategy/policy** Integrated strategic approach **Target of intervention** Programmes/organisations/systems **What is the service/benefit/system?** Financial state Welfare/Support/government agencies

Studies	Population details	Study details	Intervention details
Davies *et al.* (2004)	Who or what is/are the sample/subjects in the study? Government officers Welfare claimants Was analysis/sub-group analysis performed on these variables? No	What is the study design? Views When was the study carried out? 2003 In which country/countries was the study carried out? UK	Type of intervention/strategy/policy Integrated strategic approach Target of intervention Government officers/employees Target of intervention Programmes/organisations/systems What is the service/benefit/system? Financial state Welfare/Support/government agencies
Eccles and Lloyd (2005)	Who or what is/are the sample/subjects in the study? Government officers Welfare claimants Was analysis/sub-group analysis performed on these variables? No	What is the study design? Views When was the study carried out? 2005 In which country/countries was the study carried out? UK	Type of intervention/strategy/policy Integrated strategic approach – Jobseeker's Allowance (JSA) intervention regime pilots Target of intervention Claimants/customers Target of intervention Programmes/organisations/systems What is the service/benefit/system? Financial state Welfare/Support/government agencies
GHK Consulting Ltd (2005)	Who or what is/are the sample/subjects in the study? Government officers Was analysis/sub-group analysis performed on these variables? No	What is the study design? Views When was the study carried out? 2006/07 In which country/countries was the study carried out? UK	Type of intervention/strategy/policy Integrated strategic approach – The Business Delivery Target (BDT) Target of intervention Programmes/organisations/systems What is the service/benefit/system? Financial state Welfare/Support/government agencies – Income Support (IS), Jobseeker's Allowance (JSA) and Incapacity Benefit (IB), JSA Labour Market Interventions and follow-up (LMI) and attendance at a Basic Skills Independent Assessment following referral

Studies	Population details	Study details	Intervention details
Lloyd and Jenkins (2007)	**Who or what is/are the sample/subjects in the study?** Government officers Potential customers/ claimants **Was analysis/sub-group analysis performed on these variables?** No	**What is the study design?** Views **When was the study carried out?** 2007 **In which country/countries was the study carried out?** UK	**Type of intervention/strategy/policy** Integrated strategic approach – The telephone intervention pilot **Target of intervention** – Claimants/customers **Target of intervention** Programmes/organisations/systems – Jobseeker's Allowance claim **What is the service/benefit/system?** Financial state Welfare/Support/government agencies – Jobseeker's Allowance
McKenna *et al.* (2005)	**Who or what is/are the sample/subjects in the study** Government officers Welfare claimants with disability Welfare claimants **Was analysis/sub-group analysis performed on these variables?** No	**What is the study design?** Views **When was the study carried out?** Fieldwork 2004 Publication date: 2005 **In which country/countries was the study carried out?** UK	**Type of intervention/strategy/policy** Integrated strategic approach – Jobcentre Plus internal controls **Target of intervention** Government officers/employees **Target of intervention** Programmes/organisations/systems – Introduction of the second phase of the Customer Management System to remove the need for re-keying between systems **What is the service/benefit/system?** Financial state Welfare/Support/government agencies – Jobcentre Plus

Studies	Population details	Study details	Intervention details
Middlemas (2006)	**Who or what is/are the sample/subjects in the study?** Welfare claimants **Was analysis/sub-group analysis performed on these variables?** Ethnicity Gender Age	**What is the study design?** Randomised Controlled Trial (6 treatments) **When was the study carried out?** 2005 **In which country/countries was the study carried out?** UK	**Type of intervention/strategy/policy** Integrated strategic approach the Jobseeker's Allowance (JSA) Intervention Regime Pilots **Target of intervention** Claimants/customers **Target of intervention** Programmes/organisations/systems **What is the service/benefit/system?** Financial state Welfare/Support/government agencies – Jobseeker's Allowance (JSA)
Sainsbury *et al.* (2003)	**Who or what is/are the sample/subjects in the study** Government officers Welfare claimants Other sample focus – GP practice managers **Was analysis/sub-group analysis performed on these variables?** No	**What is the study design?** Views **When was the study carried out?** 2002 **In which country/countries was the study carried out?** UK	**Type of intervention/strategy/policy** Integrated strategic approach – The Better Medical Evidence Gathering pilot **Target of intervention** Programmes/organisations/systems **What is the service/benefit/system?** Financial state Welfare/Support/government agencies – Incapacity Benefit
Sainsbury and Eardley (1991)	**Who or what is/are the sample/subjects in the study?** Local Authority officers Welfare claimants Other sample focus local councillors advice agency workers **Was analysis/sub-group analysis performed on these variables?** No	**What is the study design?** Views – See 'Other' category (some focus groups held as part of evaluation) Other – Research design described as a 'pluralistic evaluation' (p 4) which included, for example, a telephone survey to provide data to allow the selection of suitable local authorities in which to carry out fieldwork **When was the study carried out?** Survey: 1990 Publication date: 1991 **In which country/countries was the study carried out?** UK	**Type of intervention/strategy/policy** Integrated strategic approach – A review system that allowed Housing Benefit claimants who were dissatisfied to complain about the service and their claim; this would have highlighted inaccurate payments, etc. **Target of intervention** Programmes/organisations/systems – Review system for claimants who were dissatisfied with Housing Benefit decisions **What is the service/benefit/system?** Financial state Welfare/Support/government agencies – Housing Benefit

Studies	Population details	Study details	Intervention details
Thomas *et al.* (1999)	**Who or what is/are the sample/subjects in the study?** Government officers Local Authority officers Welfare claimants Employees CSA **Was analysis/sub-group analysis performed on these variables?** No	**What is the study design?** Views **When was the study carried out?** 1998 **In which country/countries was the study carried out?** UK	**Type of intervention/strategy/policy** Integrated strategic approach **What is programme/intervention being studied, does it have a formal name?** Lone parent prototype **Target of intervention** Programmes/organisations/systems **What is the service/benefit/system?** Financial state Welfare/Support/government agencies

Risk-assessment study

Studies	Population details	Study details	Intervention details
Lensvelt-Mulders *et al.* (2006)	**Who or what is/are the sample/subjects in the study?** Welfare claimants with disability Welfare claimants **Was analysis/sub-group analysis performed on these variables?** No	**What is the study design?** Experimental with non-random allocation to groups **When was the study carried out?** 2003 **In which country/countries was the study carried out?** Europe The Netherlands	**Type of intervention/strategy/policy** Risk assessment – The Random Response Technique (RRT) **Target of intervention** Programmes/organisations/systems **What is the service/benefit/system?** Financial state Welfare/Support/government agencies – Disability insurance allowance

Appendix G
Descriptive summary of key characteristics of Value for Money reports

Prevention strategies

Reports	Prevention strategies	Systems/Government departments/ agencies	Countries
Australian National Audit Office (2005a)	Audit assesses the administrative effectiveness of the management of Goods and Services Tax compliance	Revenue collection	Australia
Australian National Audit Office (2007)	Prevention of errors using electronic records stored on the CSA's database (Cuba)	Child Support Agency	Australia
Government Accountability Office (2000b)	Prevention of dishonest/inappropriate claims	Medicare healthcare insurance (in connection with partial hospitalisation benefit)	USA
National Audit Office (1998)	Special Compliance Office: procedures to improve control environment and a role in Special Compliance Office	Revenue collection: Inland Revenue	UK
National Audit Office (2006c)	Leaflets to communicate with customers – Management of the risks of providing inaccurate information in its leaflets – How to mitigate risks around the accuracy of verbal and written information provided to the public	Department for Work and Pensions	UK
National Audit Office (2003a)	Better designed/utilised forms – Prevention of errors through better designed and utilised forms	Across services/departments: six major departments and agencies overall (three of them deal with financial services: DWP and attendance allowance, Inland Revenue and self-assessment tax forms, DfES and education financial support)	UK
National Audit Office (2005)	Income Tax Self Assessment Forms – including online service	Revenue collection: Income Tax	UK
National Audit Office (2003e)	E technology – improve accuracy of information	HM Customs and Excise	A cross-national study (including UK)
National Audit Office (1994c)	Accuracy of tax assessment	Inland Revenue	UK
National Audit Office (1994d)	Administration control of benefit claims Using computerisation and Life certificates	Department of Social Security	UK

Reports	Prevention strategies	Systems/Government departments/ agencies	Countries
National Audit Office (2006b)	Help provided to new business – registering for the main taxes to getting tax affairs right for income tax self assessment, corporation tax, PAYE, NI contributions and VAT	HM Revenue and Customs	UK
National Audit Office (2007b)	Quality of service provided to taxpayers and how better customer service can help to improve taxpayer compliance	HM Revenue and Customs	UK
Nicoll *et al.* (2007)	Procedures and processes used by the department and the ATO to record HECS-HELP student loan	The higher education loan programme, the Department of Education, Science and Training	Australia
Wilkinson *et al.*	Complex Assessment Officers (CAOs) – to assist in determining a customer's entitlement	The Age Pension programme	Australia

Detection and control strategies

Reports	Detection and control strategies	Systems/Government departments/ agencies	Countries
Australian National Audit Office (1998-1999)	The Tax File Number (TFN): The Australian Taxation Office uses the TFN system to match data in order to detect non-disclosure of income	Revenue collection	Australia
Australian National Audit Office (2004-2005)	The Tax File Number (TFN)	Revenue collection	Australia
Australian National Audit Office (2006)	The Random Sample Survey (RSS) is a point in time analysis of sampled customers' circumstances, designed to establish whether customers are being correctly paid	Centrelink	Australia

Reports	Detection and control strategies	Systems/Government departments/ agencies	Countries
Aronovitz (2007)	Centers of Medicare and Medicaid Service (CMS)'s contractors conduct program integrity activities, which include performing medical reviews of certain claims before they are paid to determine whether the items meet criteria for Medicare coverage	Medicare	USA
Comptroller and Auditor-General (2006)	Taxpayer audit methodology	Inland Revenue department	New Zealand
Government Accountability Office (2000a)	Use of Electronic Benefit Transfer systems to identify trafficking of food stamps, investigate suspects and disqualify	Food Stamp Program benefits	USA
National Audit Office (1995a)	Check claims on repayment on VAT	Revenue collection	UK
National Audit Office (1997a)	Detection and control – exchange of information on direct taxation	Revenue collection	A cross-national study (including UK)

Deterrence strategies

Reports	Deterrence strategies	Systems/Government departments/ agencies	Countries
Court of Auditors (2005)	Anti Fraud office (OLAF)- to increase effectiveness of the fight against illegal activities	Across services/departments	A cross-national study (including UK)
Government Accountability Office (1999c)	Financial Penalties: procedures and practices followed by FNS in collecting financial penalties levied against storeowners	Food Stamp program	USA
Government Accountability Office (1995)	Focus on identification of potential overpayments	AFDC, Food Stamp, Medicaid programs	USA
Government Accountability Office (2004a)	Efforts to recover unpaid taxes (owed by Department of Defence's contractors), for example, using the Treasury Offset programme (TOP) may be designed to act as a deterrence	Revenue collection	USA

Reports	Deterrence strategies	Systems/Government departments/ agencies	Countries
National Audit Office (2004b)	Recovery of debt	Inland Revenue	UK
National Audit Office (1990)	Collection and enforcement debt: Procedure to identify, progress, monitor and collect debts Incentive and penalties	Inland Revenue	UK
National Audit Office (1987)	Effectiveness of recovery action	Department of Health and Social Security, Department of Employment (Social Security Benefits)	UK

Integrated strategies

Reports	Integrated strategies	Systems/Government departments/ agencies	Countries
Australian National Audit Office (1999)	The department's arrangements for fraud control, included risk assessment, detection/investigation, prevention, management, recovery The Selection, Monitoring and Review system (SEMORE)	The Department of Employment, Education, Training and Youth Affairs	Australia
Australian National Audit Office (1999-2000)	Key aspects of fraud control arrangements in place across the APS against Commonwealth Law Enforcement Board (CLEB) guidelines	Across the Australian Public Service	Australia
Australian National Audit Office (2002a)	Fraud control arrangements/operational procedures (including fraud risk assessments, detection, recovery)	Department of Veterans' Affairs	Australia
Australian National Audit Office (2002b)	Fraud control arrangement: strategies, systems, processes used to prevention and detect GST fraud Management of fraud investigation Reporting of GST fraud	Revenue collection	Australia

Reports	Integrated strategies	Systems/Government departments/ agencies	Countries
Australian National Audit Office (2002-2003)	Fraud control Customs' Fraud Control Plan 2001 is designed to be the basis for ongoing monitoring and coordination of fraud control activities and is an important component of Customs' overall risk management framework	Australian Customs Service	Australia
Australian National Audit Office (2004)	The debt management process comprises four main elements: prevention, identification, raising and recovery	Income support and Pension payments	Australia
Aronovitz (2004)	Involves various approaches – Identify types of provider fraud and abuse problems – Approaches to ensure that the Medicaid funds are paid appropriately – Overall programme integrity (for example, review and update provider enrolment information, time-limited enrolment, cancellation or suspension of inactive billing numbers, on-site inspections, clinical background checks, auditing, targeted provider education, data warehouse, fraud and abuse detection program system, data mining, data matching or modelling	Medicaid	USA
Australian National Audit Office (1997)	Approaches to minimising Medifraud and inappropriate practice – Methodology used estimate the extent of fraud and inappropriate practice	Australian Medicare Benefits Scheme and the Pharmaceutical Benefits Scheme	Australia
Brostek (2007)	Detection and deterrence	Off shore tax	USA
Comptroller and Auditor-General (2003a)	Department's arrangements for dealing with fraud and payment errors, including risk assessment, recovery, deterrence	Welfare payment (income support) schemes, the Department of Social and Family Affair	Europe Ireland
Comptroller and Auditor-General (2004)	License fee collection procedures – aimed at reducing license fee evasion	TV license fee	Europe Ireland

Reports	Integrated strategies	Systems/Government departments/ agencies	Countries
Controller and Auditor-General (2003b)	Benefit processing system: identify, explore the extent and causes of under-over payments Reviews of case managers' caseloads case managers' performance Team coaching, training for case manager Measuring and reporting accuracy	Across services/departments	New Zealand
Frost and Lack (2007)	Department of Employment and Workplace relations administration to ensure JSKA activities	Job Network programme	Australia
Government Accountability Office (1998a)	Two nationwide initiatives – The 72-Hour Window Project and the Lab Unbundling Project (detection and deterrence) The 72-Hour Window Project targets separate payments for outpatient services that were included in the Medicare inpatient payment to hospitals, and the Lab Unbundling Project targets excess payments for lab tests that were performed concurrently on automated equipment	Medicare	USA
Government Accountability Office (1998b)	Focus is on HCFA's progress in implementing the Medicare Integrity Program	Medicare (Integrity Program)	USA
Government Accountability Office (1999a)	Controls to prevent and detect fraud and abuse	Child and Adult Care Food Program	USA
Government Accountability Office (1999b)	(1) Described what is known at the federal, state, and local levels about the amount of fraud and abuse in the program, including information on detected fraud and abuse, and (2) Examined the efforts taken to prevent and detect fraud and abuse and barriers to these efforts	U.S. Department of Agriculture's (USDA) Special Supplemental Nutrition Program for Women, Infants and Children (WIC)	USA

Reports	Integrated strategies	Systems/Government departments/ agencies	Countries
Government Accountability Office (1999f)	Focus on HCFA's oversight (in terms of detecting/reducing fraud etc) of Medicare contractors	Medicare	USA
Government Accountability Office (1999d)	How prevalent are compliance programs among hospitals and other Medicare providers, (2) what costs are involved with compliance programs, and (3) to the extent effectiveness can be measured, how effective these programs are	Medicare	USA
Government Accountability Office (1999e)	(1) Medical reviews of claims; (2) determinations of whether Medicare or other insurance sources have primary responsibility for payment, which is called Medicare Secondary Payer (MSP); (3) audits of cost reports; (4) identification and investigation of potential fraud cases (benefit integrity); and (5) provider education and training (PET)	Medicare	USA
Government Accountability Office (1999g)	Method for preventing, detecting, and responding to this type of program fraud and abuse	Supplementary Security Income	USA
Government Accountability Office (2000c)	Focus on oversight by HCFA of Medicare contractors to ensure they pay claims accurately and prevent fraud and abuse	Medicare	USA
Government Accountability Office (2001)	Focus on the performance of Social Security Administration, with five main outcomes (including reducing fraud, waste and error in the Supplemental Security Income (SSI) program)	Supplemental Security Income (SSI) program	USA
Government Accountability Office (2002a)	Activities related to the five components of internal control: control environment, risk assessments, control activities, information and communications, and monitoring	Four agencies: Department of Agriculture (USDA), Department of Health and Human Services (HHS), Department of Housing and Urban Development (HUD) and the Department of Social Security Administration (SSA)	USA

Reports	Integrated strategies	Systems/Government departments/ agencies	Countries
Government Accountability Office (2002b)	Internal Revenue Service (IRS) efforts to identify and control abusive tax schemes, including education and publicity as a way to deter/control and compliance and enforcement efforts	Revenue collection	USA
Government Accountability Office (2004b)	Internal controls	Mortgage insurance programs, the Department of Housing and Urban Development	USA
Government Accountability Office (2005)	Quality control system, internal control practices, risk assessment strategies	Food stamp	USA
Kelshiker *et al.* (2000)	Risk assessment, prevention, detection, and deterrence	Australian Taxation Office	Australia
Lack *et al.* (2001)	Appropriate fraud control arrangements in line with the fraud control policy of the commonwealth	Social security and employment services	Australia
McFarlane *et al.* (2006)	FAO's activities in relation to the Family Tax Benefit debt prevention, identification, raising and recovery	The Family Tax Benefit	Australia
Moffatt *et al.* (2003)	Fraud control planning, fraud awareness	Australian Public services (APS)	Australia
National Audit Office (1995c)	Risk assessment, deterrence	Vehicle Excise duty	UK
National Audit Office (1995b)	Financial control, 100 per cent plan	Training and Enterprise Councils in England	UK
National Audit Office (1997b)	Anti-fraud measures Incentives and penalties scheme Spotlights campaigns Verification framework	Housing Benefit	UK
National Audit Office (1999a) Progress Measures to combat Housing Benefit Fraud	Making Housing Benefit simpler to understand Raising standards of administration Removing barriers to co-operation Rewarding effective fraud prevention	Housing Benefit	UK
National Audit Office (1999b)	Detecting and deterring	The customs channels	UK

Reports	Integrated strategies	Systems/Government departments/ agencies	Countries
National Audit Office(2003c)	Risk assessment – scale and nature of fraud faced by the department – Effort to prevent, detect, investigate and impose sanctions	Across services/departments	A cross-national study (including UK)
National Audit Office (2002)	Trends in the costs of evasion and collection and the quality of information the BBC has about evaders (risk assessments) Provide a range of payment methods Catching potential evaders Prosecuting evaders	BBC licence fee	UK
National Audit Office (2003d)	Risk assessment, prevention, detection, and investigation of fraud in practice	Inland Revenue	UK
National Audit Office (2004c)	Risk assessment, detection, investigating, and preventing fraud	Revenue collection	UK
National Audit Office (2007a)	Focus on improving the accuracy of processing Income Tax (various strategies, including the Lean Initiative, Coding Assistance and the Pacesetter programme)	HM Revenue and Customs	UK
National Audit Office (2003b)	Changes to decision-making process and appeals arrangements	Disability Living Allowances Jobseekers' Allowance	UK
National Audit Office (2006a)	Key element of service delivery chains – cost effective, accessible, and provide quality of service	Across services/departments	UK
National Audit office (1992)	Arrangements for identifying, evaluating and countering VAT avoidance	Revenue collection	UK
NAO: National Audit Office (1994b)	The department have implemented a wide range of initiatives aimed at improving the service provided by the local office network	Benefit agencies in London	UK
National Audit Office (2001)	Risk assessment, detection (identifying taxpayers and getting in tax returns), deterrence – conduction enquiries into tax returns	Revenue collection	A cross-national study (including UK)

Reports	Integrated strategies	Systems/Government departments/ agencies	Countries
National Audit Office (1994a)	Prevention and detection – how the department deal with risk of internal fraud	HM Customs and Excise	UK
National Audit Office (2004a)	Prevention, deterrence, detection, risk assessment	Revenue collection	UK
Robinson (2005)	Procedures and processes to prevent and detect fraud waste and abuse in selling and servicing crop insurance policies	Crop insurance	USA
Sotiropoulos *et al.* (2000)	Framework and systems that Department of Health and Aged Care (DHAC) has in place to prevent, control, monitor, detect, and investigate fraud	Department of Health and Aged Care (DHAC)	Australia
Thurley *et al.* (2001)	Appropriate fraud control arrangement in line with the Fraud Control Policy of the Commonwealth	Department of Family and Community Services	Australia

Risk assessment

Reports	Risk assessment	Systems/Government Departments/ agencies	Countries
Australian National Audit Office (2005b)	Customs Compliance Assurance Strategy – intended to ensure that Customs have well-designed systems and processes for risk assessing, targeting and examining cargo assignments	Revenue collection	Australia
Government Accountability Office (2006)	The methodology that CMS used to estimate the Medicare error rates	Medicare	USA

Appendix H References for studies included in the map

Non-evaluative studies

Adams, C. and Webley, P. (2001). 'Small business owners' attitudes on VAT compliance in the UK'. *Journal of Economic Psychology*, 22, 2, 195–216.

Adams, L., Bunt, K. and Bright, D. (2004). *Customer experience of direct payment*. In-house Report No. 150, London: DWP.

Alm, J. and Torgler, B. (2006). 'Culture differences and tax morale in the United States and in Europe'. *Journal of Economic Psychology*, 27, 2, 224–246.

Askham, J., Hancock, R. and Hills, J. (1995). *Opinions on pensions: older people's attitudes towards incomes, taxes and benefits*. York: Joseph Rowntree Foundation.

Atkinson, A. and McKay, S. (2005a). *Child Support Reform: The views and experiences of CSA staff and new clients*. DWP Research Report No. 232, Leeds: CDS.

Atkinson, A. and McKay, S. (2005b). *Investigating the compliance of Child Support Agency clients*. DWP Research Report No. 285, Leeds: CDS.

Bean, C. and Papadakis, E. (2003). 'A comparison of mass attitudes towards the welfare state in different institutional regimes, 1985–1990'. *International Journal of Public Opinion Research*, 10, 3, 211–236.

Bebbington, L.W., Cronin, B. and Davenport, E. (1991). 'Consumer attitudes to information technology in banking'. *International Journal of Information Management*, 11, 3, 220–237.

Becker, S. (1987). 'How much collaboration?'. *Community Care*, 17–19.

Bell, A., Bryson, C., Southwood, H. and Butt, S. (2006a). An investigation of CSA Maintenance Direct Payments: Quantitative study. DWP Research Report No. 404, Leeds: CDS.

Bell, A., Kazimirski, A. and La Valle, I. (2006b). *An investigation of CSA Maintenance Direct Payments: Qualitative study*. DWP Research Report No. 327, Leeds: CDS.

Bennett, R. and Gabriel, H. (2001). 'Corporate reputation, trait covariation and the averaging principle: the case of the UK pensions mis-selling scandal'. *European Journal of Marketing*, 35, 3–4, 387–413.

Besley, T. and Preston, I. (1997). 'Fiscal anarchy in the UK: modelling poll tax noncompliance'. *Journal of Public Economics*, 64, 137–152.

Blekesaune, M. and Quadagno, J. (2003). 'Public attitudes toward welfare state policies'. *European Sociological Review*, 19, 415–427.

Boath, M., Dunbar, I. and Wilkinson, H. (2006). *Costs of Administering Housing and Council Tax Benefits*. DWP Research Report No. 332, Leeds: CDS.

Boath, M. and Wilkinson, H. (2007). *Achieving good reporting of changes in circumstances*. DWP Research Report No. 457, Leeds: CDS.

Bond, A. and Stone, M. (2004). 'How the automotive insurance claims experience affects customer retention'. *Journal of Financial Services Marketing*, 9, 2, 160–171.

Boon, M., Cowan, K. and Wagstaff, M. (2004). *A review of the DWP benefit fraud sanctions regime*. In-house Report No. 149, London: DWP.

Bosworth-Davies, R. (1993). 'An analysis of compliance officer: attitudes towards insider dealing'. *Crime Law and Social Change*, 20, 4, 339–357.

Bradshaw, J. and Mayhew, E. (2004). 'Public attitudes to dependency and the welfare state'. *International Journal of Market Research*, 46, 1, 49–63.

Bunt, K., Adams, L. and Mottram, C. (2004). *Combined Pension Forecasts: A report on the experiences and views of CPF providers and recipients*. DWP Research Report No. 212, Leeds: CDS.

Bunt, K., Howells, D. and Winterbotham, M. (1998). *Experiences of occupational pension scheme wind-up*. DSS Research Report No. 25, London: The Stationery Office.

Bunt, K., Morrison, J. and Godwin, L. (2007). *Customers' experiences of the Independent Case Examiner Prototype: Qualitative research*. DWP Research Report No. 420, Leeds: CDS.

Button, M., Johnston, L., Frimpong, K. and Smith, G. (2007). 'New directions in policing fraud: the emergence of the counter fraud specialist in the United Kingdom'. *International Journal of the Sociology of Law*, 35, 4, 192–208.

Callender, C., Court, G., Thompson, M. and Patch, A. (1994). *Employers and Family Credit*, DSS Research Report No. 32, London: The Stationery Office.

Cebulla, A. (2001). 'Coping with risk: attitudes towards private unemployment insurance in Britain and Germany'. *International Studies on Social Security*, 7, 165–184.

Christie, H. and Munro, M. (2003). 'The logic of loans: students' perceptions of the costs and benefits of the student loan'. *British Journal of Sociology of Education*, 24, 5, 621–636.

Clery, E., McKay, S., Phillips, M. and Robinson, C. (2007). *Attitudes to pensions: The 2006 survey*. DWP Research Report No. 434, Leeds: CDS.

Coast, J., Donovan, J., Litva, A., Eyles, J., Morgan, K., Shepherd, M. and Tacchi, J. (2002). 'If there were a war tomorrow, we'd find the money": contrasting perspectives on the rationing of health care'. *Social Science and Medicine*, 54, 12, 1839–1851.

Coleman, N., Jeeawody, F. and Wapshott, J. (2002). *Electronic government at the Department for Work and Pensions: Attitudes to electronic methods of conducting benefit business*. DWP Research Report No. 176, Leeds: CDS.

Corden, A. and Craig, P. (1991). *Perceptions of Family Credit*. SPRU Papers, London: HMS.

Corden, A. and Nice, K. (2006a). *Pathways to Work: Findings from the final cohort in a qualitative longitudinal panel of incapacity benefits recipients*. DWP Research Report No. 398, Leeds: CDS.

Corden, A. and Nice, K. (2006b). *Pathways to Work from Incapacity Benefits: A study of experience and use of Return to Work Credit*. DWP Research Report No. 353, Leeds: CDS.

Corden, A. and Sainsbury, R. (2001). *Incapacity Benefits and Work Incentives*. DWP Research Report No. 141, Leeds: CDS.

Dean, H. and Melrose, M. (1996). 'Unravelling citizenship: the significance of social security benefit fraud'. *Critical Social Policy*, 16, 48, 3–31.

Dean, P., Keenan, T. and Kenney, F. (1980). 'Taxpayers attitudes to income-tax evasion: an empirical study'. *British Tax Review*, 1, 28–44.

Department for Transport, Local Government and the Regions (2001). *Fraud in the private sector housing renewal and disabled facilities grants programmes*. Housing Research 133, Rotherham: Department for Transport, Local Government and the Regions.

Department for Work and Pensions (2005). *Fraud, error and other incorrectness in disability living allowance*. London: DWP.

Department for Work and Pensions (2006). *Fraud and error in the state pension*. London: DWP.

Department for Work and Pensions (2007). F*raud and error in the benefit system, October 2005–September 2006*. London: DWP.

Dwyer, P. (2002). 'Making sense of social citizenship: some user views on welfare rights and responsibilities'. *Critical Social Policy*, 22, 2, 273–299.

Edwards, J. and Wolfe, S. (2007). 'Ethical and compliance-competence evaluation: a key element of sound corporate governance'. *Corporate Governance: An International Review*, 15, 2, 359–369.

Elam, G. and Ritchie, J. (1997). *Exploring customer satisfaction*. DSS Research Report No. 63, London: The Stationery Office.

Erens, B., and Ghate, D. (1993). *Invalidity Benefit: a longitudinal survey of new recipients*. DSS Research Report No. 20, London: Stationery Office.

Evason, E. and Woods, R. (1995). 'Poverty, deregulation of the labour market and benefit fraud'. *Social Policy and Administration*, 29, 1, 40–54.

Farrell, C., Brown, R. and O'Connor, W. (2005). *Perspectives of Social Fund loans and third party deductions: A qualitative study of recipients*. DWP Research Report No. 240, Leeds: CDS.

Financial Service Authority (2002a). *Consumer understanding of annuities*. London: Financial Service Authority.

Financial Service Authority (2002b). *Mortgage endowments: the customers' view*. London: Financial Service Authority.

Financial Services Authority (2005). *Treating customers fairly: the consumers' view*. London: Financial Service Authority.

Financial Services Authority (2006). *Interest-only mortgages: consumer risks*. London: Financial Service Authority.

Ford, J. and Kempson, E. (1997). *Bridging the gap: safety-nets for mortgagors*. York: Centre for Housing Policy.

Ford, R. (2006). 'Prejudice and white majority welfare attitudes in the UK'. *Journal of Elections, Public Opinion and Parties*, 16, 2, 141–156.

Fraile, M. and Ferrer, M. (2005). 'Explaining the determinants of public support for cuts in unemployment benefits spending across OECD Countries'. *International Sociology*, 20, 4, 459–482.

Franses, A. and Thomas, A. (2004). *Jobcentre Plus' delivery of new Tax Credit policy: Report of qualitative finidings*. DWP Research Report No. 220, Leeds: CDS.

Frey, B.S. and Torgler, B. (2007). 'Tax morale and conditional cooperation'. *Journal of Comparative Economics*, 35, 1, 136–159.

Fukukawa, K. (2002). 'Developing a framework for ethically questionable behavior in consumption'. *Journal of Business Ethics*, 41, 1–2, 99–119.

Furnham, A. (1983). 'Attitudes toward the unemployed receiving social security benefits'. *Human Relations*, 36, 2, 135–149.

Furnham, A. (1987). The structure of economic beliefs'. *Personality and Individual Differences*, 8, 22, 253–260.

Furnham, A. and Goletto-Tankel, M.-P. (2002). 'Understanding savings, pensions and life assurance in 16–21-year-olds'. *Human Relations*, 55, 5, 603–628.

Gelade, G.A. and Young, S. (2005). 'Test of a service profit chain model in the retail banking sector'. *Journal of Occupational and Organizational Psychology*, 78, 1, 1–22.

George, V. (1996). 'Elite opinion on retirement pensions'. *Social Security Review*, 49, 4, 53–68.

Goldstone, C. and Douglas, L. (2003). *Pathways to work from incapacity benefits: a pre-pilot exploration of staff and customer attitudes*. London: DWP.

Goode, M. and Moutinho, L. (1995). 'The effects of free banking on overall satisfaction: the use of automated teller machines'. *International Journal of Bank Marketing*, 13, 4, 33–40.

Goodfellow, J.H. (1987). Consumer perceptions and attitudes towards savings and investments. *The International Journal of Bank Marketing*, 5, 3, 32–48.

Gough, O. and Sozou, P.D. (2005). 'Pensions and retirement savings: cluster analysis of consumer behaviour and attitudes'. *The International Journal of Bank Marketing*, 23, 6–7, 558–570.

Griggs, J., McAllister, F. and Walker, R. (2005). *The new Tax Credits system: knowledge and awareness among recipients*. London: National Council for One Parent Families.

Hall, S., Pettigrew, N. and Harvey, P. (2006). *Public attitudes to personal accounts: Report of a qualitative study*. DWP Research Report No. 370, Leeds: CDS.

Hawkes, C. and Garman, A. (1995). *Perceptions of non-state pensions*. London: Department of Social Security.

Hills, J. (2002). 'Following or leading public opinion? Social security policy and public attitudes since 1997'. *Fiscal Studies*, 23, 4, 539–558.

HM Treasury (2006). *An analysis of reported fraud in government departments*. London: The Stationery Office.

Howat, N. and Sims, L. (2006). *The Pension Service Customer Survey 2005*. DWP Research Report No. 331, Leeds: CDS.

Howat, N., Sims, L. and Norden, O. (2007). *The International Pension Centre Customer Survey 2006*. DWP Research Report No. 425, Leeds: CDS.

Hudson, M., Barnes, H., Ray, K. and Phillips, J. (2006). *Ethnic minority perceptions and experiences of Jobcentre Plus*. DWP Research Report No. 349, Leeds: CDS.

Hutton, S., Carlisle, J. and Corden, A. (1998). *Customer views on service delivery in the Child Support Agency*. DWP Research Report No. 74, London: The Stationery Office.

Irvine, A., Kemp, P. and Nice, K. (2007). *Direct payment of housing benefits: What do claimants think?* York: Joseph Rowntree Foundation.

Irving, A., Sparham, I. and Spicer, N. (2003). *Attitudes towards electronic service delivery*. In-house Report No. 117, London: DWP.

Johnson, S, Fidler Y. (2006). *Jobcentre Plus customer satisfaction: ethnic minority booster survey 2005*. DWP Research Report No. 338, Leeds: CDS.

Joseph, M., Sekhon, Y., Stone, G. and Tinson, J. (2005). 'An exploratory study on the use of banking technology in the UK: a ranking of importance of selected technology on consumer perception of service delivery performance'. *The International Journal of Bank Marketing*, 23, 4–5, 397–413.

Keenan, A. and Dean, P.N. (1980). 'Moral evaluation of tax evasion'. *Social Policy and Administration*, 14, 3, 209–220.

Kemp, P. (1997). *A comparative study of housing allowances*. DSS Research Report No. 60, London: The Stationery Office.

Kempson, E., Ford, J. and Quilgars, D. (1999). *Unsafe safety nets*. York: Centre for Housing Policy.

Kempson, E. and Whyley, C. (2001). *Payments of pensions and benefits: A survey of social security recipients paid by order book or giro cheque*. DWP Research Report No. 146, Leeds: CDS.

Levi, M. (1991). 'British corporate responses to fraud'. *Corruption and Reform*, 6, 1, 45–52.

Levi, M. (1998). 'Organising plastic fraud: enterprise criminals and the side-stepping of fraud prevention'. *The Howard Journal of Criminal Justice*, 37, 4, 423–438.

Lewis, A. and Vanvenrooij, M. (1995). 'A note on the perceptions of loan duration and repayment'. *Journal of Economic Psychology*, 16, 1, 161–168.

Lewis, B.R. (1982). 'Weekly cash-paid workers: attitudes and behaviour with regard to banks and other financial institutions'. *European Journal of Marketing*, 16, 3, 92–101.

Lonsdale, S. (1993). *Invalidity Benefit: a survey of recipients*. DSS Research Report No. 19, London: HMSO.

Loretto, W., White, P. and Duncan, C. (2000). 'Something for nothing?'. *Employee Relations*, 22, 3, 260–271.

MacDonald, R. (1994). 'Fiddly jobs, undeclared working and the something for nothing society'. *Work, Employment and Society*, 8, 4, 507–530.

Mannion, R., Hutton, S. and Sainsbury, R. (1994). *Direct payments from Income Support*. DSS Research Report No. 33, London: HMSO.

Matthews, D. (2005). 'London and County Securities: a case study in audit and regulatory failure'. *Accounting, Auditing and Accountability Journal*, 18, 4, 518–536.

Mayhew, V. (2000). *Pensions 2000: Public Attitudes to Pensions and Planning for Retirement*. DSS Research Report No. 130, Leeds: CDS.

McBarnet, D. (1991). 'Whiter than white-collar crime: tax, fraud insurance and the management of stigma'. *British Journal of Sociology*, 42, 3, 323–344.

McKenna, K., Slater, A., Steels, J. and Walton, H. (2005). *Delivering the Jobcentre Plus vision: Qualitative Research and Staff and Customers (Phase 4)*. DWP Research Report No. 146, Leeds: CDS.

Morley, N.J., Ball, L.J. and Ormerod, T.C. (2006). 'How the detection of insurance fraud succeeds and fails'. *Psychology Crime and Laws*, 12, 2, 163–180.

Nam, C.W., Parsche, R. and Schaden, B. (2001). 'Measurement of Value Added Tax evasion in selected EU countries on the basis of national accounts data'. *CESifo Economic Studies*, 47, 2, 127–144.

National Audit Office (1987). *Department of Health and Social Security and Department of Employment: incorrect payments of social security benefits*. London: HMSO.

National Audit Office (1994). *Improving social security services in London: the provision of service to customers*. London: HMSO.

National Audit Office (1998). *Underpayments to public service pensioners on invalidity benefit*. London: HMSO.

National Audit Office (2006). *International benchmark of fraud and error in social security system*. London: The Stationery Office.

NHS Counter Fraud and Security Management Service (2007). *Creating an anti-fraud culture: discovering public's perception of fraud in the NHS*. London: NHS Business Service Delivery.

Nove, A. (1995). *War Pensions Agency customer satisfaction survey 1994*. DSS Research Report No. 42, London: HMSO.

Papadakis, E. and Taylor-Gooby, P. (1987). 'Consumer attitudes and participation in state welfare'. Political Studies, 35, 3, 467–481.

Peacey, V. and Rainford, L. (2004). *Attitudes towards child support and knowledge of the Child Support Agency, 2004*. DSS Research Report No. 226, Leeds: CDS.

Peters, M. and Joyce, L. (2006). *A review of the JSA sanctions regime: Summary research findings*. DWP Research Report No. 313, Leeds: CDS.

Pettigrew, N. and Thomas, A. (2002). *Housing Benefit simplification in the private rented sector*. In-house Report No. 107, London: DWP.

Pettigrew, N., Thomas, A., Tovey, P. and Stone, V. (1999). *Housing Benefit and Council Tax Benefit Delivery: Claimant experiences*. DSS Research Report No. 97, Leeds: CDS.

Quirke, B. (1999). 'Fraud against European public funds'. *Crime, Law and Social Change*, 31, 3, 171–191.

Ritchie, J. and Chetwynd, M. (1997). *Claimants' perceptions of the claim process*. DSS Research Report No. 68, London: The Stationery Office.

Rose, T. (1999). *Modernising service delivery: The integrated services prototype*. DSS Research Report No. 104, Leeds: CDS.

Rowlingson, K., Whyley, C., Newburn, T. and Berthoud, R. (1997). *Social security fraud: the role of penalties*. DSS Research Report No. 64, London: Stationery Office.

Russell, N. and Whitworth, S. (1992). *Benefits Agency national customer survey*. DSS Research Report No. 10, London: Stationery Office.

Sainsbury, R. (2000). *Local Authorities and Benefit Overpayments*. DSS Research Report No. 119, Leeds: CDS.

Sainsbury, R., Corden, A. and Carlisle, J. (1998). *Verifying Housing Benefit and Council Tax Benefit*, London: DWP.

Sanderson, I., Fidler, Y. and Wynmer, P. (2005). *Jobcentre Plus National Customer Satisfaction Survey 2005*. DWP Research Report No. 282, Leeds: CDS.

Stafford, B., Adelman, L., Trickey, H. and Ashworth, K. (2000). *Housing Benefit administration and the speed of claims processing*. In-house Report No. 69, London: DWP.

Stafford, B., Kellard, K. and Horsley, E. (1997). *Customer contact with the Benefits Agency*. DSS Research Report No. 65, London: The Stationery Office.

Stephenson, A. (2001). *Work and welfare: attitudes, experiences and behaviour of nineteen low-income families*. In-house Report No. 76, London: DWP.

Svallfors, S. (2004). 'Class, attitudes and the welfare state: Sweden in comparative perspective'. *Social Policy and Administration*, 38, 2, 119–138.

Thomas, A. and Pettigrew, N. (1999). *Attitudes towards methods of paying benefits*. In-house Report No. 51, London: DWP.

Thomas, A., Pettigrew, N. and Stone, V. (2000). *Staff attitudes to security in the Benefits Agency 1999*. In-house Report No. 66, London: DWP.

Trott, R. and Lessof, C. (1998). *Processing Housing Benefit and Council Tax Benefit*. In-house Report No. 37, London: DWP.

Turley, C. and Thomas, A. (2006). *Housing Benefit and Council Tax Benefit as in-work benefits; claimants' and advisors' knowledge, attitudes and experiences*. DWP Research Report No. 383, Leeds: CDS.

Turnbull, P.W. (1983). 'Corporate attitudes towards bank services'. *The International Journal of Bank Marketing*, 1, 1, 53–66.

Walker, B. and Niner, P. (2003). *Review of discretionary housing payments*. In-house Report No. 27, London: HMSO.

Whitehouse, L. (2006). 'Corporate social responsibility: views from the frontline'. *Journal of Business Ethics*, 63, 3, 279–296.

Williams, T., Astin, M. and Ditch, J. (1995). *First-time customers*. DSS Research Report No. 36, London: HMSO.

Wilson, D., Patterson, A., Powell, G. and Hembury, R. (2006). *Fraud and technology crimes: findings from the 2003/2004 British Crime Survey, the 2004 Offending, Crime and Justice Survey and administrative sources*. Home Office Online Report 09/06, London: Home Office.

Intervention studies

Adams, L., Bunt, K. and Bright, D. (2004). *Customer experience of direct payment*. In-house Report No. 150, London: DWP.

Artis, M., Ayuso, M. and Guillen, M. (2002). 'Detection of automobile insurance fraud with discrete choice models and misclassified claims'. *Journal of Risk and Insurance*, 69, 3, 325–340.

Aylen, J., Barber, K., Calvert, N., Davies, V., Drake, P., Kytölä, L., Simpson, D. and Williams, J. (2007). *Evaluation of the Standard Operating Model new and repeat claims process review pilot*. DWP Research Report No. 421, Leeds: CDS.

Belhadji, El B., Dionne, G. and Tarkhani, F. (2000). 'A model for the detection of insurance fraud'. *Geneva Papers on Risk and Insurance: Issues and Practice*, 25, 4, 517–538.

Boath, M. and Wilkinson, H. (2007). *Achieving good reporting of changes in circumstances*. DWP Research Report No. 457, Leeds: CDS.

Boon, M., Cowan, K. and Wagstaff, M. (2004). *A review of the DWP benefit fraud sanctions regime.* In-house Report No. 149, London: DWP.

Brockett, P.L., Derrig, R.A., Golden, L.L., Levine, A. and Alpert, M. (2002). 'Fraud classification using principal component analysis of RIDITs'. *Journal of Risk and Insurance*, 69, 3, 341–371.

Brockett, P.L., Xia, X.H. and Derrig, R.A. (1998). 'Using Kohonen's self-organizing feature map to uncover automobile bodily injury claims fraud'. *Journal of Risk and Insurance*, 65, 2, 245–274.

Carlisle, B., Wagstaff, M., Candy, S., Pettigrew, N. and Thomas, A. (2003). *The RSL VF pilot: an evaluation: registered social landlord involvement in the Housing Benefit/Council Tax Benefit verification framework*. In-house Report No. 106, London: DWP.

Caudill, S.B., Ayuso, M. and Guillen, M. (2005). 'Fraud detection using a multinomial logit model with missing information'. *Journal of Risk and Insurance*, 72, 4, 539–550.

Cox, G.H., Brogan, D.R. and Dandridge, M.A. (1986). 'The effectiveness of home visitation in reducing AFDC case payment errors'. *Social Service Review*, 60, 4, 603–618.

Crocker, K.J. and Tennyson, S. (2002). 'Insurance fraud and optimal claims settlement strategies'. *Journal of Law and Economics*, 45, 2, 469–507.

Davies, V., Hartfree, Y., Kellard, K. and Taylor, J. (2004). *Delivering the Jobcentre Plus vision: Qualitative research with staff and customers (Phase 3)*. DWP Research Report No. 222, Leeds: CDS.

Derrig, R.A. and Ostaszewski, K.M. (1995). 'Fuzzy techniques of pattern recognition in risk and claim classification'. *Journal of Risk and Insurance*, 62, 3, 447–482.

Dionne, G. and Gagne, R. (2001). 'Deductible contracts against fraudulent claims: evidence from automobile insurance'. *The Review of Economics and Statistics*, 83, 2, 290–301.

Eardley, T. (2006). 'The impact of breaching and financial penalties on Income Support'. *Economic and Labour Relations Review*, 1, 79–106.

Eccles, J. and Lloyd, R. (2005). *The Qualitative Evaluation of the JSA Intervention Regime Pilots*. DWP Research Report No. 300, Leeds: CDS.

Englander, V. and Englander, F. (1985). 'The cost effectiveness of computer-based welfare fraud detection in New Jersey'. *Public Productivity Review*, 9, 2–3, 271–282.

Ghezzi, S.G. (1983). 'A private network of social control: insurance investigation units'. *Social Problems*, 30, 5, 521–531.

GHK Consulting Ltd (2005). *Review of the structure of the Jobcentre Plus Business Delivery Target*. DWP Research Report No. 233, Leeds: CDS.

Harris, W.L., Peyrot, M., Fenzel, L.M. and Burbridge, J.J. (1997). 'Electronic distribution of public assistance benefits: system performance and stakeholder opinions'. *Evaluation and Program Planning*, 20, 4, 393–403.

Health Systems Research Inc. (2007). *Evaluation to determine the effectiveness of the public assistance reporting and information system*. Washington, DC: Health Systems Research Inc.

Hoyt, R.E., Mustard, D.B. and Powell, L.S. (2006). 'The effectiveness of state legislation in mitigating moral hazard: Evidence from automobile insurance'. *Journal of Law and Economics*, 49, 2, 427–450.

Lensvelt-Mulders, G.J.L.M., van der Heijden, P.G.M., Laudy, O. and van Gils, G. (2006). 'A validation of a computer-assisted randomized response survey to estimate the prevalence of fraud in social security'. *Journal of the Royal Statistical Society, Series A: Statistics in Society*, 169, 2, 305–318.

Leonard, K.J. (1995). 'The development of a rule-based expert-system model for fraud alert in consumer'. *European Journal of Operational Research*, 80, 2, 350–356.

Lloyd, R. and Jenkins, S. (2007). *Qualitative evaluation of the Telephone Intervention Pilot*. DWP Research Report No. 436, Leeds: CDS.

Major, J.A. and Riedinger, D.R. (2002). 'EFD: a hybrid knowledge/statistical-based system for the detection of fraud'. *Journal of Risk and Insurance*, 69, 3, 309–324.

Martin, J.L. and Harrison, T.P. (1993). 'Design and implementation of an expert-system for controlling health-care costs'. *Operations Research*, 41, 5, 819–834.

McKenna, K., Slater, A., Steels, J. and Walton, H. (2005). *Delivering the Jobcentre Plus vision: Qualitative Research with Staff and Customers (Phase 4)*. DWP Research Report No. 253, Leeds: CDS.

Middlemas, J. (2006). *Jobseekers Allowance intervention pilots quantitative evaluation*. DWP Research Report No. 382, Leeds: CDS.

Peters, M. and Joyce, L. (2006). *A review of the JSA sanctions regime: Summary research findings*. DWP Research Report No. 313, Leeds: CDS.

Pettigrew, N., Thomas, A., Candy, S., Joyce, L. and Saunders, T. (2001). *The Verification Framework: Early Experiences of Implementation*. DSS Research Report No. 137, Leeds: CDS.

Rejesus, R.M., Little, B.B. and Lovell, A.C. (2004). 'Using data mining to detect crop insurance fraud: is there a role for social scientists?'. *Journal of Financial Crime*, 12, 1, 24–32.

Sainsbury, R. (1999). *Combating Housing Benefit fraud: local authorities' discretionary powers*. In-house Report No. 53, London: DWP.

Sainsbury, R., Corden, A. and Finch, N. (2003). *Medical evidence and Incapacity Benefit: evaluation of a pilot study*. In-house Report No. 189, London: HMSO.

Sainsbury, R. and Eardley, T. (1991). *Housing benefit reviews: an evaluation of the effectiveness of the review system in responding to claimants dissatisfied with housing benefit decisions.* DSS Research Report No. 3, London: Department for Social Security.

Smith, N. (1997). *Local authority anti-fraud incentives: dividing up the national baseline*. London: Public Attitudes Surveys Ltd.

Thomas, A., Stone, V. and Cotton, D. (1999). *Modernising service delivery: The lone parent prototype*. DSS Research Report No. 90, Leeds: CDS.

Viaene, S., Ayuso, M., Guillen, M., Van Gheel, D. and Dedene, G.A.F. (2007). 'Strategies for detecting fraudulent claims in the automobile insurance industry'. *European Journal of Operational Research*, 176, 1, 565–583.

Viaene, S., Derrig, R.A., Baesens, B. and Dedene, G. (2002). 'A comparison of state-of-the-art classification techniques for expert automobile insurance claim fraud detection'. *Journal of Risk and Insurance*, 69, 3, 373–421.

Viaene, S., Derrig, R.A. and Dedene, G. (2004). 'A case study of applying boosting naive Bayes to claim fraud diagnosis'. *IEEE Transactions on Knowledge and Data Engineering*, 16, 5, 612–620.

Walsh, D. and Milne, R. (2007). 'Perceptions of benefit fraud staff in the UK: giving PEACE a chance?'. *Public Administration*, 85, 2, 525–540.

Walsh, D. and Milne, R. (2008). 'Keeping the PEACE? A study of investigative interviewing practices in the public sector'. *Legal and Criminological Psychology*, 13, 1, 39–57.

Weisberg, H.I. and Derrig, R.A. (1998). 'Quantitative methods for detecting fraudulent automobile bodily injury claims'. *Risques*, 35, 75–101.

Yang, W.S. and Hwang, S.Y. (2006). 'A process-mining framework for the detection of healthcare fraud and abuse'. *Expert Systems with Applications*, 31, 1, 56–68.

Zekeri, A.A. (2004). 'The adoption of electronic benefit transfer card for delivering food stamp benefits in Alabama: perceptions of college students participating in the food stamp program'. *College Student Journal*, 38, 4, 602–608.

Value for Money studies

Aronovitz, L.G. (2004). *Medicaid program integrity: state and federal efforts to prevent and detect improper payments*. GAO-04-707, Washington, DC: Government Accountability Office.

Aronovitz, L.G. (2007). *Medicare: improvements needed to address improper payments for medical equipment and supplies*. GAO-07-59, Washington, DC: Government Accountability Office.

Australian National Audit Office (ANAO) (1997). *Medifraud and inappropriate practice: health insurance commission*. Canberra: Australian National Audit Office.

Australian National Audit Office (ANAO) (1998–1999). *Management of tax file numbers*. Canberra: Australian National Audit Office.

Australian National Audit Office (ANAO) (1999). *Fraud control arrangements in employment, education, training and youth affairs*. Canberra: Australian National Audit Office.

Australian National Audit Office (ANAO) (1999–2000). *Survey of fraud control: arrangements in APS agencies*. Canberra: Australian National Audit Office.

Australian National Audit Office (ANAO) (2002a). *Fraud control arrangements in the Department of Veterans' Affairs*. Canberra: Australian National Audit Office.

Australian National Audit Office (ANAO) (2002b). *Goods and services tax: fraud prevention and control*. Canberra: Australian National Audit Office.

Australian National Audit Office (ANAO) (2002–2003). *Fraud control arrangements in the Australian Customs Service*. Canberra: Australian National Audit Office.

Australian National Audit Office (ANAO) (2004). *Management of customer debt*. Canberra: Australian National Audit Office.

Australian National Audit Office (ANAO) (2004–2005). *Australian Taxation Office: tax file integrity*. Canberra: Australian National Audit Office.

Australian National Audit Office (ANAO) (2005a). *Administration of Goods and Services Tax: compliance in the large business market segment*. Canberra: Australian National Audit Office.

Australian National Audit Office (ANAO) (2005b). *Customs compliance assurance strategy for international cargo*. Canberra: Australian National Audit Office.

Australian National Audit Office (ANAO) (2006). *Assuring Centrelink's payments: the role of the random sample survey programme*. Canberra: Australian National Audit Office.

Australian National Audit Office (ANAO) (2007). *Data integrity in the Child Support Agency*. Canberra: Australian National Audit Office.

Brostek, M. (2007). *Tax administration: additional time needed to complete offshore tax evasion examinations*. GAO-07-237, Washington, DC: Government Accountability Office.

Comptroller and Auditor-General (2003). *Evaluation of control activity*. Dublin: Government of Ireland.

Comptroller and Auditor-General (2004). *Television licence fee collection*. Dublin: Government of Ireland.

Comptroller and Auditor-General (2003). *Social security benefits: accuracy of benefit administration*. Wellington: OAG New Zealand.

Comptroller and Auditor-General (2006). *Inland Revenue Department: performance of taxpayer audit: follow up audit*. Wellington: OAG New Zealand.

Court of Auditors (2005). *Special report no.1/2005 concerning the management of the European Anti-Fraud Office OLAF*. Luxembourg: Office for Official Publications of the European Communities.

Frost, R. and Lack, S. (2007). *Administration of the job seeker account*. Canberra: Australian National Audit Office.

Government Accountability Office (GAO) (1995). *Welfare benefits: potential to recover hundreds of millions more in overpayments*. Washington, DC: Government Accountability Office.

Government Accountability Office (GAO) (1998a). *Medicare: application of the false claims act to hospital billing practices*. HEHS-98-195, Washington, DC: Government Accountability Office.

Government Accountability Office (GAO) (1998b). *Medicare: HCFA's use of anti-fraud-and-abuse funding and authorities*. HEHS-98-160, Washington, DC: Government Accountability Office.

Government Accountability Office (GAO) (1999a). *Food assistance: efforts to control fraud and abuse in the child and adult care food program should be strengthened*. RCED-00-12, Washington, DC: Government Accountability Office.

Government Accountability Office (GAO) (1999b). *Food assistance: efforts to control fraud and abuse in the WIC Program can be strengthened*. RCED-99-224, Washington, DC: Government Accountability Office.

Government Accountability Office (GAO) (1999c). *Food Stamp Program: storeowners seldom pay financial penalties owed for program violations*. RCED-99-91, Washington, DC: Government Accountability Office.

Government Accountability Office (GAO) (1999d). *Medicare: early evidence of compliance program effectiveness is inconclusive*. HEHS-99-59, Washington, DC: Government Accountability Office.

Government Accountability Office (GAO) (1999e). *Medicare: program safeguard activities expand, but results difficult to measure*. HEHS-99-165, Washington, DC: Government Accountability Office.

Government Accountability Office (GAO) (1999f). *Medicare contractors: despite its efforts, HCFA cannot ensure their effectiveness or integrity*. HEHS-99-115, Washington, DC: Government Accountability Office.

Government Accountability Office (GAO) (1999g). *Supplemental security income: additional actions needed to reduce program vulnerability to fraud and abuse*. HEHS-99-151, Washington, DC: Government Accountability Office.

Government Accountability Office (GAO) (2000a). *Food Stamp Program: better use of electronic data could result in disqualifying more recipients who traffic benefits*. RCED-00-61, Washington, DC: Government Accountability Office.

Government Accountability Office (GAO) (2000b). *Medicare: lessons learned from HCFA's implementation of changes to benefits*. HEHS-00-31, Washington, DC: Government Accountability Office.

Government Accountability Office (GAO) (2000c). *Medicare contractors: further improvement needed in headquarters and regional office oversight.* HEHS-00-46, Washington, DC: Government Accountability Office.

Government Accountability Office (GAO) (2001). *Social security administration: status of achieving key outcomes and addressing major management challenges.* GAO-01-778, Washington, DC: Government Accountability Office.

Government Accountability Office (GAO) (2002a). *Financial management: coordinated approach needed to address the government's improper payments problems*. GAO-02-749, Washington, DC: Government Accountability Office.

Government Accountability Office (GAO) (2002b). *Internal Revenue Service: efforts to identify and combat abusive tax schemes have increased, but challenges remain*. GAO-02-733, Washington, DC: Government Accountability Office.

Government Accountability Office (GAO) (2004a). *Financial management: some DOD contractors abuse the federal tax system with little consequence*. GAO-04-95, Washington, DC: Government Accountability Office.

Government Accountability Office (GAO) (2004b). *HUD single-family and multifamily property programs: inadequate controls resulted in questionable payments and potential fraud*. GAO-04-390, Washington, DC: Government Accountability Office.

Government Accountability Office (GAO) (2005). *Food Stamp Program: states have made progress reducing payment errors, and further challenges remain*. Washington, DC: Government Accountability Office.

Government Accountability Office (GAO) (2006). *Medicare payment: CMS methodology adequate to estimate national error rate*. Washington, DC: Government Accountability Office.

Kelshiker, M., Hansen J. and White, P. (2000). *Australian Taxation Office: internal fraud control arrangements*. Canberra: Australian National Audit Office.

Lack, S., Thurley, A. and Wilkinson, A. (2001). *Management of fraud and incorrect payment in Centrelink*. Canberra: Australian National Audit Office.

McFarlane, M., Jackson, K. and Holbert, F. (2006). *Management of Family Tax Benefit overpayments*. Canberra: Australian National Audit Office.

Moffatt, A., Turner, E. and Holbert, F. (2003). *Fraud control arrangements in APS agencies*. Canberra: Australian National Audit Office.

National Audit Office (NAO) (1987). *Department of Health and Social Security and Department of Employment: incorrect payments of social security benefits.* London: HMSO.

National Audit Office (NAO) (1990). *Inland Revenue: collection and enforcement of debts*. London: HMSO.

National Audit Office (NAO) (1992). *HM Customs and Excise: countering VAT avoidance*. London: HMSO.

National Audit Office (NAO) (1994a). *HM Customs and Excise: prevention and detection of internal fraud*. London: HMSO.

National Audit Office (NAO) (1994b). *Improving social security services in London: the provision of service to customers*. London: HMSO.

National Audit Office (NAO) (1994c). *Inland Revenue: getting tax right first time, and dealing with more complex postal queries*. London: HMSO.

National Audit Office (NAO) (1994d). *Payments of social security benefits to overseas customers*. London: HMSO.

National Audit Office (NAO) (1995a). *Checking claims for repayment of VAT*. London: HMSO.

National Audit Office (NAO) (1995b). *Financial controls in training and enterprise councils in England*. London: HMSO.

National Audit Office (NAO) (1995c). *Vehicle Excise Duty: evasion and enforcement*. London: HMSO.

National Audit Office (NAO) (1997a). *Exchange of information on direct taxation within the European Union*. London: The Stationery Office.

National Audit Office (NAO) (1997b). *Measures to combat Housing Benefit fraud*. London: HMSO.

National Audit Office (NAO) (1998). *Special Compliance Office: prevention of corruption*. London: HMSO.

National Audit Office (NAO) (1999a). *Progress measures to combat Housing Benefit fraud*. London: HMSO.

National Audit Office (NAO) (1999b). *The red channel*. London: HMSO.

National Audit Office (NAO) (2001). *Inland Revenue: Income Tax self assessment*. London: The Stationery Office.

National Audit Office (NAO) (2002). *The BBC: collecting the television licence fee*. London: The Stationery Office.

National Audit Office (NAO) (2003a). *Difficult forms: how government agencies interact with citizens*. London: The Stationery Office.

National Audit Office (NAO) (2003b). *Getting it right, putting it right: improving decision-making and appeals in social security benefits*. London: The Stationery Office.

National Audit Office (NAO) (2003c). *Tackling benefit fraud*. London: The Stationery Office.

National Audit Office (NAO) (2003d). *Tackling fraud against the Inland Revenue*. London: The Stationery Office.

National Audit Office (NAO) (2003e). *Transforming the performance of HM Customs and Excise through electronic service delivery*. London: The Stationery Office.

National Audit Office (NAO) (2004a). I*nland Revenue: Inheritance Tax*. London: The Stationery Office.

National Audit Office (NAO) (2004b). *The recovery of debt by the Inland Revenue*. London: The Stationery Office.

National Audit Office (NAO) (2004c). *Tackling VAT fraud*. London: The Stationery Office.

National Audit Office (NAO) (2005). *Filing of Income Tax self assessment returns*. London: The Stationery Office.

National Audit Office (NAO) (2006a). *Delivering effective services through contact centres*. London: The Stationery Office.

National Audit Office (NAO) (2006b). *HM Revenue and Customs: helping newly registered businesses meet their tax obligations*. London: The Stationery Office.

National Audit Office (NAO) (2006c). *Using leaflets to communicate with the public about services and entitlements. London*: The Stationery Office.

National Audit Office (NAO) (2007a). *Accuracy in processing Income Tax*. London: The Stationery Office.

National Audit Office (NAO) (2007b). *HM Revenue and Customs: helping individuals understand and complete their tax forms*. London: The Stationery Office.

Nicoll, P., Reid, J., Rogala, M. and Taylor-Cannon, S. (2007). *The Higher Education Loan Programme*. Canberra: Australian National Audit Office.

Robinson, R.A. (2005). *Crop insurance: actions needed to reduce program's vulnerability to fraud, waste, and abuse*. GAO-05-52, Washington, DC: Government Accountability Office.

Sotiropoulos, G., Jurkovic, I., Thurley, A. and Lack, S. (2000). *Fraud control arrangements in the Department of Health and Aged Care*. Canberra: Australian National Audit Office.

Thurley, A., Sotiropoulos, G., Cooke, N. and Lack, S. (2001). *Management of fraud control: Department of Family and Community Services*. Canberra: Australian National Audit Office.

Wilkinson, A., Morris, A. and Holbert, F. (2007). *Administration of complex age pension assessments*. Canberra: Australian National Audit Office.

References

Adams, C. and Webley, P. (2001). 'Small business owners' attitudes on VAT compliance in the UK'. *Journal of Economic Psychology*, 22, 2, 195–216.

Adams, L., Bunt, K. and Bright, D. (2004). *Customer experience of direct payment*. In-house Report No. 150, London: DWP.

Alm, J. and Torgler, B. (2006). 'Culture differences and tax morale in the United States and in Europe'. *Journal of Economic Psychology*, 27, 2, 224–246.

Artis, M., Ayuso, M. and Guillen, M. (2002). 'Detection of automobile insurance fraud with discrete choice models and misclassified claims'. *Journal of Risk and Insurance*, 69, 3, 325–340.

Atkinson, A. and McKay, S. (2005a). *Child Support Reform: The views and experiences of CSA staff and new clients*. DWP Research Report No. 232, Leeds: CDS.

Atkinson, A. and McKay, S. (2005b). *Investigating the compliance of Child Support Agency clients*. DWP Research Report No. 285, Leeds: CDS.

Aylen, J., Barber, K., Calvert, N., Davies, V., Drake, P., Kytölä, L., Simpson, D. and Williams, J. (2007). *Evaluation of the Standard Operating Model new and repeat claims process review pilot*. DWP Research Report No. 421, Leeds: CDS.

Bégin, M. and Kaegi, E. (1999). 'Unconventional therapies and cancer'. *Canadian Medical Association Journal*, 161, 6, 686.

Belhadji, El B., Dionne, G. and Tarkhani, F. (2000). 'A model for the detection of insurance fraud'. *Geneva Papers on Risk and Insurance: Issues and Practice*, 25, 4, 517–538.

Bell, A., Kazimirski, A. and La Valle, I. (2006). *An investigation of CSA Maintenance Direct Payments: Qualitative study*. DWP Research Report No. 327, Leeds: CDS.

Besley, T. and Preston, I. (1997). 'Fiscal anarchy in the UK: modelling poll tax noncompliance'. *Journal of Public Economics*, 64, 137–152.

Boath, M. and Wilkinson, H. (2007). *Achieving good reporting of changes in circumstances*. DWP Research Report No. 457, Leeds: CDS.

Boon, M., Cowan, K. and Wagstaff, M. (2004). *A review of the DWP benefit fraud sanctions regime*. In-house Report No. 149, London: DWP.

Bosworth-Davies, R. (1993). 'An analysis of compliance officer: attitudes towards insider dealing'. *Crime Law and Social Change*, 20, 4, 339–357.

Bradshaw, J. and Mayhew, E. (2004). 'Public attitudes to dependency and the welfare state'. *International Journal of Market Research*, 46, 1, 49–63.

Brockett, P.L., Derrig, R.A., Golden, L.L., Levine, A. and Alpert, M. (2002). 'Fraud classification using principal component analysis of RIDITs'. *Journal of Risk and Insurance*, 69, 3, 341–371.

Brockett, P.L., Xia, X.H. and Derrig, R.A. (1998). 'Using Kohonen's self-organizing feature map to uncover automobile bodily injury claims fraud'. *Journal of Risk and Insurance*, 65, 2, 245–274.

Bunt, K., Morrison, J. and Godwin, L. (2007). *Customers' experiences of the Independent Case Examiner Prototype: Qualitative research*. DWP Research Report No. 420, Leeds: CDS.

Button, M., Johnston, L., Frimpong, K. and Smith, G. (2007). 'New directions in policing fraud: the emergence of the counter fraud specialist in the United Kingdom'. *International Journal of the Sociology of Law*, 35, 4, 192–208.

Campbell, R., Pound, R., Pope, C., Britten, N., Pill, R., Morgan, M. and Donovan, J. (2003). 'Evaluating meta-ethnography: a synthesis of qualitative research on lay experiences of diabetes and diabetes care'. *Social Science and Medicine*, 56, 671–684.

Carlisle, B., Wagstaff, M., Candy, S., Pettigrew, N. and Thomas, A. (2003). *The RSL VF pilot: an evaluation: registered social landlord involvement in the Housing Benefit/Council Tax Benefit verification framework*. In-house Report No. 106, London: DWP.

Caudill, S.B., Ayuso, M. and Guillen, M. (2005). 'Fraud detection using a multinomial logit model with missing information'. *Journal of Risk and Insurance*, 72, 4, 539–550.

Coleman, N., Jeeawody, F. and Wapshott, J. (2002). *Electronic government at the Department for Work and Pensions: Attitudes to electronic methods of conducting benefit business*. DWP Research Report No. 176, Leeds: CDS.

Cox, G. H., Brogan, D. R. and Dandridge, M.A. (1986). 'The effectiveness of home visitation in reducing AFDC case payment error'. *Social Service Review*, 60, 4, 603–618.

Crocker, K.J. and Tennyson, S. (2002). 'Insurance fraud and optimal claims settlement strategies'. *Journal of Law and Economics*, 45, 2, 469–507.

Davidson J. and Sainsbury, R. (2008). *Reporting changes in circumstances: tackling error in the Housing Benefit system – Standard Housing Benefit cases*. Research Report No. 523, London: DWP.

Davies, V., Hartfree, Y., Kellard, K. and Taylor, J. (2004). *Delivering the Jobcentre Plus vision: Qualitative research with staff and customers (Phase 3)*. DWP Research Report No. 222, Leeds: CDS.

Dean, H. and Melrose, M. (1996). 'Unravelling citizenship: the significance of social security benefit fraud'. *Critical Social Policy*, 16, 48, 3–31.

Dean, P., Keenan, T. and Kenney, F. (1980). 'Taxpayers attitudes to income-tax evasion: an empirical study'. *British Tax Review*, 1, 28–44.

Department for Transport, Local Government and the Regions (2001). *Fraud in the private sector housing renewal and disabled facilities grants programmes*. Housing Research 133, Rotherham: Department for Transport, Local Government and the Regions.

Department for Work and Pensions (2005). *Fraud, error and other incorrectness in the disability living allowance*. London: DWP.

Department for Work and Pensions (2006). *Fraud and error in the state pension*. London: DWP.

Department for Work and Pensions (2007a). *Fraud and error in the benefit system, October 2005–September 2006*. London: DWP.

Department for Work and Pensions (2007b). *Getting welfare right: tackling error in the benefits system*. London: Fraud and Error Strategy Division, Department for Work and Pensions.

Department for Work and Pensions, (2008). *Fraud and error in the benefit system: October 2006 to September 2007*. London: DWP.

Derrig, R.A. and Ostaszewski, K.M. (1995). 'Fuzzy techniques of pattern recognition in risk and claim classification'. *Journal of Risk and Insurance*, 62, 3, 447–482.

Dionne, G. and Gagne, R. (2001). 'Deductible contracts against fraudulent claims: evidence from automobile insurance'. *The Review of Economics and Statistics*, 83, 2, 290–301.

Eardley, T. (2006). 'The impact of breaching and financial penalties on Income Support'. *Economic and Labour Relations Review*, 1, 79–106.

Eccles, J. and Lloyd, R. (2005). *The Qualitative Evaluation of the JSA Intervention Regime Pilots*. DWP Research Report No. 300, Leeds: CDS.

Edwards, J. and Wolfe, S. (2007). 'Ethical and compliance-competence evaluation: a key element of sound corporate governance'. *Corporate Governance: An International Review*, 15, 2, 359–369.

Englander, V. and Englander, F. (1985). 'The cost effectiveness of computer-based welfare fraud detection in New Jersey'. *Public Productivity Review*, 9, 2–3, 271–282.

EPPI-Centre (2007). 'EPPI-Centre methods for conducting systematic reviews'. London: EPPI-Centre, Social Science Research Unit, Institute of Education, University of London.

Evason, E. and Woods, R. (1995). 'Poverty, deregulation of the labour market and benefit fraud'. *Social Policy and Administration*, 29, 1, 40–54.

Frey, B.S. and Torgler, B. (2007). 'Tax morale and conditional cooperation'. *Journal of Comparative Economics*, 35, 1, 136–159.

Fukukawa, K. (2002). 'Developing a framework for ethically questionable behavior in consumption'. *Journal of Business Ethics*, 41, 1–2, 99–119.

Furnham, A. (1987). The structure of economic beliefs'. *Personality and Individual Differences*, 8, 22, 253–260.

Government Accountability Office (GAO) (1999). *Supplemental security income: additional actions needed to reduce program vulnerability to fraud and abuse*, HEHS-99-151, Washington, DC: Government Accountability Office.

Government Accountability Office (GAO) (2001). *Social security administration: status of achieving key outcomes and addressing major management challenges*, GAO-01-778, Washington, DC: Government Accountability Office.

Government Accountability Office (GAO) (2004). *Financial management: some DOD contractors abuse the federal tax system with little consequence*, GAO-04-95, Washington, DC: Government Accountability Office.

Ghezzi, S.G. (1983). 'A private network of social control: insurance investigation units'. *Social Problems*, 30, 5, 521–531.

GHK Consulting Ltd (2005). *Review of the structure of the Jobcentre Plus Business Delivery Target*. DWP Research Report No. 233, Leeds: CDS.

Greenhalgh, T. and Peacock, R. (2005). 'Effectiveness and efficiency of search methods in systematic reviews of complex evidence: audit of primary sources'. *British Medical Journal*, 331, 1064–1065.

Griggs, J., McAllister, F. and Walker, R. (2005). *The new Tax Credits system: knowledge and awareness among recipients*. London: National Council for One Parent Families.

Harris, W.L., Peyrot, M., Fenzel, L.M. and Burbridge, J.J. (1997). 'Electronic distribution of public assistance benefits: system performance and stakeholder opinions'. *Evaluation and Program Planning*, 20, 4, 393–403.

Health Systems Research Inc. (2007). *Evaluation to determine the effectiveness of the public assistance reporting and information system*. Washington, DC: Health Systems Research Inc.

Hills, J. (2002). 'Following or leading public opinion? Social security policy and public attitudes since 1997'. *Fiscal Studies*, 23, 4, 539–558.

HM Treasury (2006). *An analysis of reported fraud in government departments*. London: The Stationery Office.

Howat, N. and Sims, L. (2006). *The Pension Service Customer Survey 2005*. DWP Research Report No. 331, Leeds: CDS.

Hoyt, R.E., Mustard, D.B. and Powell, L.S. (2006). 'The effectiveness of state legislation in mitigating moral hazard: evidence from automobile insurance'. *Journal of Law and Economics*, 49, 2, 427–450.

Irvine, A., Davidson, J. and Sainsbury R. (2008). *Reporting changes in circumstances: tackling error in the benefit system*. Research Report No. 497, London: DWP.

Irving, A., Sparham, I. and Spicer, N. (2003). *Attitudes towards electronic service delivery*. In-house Report No. 117, London: DWP.

Keenan, A. and Dean, P.N. (1980). 'Moral evaluation of tax evasion'. *Social Policy and Administration*, 14, 3, 209–220.

Lensvelt-Mulders, G.J.L.M., van der Heijden, P.G.M., Laudy, O. and van Gils, G. (2006). 'A validation of a computer-assisted randomized response survey to estimate the prevalence of fraud in social security'. *Journal of the Royal Statistical Society, Series A: Statistics in Society*, 169, 2, 305–318.

Leonard, K.J. (1995). 'The development of a rule-based expert-system model for fraud alert in consumer'. *European Journal of Operational Research*, 80, 2, 350–356.

Levi, M. (1991). 'British corporate responses to fraud'. *Corruption and Reform*, 6, 1, 45–52.

Levi, M. (1998). 'Organising plastic fraud: enterprise criminals and the side-stepping of fraud prevention'. *The Howard Journal of Criminal Justice*, 37, 4, 423–438.

Lewis, B.R. (1982). 'Weekly cash-paid workers: attitudes and behaviour with regard to banks and other financial institutions'. *European Journal of Marketing*, 16, 3, 92–101.

Lloyd, R. and Jenkins, S. (2007). *Qualitative evaluation of the Telephone Intervention Pilot*. DWP Research Report No. 436, Leeds: CDS.

MacDonald, R. (1994). 'Fiddly jobs, undeclared working and the something for nothing society'. *Work, Employment and Society*, 8, 4, 507–530.

Major, J.A. and Riedinger, D.R. (2002). 'EFD: a hybrid knowledge/statistical-based system for the detection of fraud'. *Journal of Risk and Insurance*, 69, 3, 309–324.

Martin, J.L. and Harrison, T.P. (1993). 'Design and implementation of an expert-system for controlling health-care costs'. *Operations Research*, 41, 5, 819–834.

Matthews, D. (2005). 'London and County Securities: a case study in audit and regulatory failure'. *Accounting, Auditing and Accountability Journal*, 18, 4, 518–536.

McBarnet, D. (1991). 'Whiter than white-collar crime: tax, fraud insurance and the management of stigma'. *British Journal of Sociology*, 42, 3, 323–344.

McKenna, K., Slater, A., Steels, J. and Walton, H. (2005). *Delivering the Jobcentre Plus vision: Qualitative Research with Staff and Customers (Phase 4)*. DWP Research Report No. 146, Leeds: CDS.

Middlemas, J. (2006). *Jobseekers Allowance intervention pilots quantitative evaluation*. DWP Research Report No. 382, Leeds: CDS.

Mitton, L. (2009). *Factors affecting compliance with rules: understanding the behaviour and motivations behind customer fraud*. DWP Working Paper No. 67, London: The Stationery Office.

Morley, N.J., Ball, L.J. and Ormerod, T.C. (2006). 'How the detection of insurance fraud succeeds and fails'. *Psychology Crime and Laws*, 12, 2, 163–180.

Nam, C.W., Parsche, R. and Schaden, B. (2001). 'Measurement of value added tax evasion in selected EU countries on the basis of national accounts data'. *CESifo Economic Studies*, 47, 2, 127–144.

National Audit Office (NAO) (1987). *Department of Health and Social Security and Department of Employment: incorrect payments of social security benefits*. London: HMSO.

National Audit Office (NAO) (2006). *International benchmark of fraud and error in social security system*. London: The Stationery Office.

NHS Counter Fraud and Security Management Service (2007). *Creating an anti-fraud culture: discovering public's perception of fraud in the NHS*. London: NHS Business Service Delivery.

Noblit, G.W. and Hare, R.D. (1988). *Meta-ethnography: synthesising qualitative studies*. London: Sage.

Pawson, R., Greenhalgh, T., Harvey, G., Walshe, K. (2005). 'Realist review-a new method of systematic review designed for complex policy interventions'. *Journal of Health Service Research Policy*, 10 (Supplement 1), 21–34.

Peters, M. and Joyce, L. (2006). *A review of the JSA sanctions regime: Summary research findings*. DWP Research Report No. 313, Leeds: CDS.

Pettigrew, M. and Roberts, H. (2007). *Systematic reviews in the social science: a practical guide*. Oxford: Blackwell Publishing Ltd.

Pettigrew, N., Thomas, A., Tovey, P. and Stone, V. (1999). *Housing Benefit and Council Tax Benefit Delivery: claimant experiences*. DSS Research Report No. 97, Leeds: CDS.

Pettigrew, N., Thomas, A., Candy, S., Joyce, L. and Saunders, T. (2001). *The Verification Framework: Early Experiences of Implementation*. DSS Research Report No. 137, Leeds: CDS.

Quirke, B. (1999). 'Fraud against European public funds'. *Crime, Law and Social Change*, 31, 3, 171–191.

Rejesus, R.M., Little, B.B. and Lovell, A.C. (2004). 'Using data mining to detect crop insurance fraud: is there a role for social scientists?'. *Journal of Financial Crime*, 12, 1, 24–32.

Ritchie, J. and Chetwynd, M. (1997). *Claimants' perceptions of the claim process*. DSS Research Report No. 68, London: The Stationery Office.

Rose, T. (1999). *Modernising service delivery: The integrated service prototype*. DSS Research Report No. 104, Leeds: CDS.

Rowlingson, K., Whyley, C., Newburn, T. and Berthoud, R. (1997). *Social security fraud: the role of penalties*. DSS Research Report No. 64, London: The Stationery Office.

Russell, N. and Whitworth, S. (1992). *Benefits Agency national customer survey*. DSS Research Report No. 10, London: The Stationery Office.

Sainsbury, R. (2000). *Local Authorities and Benefit Overpayments*. DSS Research Report No. 119, Leeds: CDS.

Sainsbury, R. (1999). *Combating Housing Benefit fraud: local authorities' discretionary powers.* In-house Report No. 53, London: DWP.

Sainsbury, R. and Eardley, T. (1991). *Housing Benefit reviews: an evaluation of the effectiveness of the review system in responding to claimants dissatisfied with housing benefit decisions*. DSS Research Report No. 3, London: Department for Social Security.

Sainsbury, R., Corden, A. and Carlisle, J. (1998). *Verifying Housing Benefit and Council Tax Benefit*. London: DWP.

Sainsbury, R., Corden, A. and Finch, N. (2003). *Medical evidence and Incapacity Benefit: evaluation of a pilot study*. In-house Report No. 189, London: HMSO.

Smith, N. (1997). *Local authority anti-fraud incentives: dividing up the national baseline*. London: Public Attitudes Surveys Ltd.

Stafford, B., Adelman, L., Trickey, H. and Ashworth, K. (2000). *Housing Benefit administration and the speed of claims processing.* In-house Report No. 69, London: DWP.

Steckler, A., McLeroy, K.R., Goodman, R.M., Bird, S.T. and McCormick, L. (1992). 'Toward integrating qualitative and quantitative methods: an introduction'. *Health Education Quarterly*, 19, 1, 1–8.

Thomas, A., Pettigrew, N. and Stone, V. (2000). *Staff attitudes to security in the Benefits Agency 1999*. In-house Report No. 66, London: DWP.

Thomas, A., Stone, V. and Cotton, D. (1999). *Modernising service delivery: The lone parent prototype.* DSS Research Report No. 90, Leeds: CDS.

Thomas, J. and Brunton, J. (2006). *EPPI-Reviewer 3.0: analysis and management of data for research synthesis (EPPI-Centre software)*. London: Social Science Research Unit, Institute of Education, University of London.

Tripney, J., Newman, M., Bangpan, M., Hempel-Jorgensen, A., Mackintosh, M., Tucker, H. and Sinclair, J. (2009). *In work poverty: a systematic review*. Research Report No. 549, London: DWP.

Trott, R. and Lessof, C. (1998). *Processing Housing Benefit and Council Tax Benefit*. In-house Report No. 37, London: DWP.

Turley, C. and Thomas, A. (2006). *Housing Benefit and Council Tax Benefit as in-work benefits: claimants' and advisors' knowledge, attitudes and experiences*. DSS Research Report No. 383, Leeds: CDS.

Viaene, S., Ayuso, M., Guillen, M., Van Gheel, D. and Dedene, G.A.F. (2007). 'Strategies for detecting fraudulent claims in the automobile insurance industry'. *European Journal of Operational Research*, 176, 1, 565–583.

Viaene, S., Derrig, R.A. and Dedene, G. (2004). 'A case study of applying boosting naive Bayes to claim fraud diagnosis'. *IEEE Transactions on Knowledge and Data Engineering*, 16, 5, 612–620.

Viaene, S., Derrig, R.A., Baesens, B. and Dedene, G. (2002). 'A comparison of state-of-the-art classification techniques for expert automobile insurance claim fraud detection'. *Journal of Risk and Insurance*, 69, 3, 373–421.

Walsh, D. and Milne, R. (2007). 'Perceptions of benefit fraud staff in the UK: giving PEACE a chance?'. *Public Administration*, 85, 2, 525–540.

Walsh, D. and Milne, R. (2008). 'Keeping the PEACE? A study of investigative interviewing practices in the public sector'. *Legal and Criminological Psychology*, 13, 1, 39–57.

Weisberg, H.I. and Derrig, R.A. (1998). 'Quantitative methods for detecting fraudulent automobile bodily injury claims'. *Risques*, 35, 75–101.

Wilson, D., Patterson, A., Powell, G. and Hembury, R. (2006). *Fraud and technology crimes: findings from the 2003/2004 British Crime Survey, the 2004 Offending, Crime and Justice Survey and administrative sources*. Home Office Online Report 09/06, London: Home Office.

Yang, W.S. and Hwang, S.Y. (2006). 'A process-mining framework for the detection of healthcare fraud and abuse'. *Expert Systems with Applications*, 31, 1, 56–68.

Zekeri, A.A. (2004). 'The adoption of electronic benefit transfer card for delivering food stamp benefits in Alabama: perceptions of college students participating in the food stamp program'. *College Student Journal*, 38, 4, 602–608.

This report presents the findings from a review of research evidence related to fraud and error in financial, welfare and revenue services, with particular focus on notification of changes of circumstance.

The review followed standard review processes using transparent and explicit methods to identify relevant research evidence, aiming to describe existing empirical evidence in this area, to identify research gaps, and to inform decisions on directions of future research in the field.

If you would like to know more about DWP research, please contact:
Kate Callow, Commercial Support and Knowledge Management Team,
Upper Ground Floor, Steel City House, West Street, Sheffield, S1 2GQ.
http://research.dwp.gov.uk/asd/asd5/rrs-index.asp

DWP Department for Work and Pensions

Published by the
Department for Work and Pensions
April 2011
www.dwp.gov.uk
Working Paper no. 97
ISBN 978-1-84712-937-6