Report prepared for the
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Evaluation of the General Practice Immunisation
Incentives scheme

Volume 1
Methods, findings and recommendations
Acronyms

ABS Australian Bureau of Statistics
ACIR Australian Childhood Immunisation Register
ACT Australian Capital Territory
ADGP Australian Divisions of General Practice Ltd.
AMA Australian Medical Association
AMS Aboriginal Medical Service
ARIA Accessibility and Remoteness Index for Australia
ASVS Australian Standard Vaccination Schedule
BPP Better Practice Programme
CINAHL Cumulative Index to Nursing and Allied Health Literature
CME Continuing Medical Education
DIC Divisional Immunisation Coordinator
DTP Diphtheria, Tetanus and Pertussis vaccine
DTPa Diphtheria, Tetanus and Pertussis acellular vaccine
DTPw Diphtheria, Tetanus and Pertussis whole cell vaccine
GP General Practitioner
GPII General Practice Immunisation Incentives (scheme)
GPIIAG General Practice Immunisation Incentives Advisory Group
GPSRG General Practice Strategy Review Group
Hib Haemophilus influenza Type B
HIC Health Insurance Commission
MBS Medicare Benefits Schedule
MEDLINE Medical Literature, Analysis, and Retrieval System Online
MeSH Medical Subject Headings
MOU Memorandum of Understanding
NACCHO National Aboriginal Controlled Community Health Organisations
NCIRS National Centre for Immunisation Research and Surveillance
NGPIC National General Practice Immunisation Coordinator
NHMRC National Health and Medical Research Council
NIC National Immunisation Committee
NLM United States of America National Library of Medicine
NNDSS National Notifiable Diseases Surveillance System
NSW New South Wales
NT Northern Territory
OATSIH Office of Aboriginal and Torres Strait Islander Health
Evaluation of the General Practice Immunisation Incentives scheme
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PIP  Practice Incentives Program
RACGP  Royal Australian College of General Practitioners
RDAA  Rural Doctors Association of Australia
SA  South Australia
SBO  State Based Organisation
SBOIC  State Based Organisation Immunisation Coordinator
SIP  Service Incentive Payment
UK  United Kingdom
VIC  Victoria
WA  Western Australia
WPE  Whole patient equivalent
Executive Summary

This report presents the findings of the evaluation of the General Practice Immunisation Incentives (GPII) scheme. The results of surveys, interview guide for stakeholder interviews and Divisional case studies undertaken in the evaluation of the scheme are contained in a second volume. A third volume contains the findings of a review of the literature on incentive schemes in general practice.

The Seven Point Plan

The GPII scheme is an integral part of the Immunise Australia Seven Point Plan, announced in February 1997. These initiatives formed the Commonwealth Government response to the reported immunisation coverage for children aged up to six years falling to 52%. The aim of the Seven Point Plan was to improve Australia’s childhood immunisation level. Within the plan, the GPII scheme was to support general practitioners (GPs) in playing a more central role in immunisation and notification.

The elements of the Seven Point Plan are highly interactive and inextricably linked. Collectively, they form a system-wide approach to the goal of raising childhood immunisation. In considering the operation and impact of the GPII however, it is impossible to ignore the other initiatives of the Seven Point Plan.

Changes in immunisation coverage

Overall, there has been an increase in real levels of childhood immunisation coverage since the inception of the GPII scheme, although at levels lower than the apparent increase, due to artefacts of increased reporting to the Australian Childhood Immunisation Register (ACIR). The elements of the Seven Point Plan have operated in a systemic way to cause the increases in coverage levels. It is impossible to separately quantify the impacts of the individual elements.

However, there is some indication that the strongest impacts have been through parent inducements—the school entry requirements and welfare payments strategies—with the GPII playing a lesser, but significant role.

While there is some variability across States and Territories, with the exception of the Northern Territory (NT), the trends of increased coverage have been similar. In the NT, significant data quality issues have compromised any ability to assess changes with confidence.

There is an apparently greater increase in coverage levels for remote areas. The reasons for this are not immediately apparent, and reporting bias can not be sufficiently well quantified to assess the importance of this finding.

The evaluation could only partially address the improvements made in immunisation rates for particular age groups, as the data available to the evaluation did not support further analysis. Available evidence shows that coverage for 12 to 15 month olds has reached 88.4% nationally and has exceeded 90% in some States and Territories. In contrast, coverage for 24 to 27 month olds is somewhat lower, at 81.7%, although the apparent gap narrowed in the most recent quarter (June 2000).

Examination of the changes in immunisation coverage by socio-economic status was carried out. Unfortunately, the data available did not allow for analysis of other demographic characteristics, such as ethnicity. Reporting artefacts in the ACIR data also confounded interpretation of changes in
immunisation coverage by socio-economic status. What was possible was an analysis of this reporting bias.

The surprising finding was that areas of low socio-economic status exhibited more marked increases in reporting of immunisation data to the ACIR since the inception of the GPII, than did other areas. This may reflect a lower initial rate of reporting for these areas, but remains a significant finding. It implies that the data on the ACIR are now of similar reliability for areas of different socio-economic status, and this will make analysis of real immunisation trends by socio-economic status possible in the future.

The Service Incentive Payment (SIP)

The SIP was important in encouraging GPs to participate in the scheme and has had a substantial impact on the reporting of data to the ACIR. Consequently, the quality of the data on the ACIR has improved markedly in the two years of the scheme’s operation. This would not have happened to the same extent without an adequate SIP component.

The Outcomes Payment

The outcomes payment has become more important to GPs over time, as they have better understood its intent and operation. This payment has encouraged GPs to approach child immunisation in a far more strategic manner than previously. It also has contributed significantly to the favourable view of greater GP involvement in such population health activities.

The Divisional Immunisation Coordinators (DICs)

The National, State and Divisional coordination roles have been essential to the success of the scheme—particularly the Divisional Immunisation Coordinators (DICs). The DICs have contributed to the uptake of the scheme by GPs, increased awareness of population health issues and improved the quality of immunisation practice generally within general practices. There is some evidence also of their importance to the coordination of State and local level activities and programs among other non-GP providers.

One of the key activities undertaken by DICs was the education and training of GPs and practice staff, with a particular emphasis on quality of immunisation practice. Stakeholder interviews indicate the view that quality among GPs has improved over time. Vaccine wastage data support this view suggest that the quality of immunisation service has not fallen since the commencement of the GPII and may in fact have improved.

Immunisation Providers

Over the life of the GPII scheme, there appears to have been a transfer of immunisation activity from non-GP providers to GPs. However, it is not possible to discern the extent to which this change is real, as the data are somewhat suspect (for this purpose) and do not allow isolation of the effects of increased reporting within the two sectors.

The reduction in non-GP proportion of immunisations is largely in the local government sector, and there is variety in the trends across different States and Territories.

The evaluation attempted to examine whether immunisation levels are increasing as a result of GPs taking on more immunisations. However, the available data did not allow a definitive answer. There is growth in immunisation rates and GPs are doing more immunisations. However, the
interaction of the elements of the Seven Point Plan make it impossible to conclude whether immunisation levels would have increased without the GPII element of the scheme.

**Divisional Case Studies**

A number of the strategic transition plans for Divisions of General Practice were reviewed, to assess their nature and outcomes with respect to the GPII scheme. The Divisional plans varied in their specificity, although most had a primary aim of increasing immunisation coverage in their area. Several also placed great emphasis on the formation and active employment of local linkages to work towards achieving that aim.

Where the aim was stated in general terms (that is, to increase coverage, with no target level to be reached), the Divisions were apparently successful. In those cases where the aim was expressed as exceeding 90% coverage across the Division, that aim had not been reached as at May 2000. It should be noted that no Division had achieved this level of coverage at that point in time.

According to Divisions, the most effective strategies used were:

- nurse and administrative staff education (94%);
- practice visits (77%);
- developing and distributing resource kits (72%); and
- other activities, principally comprising clinical and cold chain audits, GP and Continuing Medical Education (CME) seminars, data entry, data cleaning and data interpretation.

The common attributes of the Divisions with high levels of coverage were:

- desire and commitment to work closely with all immunisation providers to raise coverage levels;
- focus on ensuring best practice in immunisation;
- recognition that practice staff were key to improving coverage levels and best practice immunisation;
- recognition that GPs and their staff needed more information and education; and
- focus on ensuring practice data were accurate.

**The State Based Organisation Immunisation Coordinators (SBOICs)**

The State Based Organisation Immunisation Coordinators (SBOICs) and the National General Practice Immunisation Coordinator (NGPIC) were seen to have pivotal roles in the evolution of the scheme. There was a sense that the roles were not well-delineated in the early days of the scheme and that greater clarity of respective responsibilities would have been an improvement. This was partly due to the evolutionary nature of these roles and to the circumstances in which they were established.

The SBOIC roles developed in different ways in each State and Territory, depending upon the existing immunisation programs and infrastructure. State Based Organisations (SBOs) in all States and Territories felt the level of funding was sufficient to enable them to undertake meaningful work. However,
those with large numbers of Divisions felt that they should receive more
funding to recognise the larger task that they faced.

**The future of the GPII scheme**

The overall conclusion is that the scheme should continue, with some
changes, until June 2003. The SIP, outcomes payment and infrastructure
components each should be retained.

However, the SIP should be decreased from its current level to $15.50. The
$2.7m annual savings from such a reduction should be retained within the GP
sector. Part of these savings should be applied to:

- a $123,000 increase in funding to the SBOIC roles, distributed according to
  the numbers of Divisions of General Practice in each State and Territory; and
- bringing the current rules for determining immunisation status under the
  GPII into line with the due and overdue rules in the Australian Standard
  Vaccination Schedule (ASVS) ($1.5m per annum).

This rule change will bring this aspect of the scheme into line with the ACIR
rules.

**The GPII as a model for other incentive schemes**

This evaluation also addressed the question of the GPII scheme as a model
for encouraging GP participation and role expansion by using financial
incentives. Such incentive schemes should be used only as a part of a broader
collaborative strategy to address a particular population health issue. It is
important that the key agents for change are engaged in this broader strategy.
This is particularly relevant to a federation like Australia, where States and
Territories play a key role in population health.

The survey results and stakeholder interviews support the view that GPs are
looking to take on a greater role in population health activities. The GPII model
could be translated to other population health interventions and should retain
the elements of outcomes payment, SIP and the national, State and Division
infrastructure arrangements.

There are a set of prerequisites for the success of such population health
incentive schemes. These are:

- It should be aimed at addressing a health issue of national importance. This
  perception should be widely held but particularly it must be prevalent among
  GPs and the general community.
- It must be based on population health interventions that have a strong and
  widely accepted evidence basis for their effectiveness and desirability.
- There must exist widely accepted best practice and clinical guidelines for
  the intervention(s) of interest, and their adoption and application should form
  part of the measure of GP performance.
- It must include a set of performance measures to assess the population
  health outcome from the intervention in a timely fashion, and an information
  system to support the collection and reporting requirements necessitated by
  these performance indicators.
- GP participation should be voluntary.

There will be a reporting burden associated with any future scheme, and the
SIP is seen, in part, as compensation for such additional work. The SIP was
important in improving the amount and quality of data on the ACIR. Therefore, it is likely that there will need to be some form of SIP in future schemes. However, there may be scope for it to be combined into a broader SIP that encompasses more than one population health incentive scheme.

The outcomes payments are a key component of any population health incentives scheme. They provide the essential link between the indicator of effectiveness and reward for performance. The correct outcomes payment mechanism is needed to ensure that the incentive system is working to improve performance in the ways desired.

The infrastructure component (DICs, SBOICs, NGPIC) has been essential to the success of the GPII scheme. Other population health interventions will have some degree of need for a similar infrastructure. For example, the issues of education, training and other support are likely to manifest as they have under the GPII scheme. The most appropriate structure for such a component will depend upon the nature of the proposed intervention and the circumstances of its introduction.

The experience of the GPII scheme makes it clear that it is possible to influence GP practice directly through such an approach. The general view of stakeholders was that the GPII scheme could be applied successfully to other population health interventions.

However, this approach should not be seen simply as the use of financial incentives to effect change. Rather, financial incentives are one aspect, together with the coordination and support components used with the GPII scheme. The success of any similar schemes is likely to be variably reliant on each of these components and possibly on others not used or not available for the GPII.
Recommendations

The discussion on each of the following recommendations can be found in chapters 7 and 8 of this report.

Recommendation 1: The GPII scheme represents a successful example of a population health program delivered by GPs and should continue, with regular reviews, the first of which should take place in 2003.

Recommendation 2: The SIP and outcomes payment components should be retained as direct financial incentives to GPs and practices under the GPII scheme.

Recommendation 3: The amount of the SIP should be reduced to $15.50, with savings derived from this measure to be retained in the GP sector.

The outcomes payment pool should be increased. This increase should be funded from savings derived from reducing the SIP.

Recommendation 4: The outcomes payment calculation should be modified to use the current due and overdue rules, based on the Australian Standard Vaccination Schedule, and as applied for the ACIR.

Recommendation 5: The existing outcomes payment increments and payment tiers should be retained.

Recommendation 6: Research should be carried out, with those practices with high rates of conscientious objection, to assess HIC data completeness and the effect of these high rates on outcomes payments.

Recommendation 7: The practice of quarterly recalculation of outcomes payments and payment of positive variances should continue.
Recommendation 8: The Divisional Immunisation Coordinator (DIC) roles and funding should be retained. The DIC role should include a formal reporting link to the SBO in their State or Territory.

Recommendation 9: The existing GPII funding formula for Divisions should be retained.

Recommendation 10: The funding method for SBOICs should be changed to comprise a base funding amount equal to the current fixed payment, plus a loading for the number of Divisions in the State or Territory.

Recommendation 11: The role of the SBOICs should reinforce a focus on developing, promoting and participating in State-wide collaboration and coordination of whole-of-life immunisation activities, with particular emphasis on childhood, involving the Commonwealth, State and Territory health authorities, local government and other key actors.

The SBOIC role should include a formal reporting link to the NGPIC.

Recommendation 12: The role of the NGPIC should reinforce a focus on developing, promoting and participating in national collaboration and coordination of whole-of-life immunisation activities, with particular emphasis on childhood.

The NGPIC role should include a formal reporting link to the National Immunisation Committee.

Recommendation 13: A GP incentive scheme for a given population health intervention(s) should be considered only as a part of a broader set of strategies focused on a population health outcome.

Recommendation 14: The GPII model of financial incentives should be used to enhance the role of GPs and their involvement in population health practice.
Recommendation 15: Any incentive scheme aimed at enhancing the GP role in a given population health intervention should include structural elements to support, monitor and improve the quality of that intervention.

Recommendation 16: Any incentive scheme developed to enhance the GP role in a given population health intervention should build on existing structures.

Recommendation 17: Any GP-focused incentives scheme that targets population health issues should ensure that the health issues are widely accepted to be of national importance by both providers and consumers.

Recommendation 18: Any GP-focused incentive must be based on population health interventions that have a strong and widely accepted evidence basis for their effectiveness and desirability.

Recommendation 19: A necessary precursor to any GP-focused incentive scheme is the existence and wide acceptance of best practice and clinical guidelines for the interventions of interest.

   The adoption and application of such best practice and clinical guidelines should form part of the measure of GP performance.

Recommendation 20: Any GP-focused incentive scheme must include the following measurability components:

   (a) performance measures to assess the population health outcome from the intervention in a timely fashion;

   (b) an information system to support the collection and reporting requirements necessitated by these performance indicators.
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<td>GP participation in any GP-focused incentive scheme should be voluntary.</td>
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<td>Recommendation 23:</td>
<td>The organisational network of ADGP, SBOs and Divisions could be used to inform GPs of proposed and impending population health incentive schemes for GPs. This network also could be used for delivering education and training, as appropriate, for such schemes.</td>
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1 Introduction

This report presents the findings of the evaluation of the General Practice Immunisation Incentives (GPII) scheme. The results of surveys, interview guide for stakeholder interviews and Divisional case studies undertaken in the evaluation of the scheme are contained in a second volume (KPMG Consulting, 2000a). A third volume contains the findings of a review of the literature on incentive schemes in general practice (KPMG Consulting, 2000b).

The scheme began in 1 July 1998 as a two-year initiative, to be evaluated prior to a decision being made on its continuation. In November 1999 a decision was taken to extend the operation of the scheme for a further six months (to 31 December 2000), to allow time for the evaluation to be carried out.

In April 2000, the evaluation commenced, with terms of reference as shown in Appendix 1. During the evaluation, the Federal Minister for Health and Aged Care announced a further six month extension of the scheme, through to 30 June 2001.

This evaluation was carried out by a team led by Peter Tyler and Sandra Delon of KPMG Consulting Australia, with expert advice from Associate Professor Liz Farmer, Dr Jenny Doust and Ms Emma Miller (all of the Flinders University of South Australia Department of General Practice) and from Dr John Togno of Monash University’s Centre for Rural Health Research. The conduct of the evaluation was overseen by the Steering Committee whose membership is listed at Appendix 2.

1.1 Acknowledgments

An evaluation such as this requires the active participation and cooperation of a wide range of stakeholders. Other important contributors included, but were not limited to, staff of State and Federal health authorities and practising general practitioners (GPs). The evaluators would like to thank those who have contributed to this report—either directly or indirectly—for their willingness to offer their input in a constructive and considered manner.

Also, we would like to thank the members of the Steering Committee, who provided guidance on issues that arose during the evaluation as well as contributing valuable insights and information.
Evaluation of the General Practice Immunisation Incentives scheme

November 2000

2 Overview of the GPII scheme

In February 1997, the Commonwealth announced several initiatives as part of the Immunise Australia Seven Point Plan. The aim of these initiatives was to improve Australia's childhood immunisation level. A key component of the initiatives announced was the GPII scheme, which was to support GPs in playing a more central role in preventive health care. It was to focus particularly on their ability to increase the childhood immunisation level.

In considering the operation and impact of the GPII however, it is impossible to ignore the other initiatives of the Seven Point Plan.

2.1 Historical background leading to the scheme

Through the 1970s and 1980s, hospital based departments of general practice were established throughout Australia. Over time, these departments suffered because of the lack of infrastructure funding to sustain them (Commonwealth Department of Health and Aged Care, 2000).

In response to the Demonstration Grants Program announced in the 1991-92 Commonwealth Budget, a number of trial Divisions of general practice were established. The National Health Strategy put forward a blueprint for development of general practice in Australia (Commonwealth Department of Health, Housing and Community Services, 1992) and 100 Divisions of General Practice (Divisions) were in place by 1993. There are now 123 Divisions, with 80% membership by GPs.

In 1994-95, early projects undertaken by Divisions recognised the need for reliable and accurate information to support the immunisation work of GPs. Thus, many of them focused on creating simple databases such as recall and reminder systems. These databases were intended to enhance the role of GPs in monitoring chronic diseases and in providing preventive strategies.

By the end of 1995, a moratorium on immunisation projects was called, in anticipation of the start of the Australian Childhood Immunisation Register (ACIR) in January 1996. The view was taken that local and regional databases would be contrary to the role expected of ACIR and would be a needless duplication of effort.

Around this time, the Divisions Steering Group was considering a national general practice immunisation program, in response to a recognised need for a national infrastructure to support GPs in providing immunisation services in their practices. It was not until the Australian Divisions of General Practice Ltd (ADGP) and State Based Organisations (SBOs) were put in place that the necessary infrastructure for such a program existed (Aloizos, 2000).

These changes occurred in the climate of a change in the focus and funding of the Divisions program. In response to support from GPs and the health system at large, Divisions moved from project based funding to a system of block grants with associated outcomes, which focused on agreed health priorities (Commonwealth Department of Health and Aged Care, 2000).

Prior to the advent of the ACIR, in January 1996, Australia relied on either Australian Bureau of Statistics (ABS) surveys or ad hoc surveys to monitor
immunisation coverage. The ACIR aimed to provide comprehensive national information on the immunisation status of children less than seven years of age. In addition it aimed to:

- provide a basis for a recall reminder scheme which would inform parents when their child’s next vaccination is due or overdue;
- provide information on the immunisation status of individual children;
- identify areas of high risk because of a large number of unimmunised children; and
- monitor immunisation coverage at national, State and local levels to improve service delivery.

By providing both information and linking this to payments, initially to parents, the ACIR aimed to promote age appropriate childhood immunisation throughout Australia. Therefore, Commonwealth programs including payments to parents in Childcare Assistance, and Childcare rebates became dependent on the accuracy and completeness of ACIR records.

In 1994-95, the Better Practice Programme (BPP) was introduced by the Commonwealth Government. It was introduced at a time of tension and a breakdown in relations between the Government and the profession (Commonwealth Department of Health and Aged Care, 2000). Consequently, the BPP met with a mixed reaction from GPs and was never fully accepted, with membership peaking at 50% of practices.

In January 1997, the General Practice Strategy Review Group (GPSRG) was created to review progress on the General Practice Strategy, identify achievements and progress, and to provide advice on future directions. This review was accepted by GPs and was endorsed by GP representative organisations.

The GPSRG handed down its report in 1998 (GPSRG, 1999). One of the recommendations was to replace the BPP with a new program comprising targeted programs that would, over time, come to operate with a single entry point. This new program was called the Practice Incentives Program (PIP) and replaced the BPP on 1 July 1999. A key part of the PIP is a population health focus for GPs and targeted incentives, particularly on immunisation. From the uptake of PIP by GPs, it is clear that it has proven to be far more acceptable to the profession than the BPP.

The GPII commenced on 1 July 1998 and ran in parallel with the BPP for its first year of operation. It included its own, separate funding formula (see section 2.3) and practices were eligible to participate in the GPII if they were already registered with BPP or if they registered separately for the GPII scheme only.

The negotiations to establish the GPII scheme involved the GP Forum and took place simultaneously with the work of the GPSRG and others on the PIP. Consequently, the GPSRG became engaged in fine-tuning some aspects of the GPII model.

As a result of lobbying by the profession, and particularly by the GP Forum¹, the Royal Australian College of General Practitioners (RACGP) was funded to create

¹ The GP Forum served as a forum for the various GP organisations to discuss, develop and endorse a common position—supported by the profession. This unity assisted in negotiations with the Commonwealth Department of Health and Aged Care at the time. In relation to the GPII scheme, the role of the GP Forum
a new position—the National General Practice Immunisation Coordinator (NGPIC). The role was intended to facilitate communication and the passage of information with and between different stakeholders. The list of stakeholders was comprehensive and included the Commonwealth Department of Health and Aged Care, various committees, State and Territory health authorities, Divisions of General Practice, SBOs and GPs.

At the time that the NGPIC position was established, ADGP did not yet exist. The early work of the NGPIC focused almost entirely upon Divisions and, later the State Based Organisation Immunisation Coordinators (SBOICs). After ADGP came into existence (January 1999), the RACGP and ADGP agreed that the NGPIC position was best suited to reside within ADGP. This recognised where the main focus of the position lay, while still allowing appropriate reporting to other general practice organisations.

Other aspects of the structure and evolution of the GPII scheme are discussed in the following sections.

2.2 The Seven Point Plan

The stimulus for the Seven Point Plan was an ABS report that showed the immunisation coverage for children aged up to six years had fallen to 52% (ABS, 1997). Although some awareness of falling immunisation rates already existed, this new information gave rise to considerable community and government concern.

The response to this concern was to adopt a systems approach—a multifaceted approach that put in place a comprehensive set of inducements targeting key immunisation milestones and focussed on both parents and the existing infrastructure for immunisation delivery. The resulting package was referred to as the Seven Point Plan.

1. Initiatives for Parents

The Maternity Allowance was modified to provide a bonus to parents who ensured that their child’s immunisation coverage was complete. From 1 January 1998, the Maternity Allowance was paid in two instalments, the first at birth and the second at 18 months. Provisions were made for those parents who do not have their children immunised due to medical contraindications or conscientious objection.

From 1 January 1998, new requirements also were introduced for recipients of the Childcare Assistance Rebate and the Childcare Cash Rebate. These requirements included provision of proof of age appropriate immunisation in order for these benefits to be paid. Again, families can claim exemption from this requirement for medical reasons or if they have a personal, philosophical or religious objection to vaccination.

2. Bigger role for GPs

The GPII scheme was introduced to encourage a greater role for GPs in immunisation, and to take advantage of their unique position to access
unimmunised children. Divisions of General Practice were encouraged to increase their involvement to ensure that GPs followed good immunisation practice and submitted data to the ACIR (HCA, 1999).

3. Monitoring and evaluation of immunisation targets
Data on immunisation rates from the ACIR were published annually to encourage competition and inspire providers in areas with low rates to improve their coverage (HCA, 1997; HCA, 2000; RCH, 1997).

4. Immunisation Days
Immunisation days were held in areas with low immunisation coverage, supported with a range of educational materials (Commonwealth Department of Health and Aged Care, 1998b).

5. Measles Eradication
The National Health and Medical Research Council (NHMRC) recommended a change to the Standard Vaccination schedule on 9 July 1998 which moved the second dose of MMR vaccine from the 10-16 year age group to the 4-5 year age group. As a result, a one-off school based Measles Control Campaign was undertaken from August to November 1998, in conjunction with all States and Territories (NCIRS, 1998), as the first stage of a measles elimination strategy. The Minister released the final report of the campaign in November 1999 which evaluated the impact of the campaign on immunisation coverage levels in pre-school and primary school aged children.

6. Education and Research
A communication strategy was executed to better educate providers about the NHMRC’s policies and guidelines relating to immunisation. A community campaign also was run to provide parents with more information about benefits and risks of vaccination. The main objectives were to increase the understanding about the need for immunisation and to create a climate of acceptance and active support from both parents and service providers.

In addition, the National Centre for Immunisation Research and Surveillance (NCIRS) was established to undertake epidemiology and social research, surveillance and clearing house activities (NCIRS, 1999).

7. School Entry Requirements
The Commonwealth is working with States and Territories on uniform school entry requirements to ensure that parents submit details of children’s immunisation history upon their child’s enrolment. Recommendations for the development of model school entry legislation have been developed by the Legislation Reform Working Group and endorsed by the National Public Health Partnership. Legislation has been achieved in New South Wales (NSW), Victoria, Tasmania and the Australian Capital Territory (ACT).
It was intended that conscientious objectors and parents of children with medical contra-indications would not be coerced. Exemptions and conditions were included to meet this requirement. However, the general view was that if complacency, confusion and procrastination were major causes of the low immunisation levels, then the strategies described above should work in such a way that parents found it easier to vaccinate their children than not to vaccinate them.

The Seven Point Plan was approved by Cabinet and launched by the Minister for (then) Health and Family Services, the Hon Dr Michael Wooldridge, in February 1997.

The principles and philosophy driving the Seven Point Plan were embodied within the Australian Immunisation Charter, through which a range of community groups and organisations jointly committed to support vaccination programs. That Charter has a broader focus than the Seven Point Plan and was signed by the participating organisations in 1997. A copy of the Charter is at Appendix 3.

2.3 The components of the GPII scheme

In devising the Seven Point Plan, it was recognised that GPs were uniquely placed to play a key role in raising early childhood immunisation coverage rates. GPs were ideally placed to monitor the immunisation of all children in their care, given that most pre-school aged children see a GP several times a year. This level of contact also meant they were well placed to reach children not targeted by other means. Finally, there was support within the GP sector for immunisation and GPs had a desire to make a significant contribution in this area. The GPII scheme was developed to capitalise on these advantages.

The scheme was set up to recognise and link into the existing organisational structures that supported the provision of immunisation services generally. This is illustrated in Figure 2-1. This network of advisory and communication links aimed to ensure that the scheme accommodated the needs of stakeholders and was able to tap into local and State or Territory level initiatives.
The GPII scheme began on 1 July 1998 and included the following components:

- General Practice Immunisation Incentives Advisory Group (GPIIAG)
  The GPIIAG was established with the brief to advise the Commonwealth Department of Health and Aged Care on the implementation of the scheme. It was formed with representation from the GP sector and the hierarchy of Divisional structures. Linkages were established with the National Immunisation Committee (NIC), Australian Technical Advisory Group on Immunisation (ATAGI) and other key groups to ensure that advice was formulated in accordance with policy and also could inform further policy development with regard to GP-specific issues around the scheme. The terms of reference for the group are in Appendix 5.

- Service Incentive Payment (SIP)
  The SIP was paid to the GP or to the practice, as directed by the practitioners, on the completion of each schedule in accordance with the NHMRC standards for childhood immunisation\(^\text{2}\). The SIP was made when the ACIR received notification that an immunisation schedule had been completed, for the child, from the GP.

- Outcomes payment
  The outcomes payment was paid quarterly to general practices that achieved an immunisation level of 70% or better. The payment quantum was increased if the immunisation level exceeded 80% and increased

\(^2\) The NHMRC Australian Standard Vaccination Schedule (ASVS) is reviewed and updated from time to time. A new Schedule commenced in July 1998. The Schedule has subsequently been revised, with the most recent version coming into operation on 1 May 2000. Information about the Schedule and a copy of the latest version can be found at http://www.health.gov.au/pubhlth/immunise/schedule.htm.
Further if the level reached 90%. After the first year, the 70% threshold was removed and raised to 80%. The first outcomes payments were made in August 1998.

These incentives were restricted to providers eligible to receive payment for services rendered under the Medicare Benefits Schedule (MBS) arrangements. Effectively, this is all non-specialist medical practitioners (GPs and Other Medical Practitioners—as defined in the MBS).

In addition to the SIP and outcomes payments, the following activities were integral parts of the GPII scheme:

- **Divisional Immunisation Coordinators (DICs)**
  Divisions were funded to work with GPs to develop collaborative strategies to increase childhood immunisation. In 1998-99, $3m was provided to Divisions and a further $3m in 1999-00 and 2000-01. Most Divisions used part of this funding to employ DICs, who were expected to work with GPs to increase their immunisation coverage levels, as well as linking with other providers and organisations doing immunisation locally.

- **SBOICs**
  SBOs were funded to work with Divisions to set up appropriate structures to support immunisation at a State level. The SBOICs were intended to link with State health authorities and other providers, develop educational and training material and target groups with low immunisation levels. Each SBO received $50,000 per annum for the SBOIC role, with the exception of the ACT, which received $25,000³.

- **NGPIC**
  The position of NGPIC was established, to facilitate communication and the passage of information with and between different stakeholders. The list of stakeholders was comprehensive and included the Commonwealth Department of Health and Aged Care, various committees, State and Territory health authorities, Divisions of General Practice, SBOs and GPs.

### 2.4 Operational background to the GPII scheme

This section briefly describes some key characteristics of the operation of the scheme. Consideration of its operational performance is presented in Chapter 5.2.

In order for a general practice to receive outcomes payments under the GPII scheme it must be registered with the scheme. Registration involves providing basic information about the practice to the Health Insurance Commission (HIC)⁴, which holds the information in a central database that is used for feedback reporting and payment purposes.

Practices registered with PIP are registered automatically for the GPII scheme—although individual GPs within these practices may opt out of the scheme. However, a practice may choose to register for the GPII scheme only and not for PIP and a number of practices have chosen to do so. A further number of practices have elected not to register with PIP nor with GPII.

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³ Note that the ACT is covered by a single Division of General Practice.

⁴ The same form is used for registering with the GPII scheme and PIP. Copies of the form can be obtained from the HIC.
As practice details change—for example, a new doctor joins the practice or a doctor leaves the practice—these should be notified to the HIC. As the payment system is intimately linked to the accuracy of the practice data, the database is generally up-to-date for key practice details.

SIP is paid when a GP completes an age appropriate immunisation schedule and notifies the ACIR of the vaccination. The ACIR, administered by the HIC, is a national database containing information on the immunisation status of all children under the age of seven years who live in Australia.

In addition to the SIP, immunisation providers receive a notification payment for providing immunisation information to the ACIR. The amount is agreed between each State and Territory and the Commonwealth and is up to $6.00 (Commonwealth contribution of $3.00 plus a State or Territory contribution of $3.00) for each immunisation encounter that completes an age appropriate immunisation schedule. Therefore, when a GP delivers the last vaccination of a schedule, both a SIP and an ACIR notification payment are payable. SIP and ACIR payments are made directly to the GP on a monthly basis.

Outcomes payments are paid to the general practice on a quarterly basis, based on “coverage of children immunised”. The calculation of coverage uses a formula that measures coverage of children associated with the practice. Association is determined by whether the child has attended the practice at least twice in the relevant 12 month reference period. The strength of that association is measured in terms of the practice’s proportion of all MBS fees claimed for that child in the relevant 12 month reference period. This strength of association is combined with immunisation status—as recorded on ACIR—when measuring the coverage level for the practice.

Practices receive quarterly feedback statements and the GPII Practice Report (until recently known as the ACIR020A report). These feedback statements provide practices with a statistical breakdown of the immunisation status, by schedule, of children who attended the practice during the 12-month reference period. Practice payment details also are provided. The GPII Practice Report identifies those children who have attended the practice during the 12-month reference period and were, according to ACIR records, assessed as not fully immunised as at the last day of the reference period.

Divisions of General Practice are supported to work with GPs and other providers to improve immunisation coverage rates in the community. Funding is provided on the basis of a fixed amount plus a (child) population-based amount and a component for rurality. Divisions with particularly low levels of coverage may receive additional funding to assist them in achieving rapid improvement.

SBOs and the NGPIC role are funded fixed amounts on an annual basis to provide coordination at the State and national levels respectively.

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5 The ASVS describes the immunisation requirements for different age milestones. Age appropriate immunisations are determined by the requirements of these schedules.
6 The ACIR notification payment was introduced as a part of the infrastructure to support the establishment and maintenance of the ACIR. The ACIR notification payment is available to all registered immunisation providers—both GPs and non-GPs.
3 Evaluation methods

The evaluation employed a range of methods—quantitative and qualitative—to gather the information needed, first to evaluate the performance of the GPII scheme and second to assess its suitability as a model for other population health interventions with a GP focus.

The nature of the scheme meant that there were multiple perspectives that the evaluation needed to consider. These included:

- the funder (Federal Government);
- immunisation providers (GPs, local government, community health service);
- Divisions of General Practice;
- representative bodies (RACGP, the Australian Medical Association (AMA), ADGP, the Rural Doctors Association of Australia (RDAA), the GP Forum, etc.);
- SBOs; and
- State and Territory health authorities.

The consumer perspective was investigated by obtaining the views of the Consumers Health Forum of Australia Inc, represented on the GPIIAG and indirectly by reviewing changes in immunisation levels.

The various components of the GPII scheme and its operation were likely to be seen differently by these different stakeholders. Therefore, our evaluation strategy sought to capture the wide variety of views and to triangulate the GPII scheme’s performance from them. Where suitable quantitative data were available, these were used to quantify performance and to validate qualitative observations.

The specific tools and methods used are described below.

3.1 Literature review

The literature review was carried out to review programs where financial incentives for GPs have been used and to identify the circumstances that have contributed to the success or failure of these initiatives. The literature review addressed the following project objectives:

- the effect of the GPII scheme on best practice and quality—for example, cold chain management and vaccine supply;
- experience internationally of encouraging GPs by using financial incentives; and
- whether the GPII scheme as a methodology could be applied to other population health initiatives.
A systematic search was carried out, using relevant electronic databases and Internet sources, for publications about incentives to influence immunisation practice. For completeness and accuracy, bibliographies of relevant articles were also scrutinised and consultation was carried out with relevant professional organisations regarding possible ongoing or unpublished work. The aims of the search were to:

- Identify all articles and reports of direct relevance to incentives (financial or otherwise) to influence GP immunisation practice;
- Identify all articles and reports concerning barriers and enablers to GP immunisation practice; and
- Identify all articles and reports regarding incentive schemes as they apply to GP practices other than immunisation.

Four major databases were searched: MEDLINE—for the period 1966 to June 2000; HealthStar—for the period 1975 to March 2000; Cochrane Library—2000, Issue 1; and CINAHL—for the period 1982 to February 2000.

In addition to these literature databases, limited reviews were carried out of a number of Internet sites, seeking articles or items of relevance. These included sites in Canada, the United States of America, the United Kingdom (UK) and New Zealand.

The method used in the literature review followed the methods outlined in the 'Cochrane Collaboration Handbook' as closely as possible (Mulrow and Oxman (eds), updated 1997). The search terms were designed to be highly sensitive in order to maximise the ability of the process to capture the greatest number of related published material.

The complete databases of MEDLINE, HealthStar, Cochrane and CINAHL were searched using the following search terms:

- MeSH
  immunization; quality of health care; physician's practice patterns; and nursing practice.

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7 MEDLINE® (Medical Literature, Analysis, and Retrieval System Online) is the US National Library of Medicine's (NLM’s) bibliographic database of references to journal articles in life sciences, concentrating on biomedicine.
8 The HealthSTAR database provides access to the published literature of health services technology, administration, and research. HealthSTAR is produced jointly by NLM's National Information Center on Health Services Research and Health Care Technology, and the American Hospital Association.
9 The Cochrane Library contains regularly updated systematic reviews of the effects of health care prepared by The Cochrane Collaboration.
10 The Cumulative Index to Nursing and Allied Health Literature (CINAHL) contains citations for most English-language nursing journals and from 17 allied health disciplines. It covers fields such as consumer health, health services administration and allied health fields from athletic training and dental hygiene to physician assistant and social service in health care.
11 NLM assigns subject headings to each citation included in the database. The subject headings are selected from a controlled vocabulary list called Medical Subject Headings (MeSH).
Keywords
immunization; immunisation; program; incentive; vaccine.

In addition, bibliographies of pertinent articles were searched, consultation with relevant professional organisations was pursued and relevant Internet resources, such as e-mail communications with authors in the field of interest and searches of relevant web sites, were also utilised.

Citations were managed using ProCite (version 4) reference manager, and were scrutinised for relevance to the evaluation and its objectives. Erring on the side of over-inclusion, all abstracts and titles which may have been relevant were retrieved or were ordered.

This search strategy resulted in the identification of 315 articles. After careful scrutiny of the titles and/or abstracts, these references were categorised as follows:

Figure 3-1 Articles located in literature search

<table>
<thead>
<tr>
<th>Status</th>
<th>Articles</th>
</tr>
</thead>
<tbody>
<tr>
<td>For retrieval</td>
<td>78</td>
</tr>
<tr>
<td>Letter/comment/news</td>
<td>11</td>
</tr>
<tr>
<td>Non-English language</td>
<td>1</td>
</tr>
<tr>
<td>Not relevant</td>
<td>225</td>
</tr>
<tr>
<td>Total</td>
<td>315</td>
</tr>
</tbody>
</table>

The detailed results and findings of the literature review have been reported separately (KPMG Consulting, 2000b).

3.2 Survey of Divisions of General Practice

The nature of the GPII scheme was such that Divisions of General Practice were expected to play a pivotal role. Consequently, their views regarding the operation and outcomes of the scheme were actively sought. A survey was conducted to collect these views.

Survey instrument

For details of the questions asked in the survey, refer to Volume 2 of this report. Due to the short time lines required for the survey, the number of questions was necessarily limited. Questions were developed after interviewing representatives of three Divisions to identify key issues and the instrument was pretested with two further Divisions before the final version was agreed.

All Divisions were surveyed, with ADGP e-mailing surveys to the Divisions. A reminder message was similarly e-mailed to Divisions, approximately two weeks after the survey was distributed.
Response

In total, 86 returns were received, of the 123 distributed—a response rate of 70%. This response rate reflects the level of interest displayed by Divisions in the GPII scheme and is not surprising, given their integral role. For this reason, we had hoped for a higher return rate however, this is nonetheless pleasing.

Figure 3-2 shows the response rates by jurisdiction and these were generally above 50%.

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>Divisions</th>
<th>Responses</th>
<th>Response rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSW</td>
<td>37</td>
<td>22</td>
<td>59.5</td>
</tr>
<tr>
<td>Victoria</td>
<td>31</td>
<td>27</td>
<td>87.1</td>
</tr>
<tr>
<td>Queensland</td>
<td>20</td>
<td>11</td>
<td>55.0</td>
</tr>
<tr>
<td>WA</td>
<td>15</td>
<td>12</td>
<td>80.0</td>
</tr>
<tr>
<td>SA</td>
<td>14</td>
<td>8</td>
<td>57.1</td>
</tr>
<tr>
<td>Tasmania</td>
<td>3</td>
<td>3</td>
<td>100</td>
</tr>
<tr>
<td>NT</td>
<td>2</td>
<td>2</td>
<td>100</td>
</tr>
<tr>
<td>ACT</td>
<td>1</td>
<td>1</td>
<td>100</td>
</tr>
<tr>
<td>Australia</td>
<td>123</td>
<td>86</td>
<td>69.9</td>
</tr>
</tbody>
</table>

Figure 3-3 shows the response rate, categorised by whether the Division is urban or rural. As the data show, the return rate is comparable for rural and urban Divisions. Both are well represented in the sample.

<table>
<thead>
<tr>
<th>Geographic area</th>
<th>Divisions</th>
<th>Responses</th>
<th>Response rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>61</td>
<td>42</td>
<td>68.9</td>
</tr>
<tr>
<td>Rural</td>
<td>62</td>
<td>44</td>
<td>71.0</td>
</tr>
<tr>
<td>Australia</td>
<td>123</td>
<td>86</td>
<td>69.9</td>
</tr>
</tbody>
</table>

It is possible that a survey of this sort, with a self-selected sample, could suffer from a selection bias. That is, those Divisions that did not submit a return may have a distinctly different set of views from those that did choose to submit a
return. There is a particular risk that non-response may be an indicator of a negative view of the GPII scheme.

For this reason, it is important to interpret the results cautiously, using other information where possible to confirm or refute the survey findings.

### 3.3 Survey of general practices

To capture the views of GPs directly, it was decided to conduct a survey of a sample of general practices. In considering the nature of the sample, it was important to ensure representation of practices in areas of different immunisation coverage and in different geographic areas.

**Sampling procedure**

Ideally, the sample would have included both practices that chose to participate in the GPII scheme and practices that chose not to participate. The HIC maintains a database of all practices registered for the GPII scheme or the PIP. However, no database of practices not participating in the scheme was available. Therefore, these practices were not able to be included. This meant that reasons for not participating could not be explored.

HIC provided a database containing details of practices registered for PIP or GPII. Immunisation coverage data for 30 September 1999 were obtained from HIC quarterly outcomes payment calculations and were linked to the practice details. These data also were linked, using postcode, with a measure of geographic accessibility—the Accessibility and Remoteness Index of Australia (ARIA)\(^2\).

Figure 3-4 shows the distribution of registered practices across these two measures of immunisation coverage and accessibility.

Using standard techniques for calculating sample sizes (Desu and Raghavarao, 1990), and an expected return rate of 40%, a minimum sample size of 600 practices was used. This sample was selected according to the distribution of practices in Figure 3-4, with the requirements that there be at least one practice in the sample for every populated cell of the figure, except where coverage was unknown. Practices for which coverage was not available were excluded from the sample.

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\(^2\) The ARIA was developed jointly by the Information and Research Branch of the Commonwealth Department of Health and Aged Care and the National Key Centre for Social Applications of Geographical Information Systems (Commonwealth Department of Health and Aged Care and GISCA, 1999). It classifies area in terms of their accessibility, as follows:

- Highly accessible—relatively unrestricted accessibility to a wide range of goods and services and opportunities for social interaction.
- Accessible—some restrictions to accessibility of some goods, services and opportunities for social interaction.
- Moderately accessible—significantly restricted accessibility of goods, services and opportunities for social interaction.
- Remote—very restricted accessibility of goods, services and opportunities for social interaction.
- Very remote—very little accessibility of goods, services and opportunities for social interaction.

The full report can be found at www.health.gov.au.
**Figure 3-4** General practices registered with PIP or GPII, by accessibility and coverage at 30 September 1999

<table>
<thead>
<tr>
<th>Coverage</th>
<th>ARIA category</th>
<th></th>
<th></th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Highly</td>
<td>Accessible</td>
<td>Accessible</td>
<td>Moderately Accessible</td>
<td>Remote</td>
</tr>
<tr>
<td>&lt;50%</td>
<td>113</td>
<td>8</td>
<td>5</td>
<td>1</td>
<td>127</td>
</tr>
<tr>
<td>50% to &lt;60%</td>
<td>75</td>
<td>7</td>
<td>5</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>60% to &lt;70%</td>
<td>250</td>
<td>19</td>
<td>9</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>70% to &lt;80%</td>
<td>724</td>
<td>63</td>
<td>33</td>
<td>13</td>
<td>10</td>
</tr>
<tr>
<td>80% to &lt;90%</td>
<td>2,040</td>
<td>255</td>
<td>96</td>
<td>23</td>
<td>26</td>
</tr>
<tr>
<td>90% to &lt;100%</td>
<td>1,208</td>
<td>199</td>
<td>88</td>
<td>15</td>
<td>9</td>
</tr>
<tr>
<td>100%</td>
<td>74</td>
<td>6</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Unknown</td>
<td>74</td>
<td>3</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4,558</td>
<td>560</td>
<td>238</td>
<td>62</td>
<td>57</td>
</tr>
</tbody>
</table>

As a result, a stratified random sample of 619 practices was selected, whose distribution by coverage and accessibility is shown in Figure 3-5.

**Figure 3-5** General practices in survey sample, by accessibility and coverage at 30 September 1999

<table>
<thead>
<tr>
<th>Coverage</th>
<th>ARIA category</th>
<th></th>
<th></th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Highly</td>
<td>Accessible</td>
<td>Accessible</td>
<td>Moderately Accessible</td>
<td>Remote</td>
</tr>
<tr>
<td>&lt;50%</td>
<td>13</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>50% to &lt;60%</td>
<td>19</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>60% to &lt;70%</td>
<td>28</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>70% to &lt;80%</td>
<td>81</td>
<td>8</td>
<td>2</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>80% to &lt;90%</td>
<td>227</td>
<td>29</td>
<td>11</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>90% to &lt;100%</td>
<td>135</td>
<td>23</td>
<td>10</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>100%</td>
<td>9</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>502</td>
<td>66</td>
<td>30</td>
<td>11</td>
<td>10</td>
</tr>
</tbody>
</table>

**Survey instrument**

For details of the questions asked in the survey, refer to Volume 2 of this report. To reduce the burden on GPs and practice staff who would be expected to complete the form, the number of questions was limited. The instrument was pre-tested with several GPs before the final version was agreed.

Survey forms then were sent to all of the practices in the sample, using the main practice address from the HIC practice database. A pre-paid, return-addressed envelope was included with each form sent.
Response

In total, 247 valid returns were received, of the 619 distributed—a response rate of approximately 40%. This represents a good response for a survey of this type among general practices.

Figure 3-6 shows the responses by coverage rates which are clearly better for practices in the 70% to less than 100% range. This means that the survey produced less representative data for the practices with (relatively) lower coverage rates (that is, for practices with coverage below 70%). This may show a lack of interest in the scheme, due to the minimal benefit such practices receive from it, combined with a perception that they will be unlikely to benefit from likely changes to the GPII scheme in the future.

Interestingly, there also is a low return rate for practices showing 100% coverage. This most probably reflects a general satisfaction with the scheme as it stands, because the practice is achieving the best possible outcome under the present arrangements.

Figure 3-6  Response rate by coverage at 30 September 1999, survey of general practices

<table>
<thead>
<tr>
<th>Coverage</th>
<th>Sampled practices</th>
<th>Responses</th>
<th>Response rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;50%</td>
<td>16</td>
<td>2</td>
<td>12.5</td>
</tr>
<tr>
<td>50% to &lt;60%</td>
<td>13</td>
<td>2</td>
<td>15.4</td>
</tr>
<tr>
<td>60% to &lt;70%</td>
<td>35</td>
<td>5</td>
<td>14.3</td>
</tr>
<tr>
<td>70% to &lt;80%</td>
<td>97</td>
<td>31</td>
<td>32.0</td>
</tr>
<tr>
<td>80% to &lt;90%</td>
<td>273</td>
<td>113</td>
<td>41.4</td>
</tr>
<tr>
<td>90% to &lt;100%</td>
<td>172</td>
<td>93</td>
<td>53.5</td>
</tr>
<tr>
<td>100%</td>
<td>13</td>
<td>1</td>
<td>7.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>619</strong></td>
<td><strong>247</strong></td>
<td><strong>39.7</strong></td>
</tr>
</tbody>
</table>

Figure 3-7 shows the response rate by ARIA category for the practice. Clearly, remote and very remote practices responded at a lower rate than those with better accessibility. In order to gain more reliable results, it was necessary to combine the remote and very remote responses in later analyses.
3.4 Stakeholder consultations

A wide range of stakeholders were consulted to provide their views on the performance of the GPII scheme in a qualitative form. In most cases, this consisted of collecting their views in a face-to-face or telephone interview. In some cases, two or more stakeholders were interviewed as a group. This was a matter of choice for the stakeholders.

Some focus groups also were held, none of which had been planned in the original approach, which took advantage of circumstances to maximise the range of stakeholder views available to the evaluation.

Some stakeholders chose not to be interviewed but to provide their input in written form and others supplemented their interview comments with further written views.

Interview guide

To ensure consistency of presentation and comparability of information gathered in the interviews and focus groups, an interview guide was developed. The guide structured the interview around the following broad areas:

- Your role and relationship with the GPII scheme.
- Development and design of the GPII scheme.
- Implementation of the GPII scheme.
- Operation and outcomes of the GPII scheme.
- Future directions for the GPII scheme.
- The GPII as a model for other incentive schemes.
- Other.
The guide operated as an outline of the areas and questions that the interview was to cover, rather than as a script. In the interviews themselves, other issues that arose were pursued inasmuch as they were relevant and material to the evaluation of the GPII scheme.

For those stakeholders who chose not to participate in an interview, a copy of the terms of reference and the interview guide were provided and they were invited to make a written submission of their views on the scheme.

For details of the interview guide used, refer to Volume 2 of this report.

**Stakeholders consulted**

Stakeholders were approached in all States and Territories. They included:

- **Organisations**—Commonwealth Department of Health and Aged Care, HIC, Centrelink, RACGP, State health authorities, etc.
- **Members of relevant decision-making and advisory bodies**—GPIIAG, NIC.
- **Individuals**—SBOICs, NGPIC, DICs, GPs, etc.

Two stakeholders chose not to make a submission to the evaluation. The stakeholders who did participate in the consultation process are listed at Appendix 3.

### 3.5 Data analysis

The main source of quantitative data for the evaluation was the HIC. The HIC collects a wide range of data in relation to the GPII scheme, including the immunisation data held in the ACIR.

In addition to the database of registered practices, the HIC provided the standard reports used in calculating outcomes payments and some tailored reports. Further data were obtained from several Internet sites, including:

- **the ACIR site maintained by HIC** ([http://www1.hic.gov.au/general/acircirhome](http://www1.hic.gov.au/general/acircirhome)); and

A range of documents relating to the operation of the scheme and to evaluations of the other elements of the Seven Point Plan was made available by the Commonwealth Department of Health and Aged Care. These were reviewed for relevance to the GPII scheme, with particular reference to Term of Reference 1 for the evaluation.
3.6 **Divisional case studies**

Brief case studies were carried out on eight Divisions, to examine the transition plans that they adopted under the GPII scheme. The case studies focused on the strategies the Divisions adopted to effect their coordination and support roles.

One Division was selected from each State and Territory. Preference was shown for Divisions who had achieved relatively high levels of coverage, in an effort to identify the factors that might have contributed to this achievement.

Details of the transition plans for the selected Divisions were obtained from State and Territory offices of Commonwealth Department of Health & Aged Care, as were performance measures against the Divisions’ nominated goals and targets. This information was supplemented with data from the survey of Divisions.

The full case studies have been included in Volume 2 of this report.
4 Development and design of the GPII scheme

The preceding chapters have provided background to the evaluation and its conduct. From this point forward, the remaining chapters deal with the information gathered, the results of analysis and the findings from the evaluation itself. Data sources are as described in Chapter 3, but the specific sources used vary across chapters and, sometimes, within chapters.

This chapter concerns itself with reviewing the development of the GPII scheme and its operational design. It relies principally on document analysis and stakeholders’ perceptions of the rationale and issues associated with its initial development and design.

4.1 Stimulus for the GPII scheme

As mentioned in section 2.1, in the mid 1990s the Commonwealth Government was concerned at the reported low national levels of childhood immunisation. This indicated that the number of children in Australia who were fully immunised had fallen too low to prevent transmission of some vaccine-preventable diseases, increasing the risk of epidemics.

The establishment of the Seven Point Plan in 1997 marked a concerted effort to raise childhood immunisation coverage levels to the levels necessary to protect the health of the population.

The GP profession was involved in both conceptual thinking and practical projects around a greater role for GPs in immunisation in the early 1990s (see section 2.1). The idea of a GP-based incentive forming a part of the overall plan was similar to the approach adopted by the UK in 1990. A presentation at the Public Health Association of Australia National Immunisation Conference in 1996 had provided information on the outcomes basis of the UK model, as well as some idea of the impact it was having on immunisation levels in that country.

GPs were well placed to provide immunisation on an opportunistic basis to the target group of the Seven Point Plan—children under the age of seven. On average, over nine out of ten of these children saw a GP seven times a year (Commonwealth Department of Health and Aged Care, 1998a). Each of these visits provided the opportunity to review a child’s immunisation status and potentially to provide any immunisations required. This was seen as a major advantage in a strategy to opportunistically encourage immunisation (NT), as well as immunise children who were not accessing immunisation services through traditional providers.

The fact that the ACIR was already operating meant that the information collection and reporting systems necessary to a scheme such as the GPII scheme already were in place. Also, feedback systems had been operating and these had raised awareness of the measurement of immunisation coverage at the practice level among GPs.
4.2 Aims of the GPII scheme

The stated aim of the GPII scheme was summarised by the Government as:

"GP\textsc{\texten}{s} will be encouraged through the Better Practice Programme to obtain high immunisation coverage levels with the aim that 90 per cent of doctors ensure that 90 per cent of the children attending their practice are fully immunised. (Commonwealth Department of Health and Aged Care, 1998a)"

This aim was reflected in minutes of meetings of the GPIIAG, which referred to an aim of achieving 90% coverage among registered practices by the year 2000. However, it is clear that also there was a desire to effect cultural change in the GP sector, in two related dimensions:

- by enhancing the role of the GP as an agent for population health interventions; and
- by introducing a new means for funding GP activity, based on health outcomes.

These dual aims were recognised by many of the stakeholders, albeit expressed in a variety of ways. Qualitative analysis of stakeholder interviews suggests that they perceived that the scheme was initiated with the following aims in mind:

- to increase immunisation coverage levels (with an ultimate goal of decreasing incidence of vaccine preventable diseases);
- to encourage GPs to provide more immunisations;
- to encourage GPs to send in data to ACIR;
- to further promote outcomes based funding to the GP sector;
- to foster a population health perspective among GPs; and
- to improve the relationship between Divisions and GPs.

It was clear from analysis of the interviews, that these perceptions reflected a mix of genuine beliefs and post-hoc rationalisations of consequences of the scheme’s operation. For example, the view that the scheme was implemented “to improve the relationships between Divisions and GPs” tended to reflect a perception that such an improvement had occurred and a feeling that therefore this must have been intended.

A few stakeholders suggested the scheme was developed to foster working relationships between GPs and other providers, and “because GPs are a very powerful lobby group”.

This last theme reflected knowledgeable stakeholders’ observations of the process and outcomes of the GPIIAG and other GP consultative processes. Non-GP stakeholders felt more strongly than GP stakeholders that this was an aim of the scheme. However, the formation of the GPIIAG and the minuted deliberations and decisions made by that group lend some support to this view.
4.3 The design and development of the GPII scheme

The two major components of the scheme are the provider incentives (SIP and outcomes payment) and the infrastructure arrangements (National, State and Divisional support and coordination activities).

Early thinking on the design for the scheme was to provide the outcomes-based incentive only, with no fee-for-service element to the scheme at all. There was a strong view from the GP sector that this was unlikely to be attractive to GPs. This view was communicated from consultations facilitated by the GP Forum. As a consequence, the SIP was introduced and had the additional benefit that it would improve the flow of data to ACIR.

The introduction of the scheme was an evolving process. Circumstances surrounding the scheme were extremely important in shaping the events and processes of its introduction and subsequent development. The fullness of such circumstances are not always known to all stakeholders and often are interpreted differently.

Stakeholders identified the following as issues with the design of the scheme.

Recognition of variation in States and Territories practices

This issue really comprised two separate concerns. The first related to the differences in numbers of general practices and Divisions in each of the States and Territories, while the second was a more general concern about the different arrangements that existed in each State and Territory at the time of implementing the GPII scheme.

SBOs in the larger States believed that each State and Territory should receive variable State-based funding, using the number of GPs or practices in the States and Territories in the relevant funding formula. They felt that the quantum of funding should reflect the scale of the task, and that this was a function of larger numbers of GPs and practices requiring more coordination and support.

In contrast, SBOs in some smaller States or Territories appreciated the fixed funding instead of some form of pro rata funding, as it allowed them to do “something material”. They felt that pro rata funding models too often resulted in inadequate funding going to smaller jurisdictions.

Analysis of the stakeholder interviews suggest that the scheme should have acknowledged that there was a different mix of providers and immunisation arrangements operating in each State and Territory. In jurisdictions where non-GP providers had a major role, stakeholders thought it was particularly important to ensure that all providers had the opportunity to receive incentives and to protect the existing arrangements that were working effectively.

The issue of variability of arrangements between States and Territories was more fundamental, in that it related to whether or not the implementation of the scheme adequately recognised this variability. There also was a tension caused by the fact that the GPII scheme was a Federal initiative, but still needed to link closely with State based immunisation programs, over which it had no direct influence.

As section 6.1.10 shows, there was some variety in providers of immunisation prior to the advent of the GPII scheme.
Three jurisdictions—Queensland, the ACT and the Northern Territory (NT)—had existing childhood immunisation databases operating prior to the introduction of the ACIR in 1996, which was a factor in the way in which the scheme operated in these jurisdictions.

Their original ACIR reporting arrangements were set up with data being collected by the State or Territory registers and then being forwarded regularly to the ACIR. This arrangement continued under GPII. These local registers originally did not use Medicare number as their means of uniquely identifying individuals and, so, did not collect it as a mandatory data item. The need for Medicare number to be reported to ACIR meant some changes to local systems and procedures.

In the case of the NT, special arrangements were put in place for payment of SIP to GPs under the scheme. The SIP payments were forwarded to the Territory Government, which then passed the money on to the GPs. This arrangement operated until mid-1999. From late 1999 it was changed to the same arrangement as in other States and Territories. That is, SIP is now made directly to the GPs or to practices as directed by practitioners. The process of making this change was complicated by some difficulties, associated with changes to payment details, and created some concern among providers.

In addition to these specific differences among the States and Territories, there were different models of linkages and coordinating activities operating. Some models adopted a high degree of vertical integration but had scope for better horizontal integration (that is, better formal, active links between different hierarchies of providers at the State or Territory level). Others included more formal information sharing and strategy coordination among provider sectors.

Criticism by stakeholders amounted to a sense that the GPII, as implemented, focused too much on the development of the role of the GP in childhood immunisation, without capitalising on and improving, where possible, the links and activities already in place. That is, it did not adequately consider the GP role in relation to the other providers and the immunisation coordination processes already in place.

The suggestions followed that future incentive schemes should acknowledge existing State and Territory arrangements and build on those, rather than assume that one national model should fit all.

Recognition that Divisions were responsible for varying numbers of GPs and practices

There was recognition that the funding formula for Divisions incorporated rurality and the size of the child population. However, a number of stakeholders felt that that numbers of GPs and practices should have been built into the funding formula.

While this perception has face validity, it is worth noting that there was little or no reliable information on numbers of practices in Divisions at the time that the GPII scheme was developed. In fact, the database on practice details generated through registration with PIP and GPII has provided this information as an administrative by-product.

Minutes from the GPIIAG make it clear that the original intention was to fund Divisional participation in the GPII scheme in a similar way to other outcomes-based funding activities piloted across some Divisions. This approach
was consistent with the outcomes theme intrinsic to the scheme as well as being consistent with an existing funding model.

Consideration of the effect the scheme might have on other providers

There was clear acknowledgment that the scheme was funded using GP appropriations, however, almost all stakeholders felt that all immunisation providers should have been offered incentive payments. They felt that all immunisation providers should have been treated equally and had the opportunity to receive incentive payments. Some felt that the unequal treatment had strained the relationships among providers rather than fostering a more collaborative approach.

While this feeling was strongest among non-GPs, it also was expressed by a minority of GPs. This view was put in terms of an issue of equitable treatment of providers, and it bears closer scrutiny.

The GPII scheme had a clear policy aim to take advantage of the unique position of GPs to improve the rate of immunisation among children. As discussed in section 4.2, another aim was to influence GP behaviour with regard to population health interventions and payment mechanisms.

This focus on the GP sector was made in the context of the GPII scheme as one part of the systemic approach to childhood immunisation embodied in the Seven Point Plan.

It is clear that there was both an awareness of the likely consequences of the GPII on immunisation by other providers (GPIIAG minutes, 11 March 1998) and a belief that this behaviour already had changed and continued to change (HCA, 1999).

Thus, the exclusion of non-GPs from the SIP and outcomes payment incentives reflected a deliberate intent to focus on changing GP behaviour, as a part of a broader set of strategies. This intent was based, to a significant extent, on the belief that it offered the best means to improve childhood immunisation rates in the short term.

Consultation with “grass roots” GPs

Some stakeholders expressed a view that the consultation with GPs had not extended effectively enough to the grass roots level. Some GPs felt they had not been sufficiently involved in developing the scheme. They felt that it was presented as a fait accompli and there had been only limited opportunity to influence its design. Others felt that their concerns had not been sufficiently addressed by the Commonwealth Department of Health and Aged Care.

It must be noted that the Commonwealth embarked on an extensive consultation process, during a 12-month period from August 1997, on the form that the incentive payment should take before payments commenced in August 1998. This process included the release by the Minister for Health and Aged Care of a discussion paper that canvassed a number of options. Also quarterly immunisation coverage statements were issued to all practices participating in the BPP and to all individual GPs not participating in the BPP, to assist practices to identify any gaps in coverage well before payments began.
The other major avenues for consultation with GPs were:

- organisational representation on GPIIAG (RACGP and AMA);
- Divisional GP representation on the GPIIAG; (Divisions and ADGP);
- practising GP representation on the GPIIAG;
- formal responses from the RACGP and AMA on issues presented to them for comment; and
- the GP Forum.

**Identified performance objectives for NGPIC, SBOICs and Divisions**

Some stakeholders felt that SBOICs and Divisions were not given clear performance objectives to be achieved with their funding. This made it difficult for the Commonwealth to objectively monitor and evaluate their performance.

As referred to above, the original intention for Divisional funding was to adopt an outcomes–based approach. However, the end result reflected this intention in a limited way only. For example, in return for their GPII funding, Divisions were expected to include immunisation as an explicit area in their strategic planning and develop strategies accordingly.

**Role clarity and delineation for NGPIC, SBOICs and Divisions**

A more widely held concern was that there was insufficient clarity of roles and delineation of responsibilities between the three levels of coordination and support activities.

While the anticipated role of Divisions was considered and discussed when the scheme was being developed, it is not clear how and when the outcomes of decisions were communicated to Divisions.

There were a series of meetings held in States and Territories, to work through issues of how the scheme would link into the existing State and Territory arrangements. However, in the early stages there was significant confusion of roles, linkages and responsibilities between the NGPIC and SBOIC roles. There also was a perception that DICs lacked direction and clarity of expectations.

In defence of the perceived lack of direction and role definition for SBOICs and DICs, there are two points to make. The first is that, by their nature, these roles need to have a degree of flexibility that will allow them to be responsive to State or Territory and local issues, respectively. This is reinforced by the discussion above, regarding the need to adapt national schemes to existing arrangements in States and Territories.

Second, there was a tension between waiting for specific role definitions to be negotiated and agreed and the desire to get resources out to the SBOs and Divisions to support the implementation of the scheme. The decision was taken to release the resources to minimise the delays between the commencement of incentives to GPs and the availability of the SBOICs and DICs to support and coordinate GP immunisation activities.
This second source of tension is reflected in the evolving nature of the scheme, and the respective roles have emerged over time. These roles have tended to be shaped both by circumstances and by the individual occupants.

Service incentives versus reporting incentives

There was a view that GPs should have been providing a good quality immunisation service as part of their routine business, prior to introducing the GPII scheme. This was accompanied by the view that they should receive extra funding only for filling out forms and sending in data.

While this argument has face validity, it ignores the second aim of the GPII scheme, which was to effect a cultural change among GPs, along the lines discussed above (see section 4.2). There also is an argument that the SIP (to which this argument principally is directed) is partly a payment for data recording, collection and notification (see section 4.2).

This raises the important issue of payment for data. The precedent for this was established with the ACIR notification payment. However, that is a broadly-based payment, available to a wide range of providers. The notion of the SIP as a payment for data suggests a precedent of payment for data specifically within the GP sector.

However, as discussed in section 6.1.10, the SIP should rather be seen as payment for a number of activities. These include the tracking and researching of patient histories to establish immunisation status, as well as recording and reporting of information regarding immunisation services (the delivery of the last immunisation in a schedule).

As such, the data provision is an important aspect, however, the other aspects are of equal importance, as they are aspects of good practice in immunisation.

Thresholds for outcomes payment

There was some criticism by stakeholders of the removal of the 70% threshold after 12 months of operation of the scheme. In their view, this was too short a time period within which to remove this initial threshold, as practices tended to feel that they had just managed—or almost had managed—to reach this level when the bar was raised higher, and they got no reward for the improvements they had made.

This removal was a design feature of the scheme. The 70% threshold was included to make it easier for GPs to reach a point where they could get outcomes payments. However, longer term it was important to provide strong incentives to continue the improvement in immunisation coverage towards the 90% target set for participants the scheme. In the longer term, the 70% threshold was seen as possibly reducing the incentive to pursue this further improvement.

Thus, the 70% threshold can be interpreted as an inducement to GPs to participate in the scheme, and a tool for educating GPs about the nature and operation of the outcomes payment.

The removal of the 70% threshold cannot be viewed without consideration of the role of SIP. Under the “1990 Contract”, the UK incentive model did not include an equivalent of SIP, but relied upon outcomes target incentive payments alone. The initial coverage threshold for receiving outcomes payment was lower than the 80% level adopted in the GPII scheme. Arguably, the provision of SIP in addition
to the outcomes payment enables the threshold for outcomes payment to be set higher, as there is an ongoing reward associated with the service effort required to reach that initial threshold.

While this comparison with the UK approach is somewhat confounded by the fact that GPs in the UK are salaried (as opposed to the fee for service system in Australia), the argument has face validity. As such, it reflects on the interactive and mutually supportive roles that SIP and outcomes payments play within the scheme.
5 Implementation and operation of the GPII scheme

This chapter deals with the process of implementing the GPII scheme and its operational design. It describes perceptions of what seems to have worked well, what could have been done better and what should have been done differently. The content is derived from document analysis, stakeholder interviews, Divisional surveys, practice surveys and data analysis.

5.1 Implementation

Prior to 1997 there had been some thoughts among GPs regarding ways to engage the GP sector more strongly in the immunisation of children. These thoughts were based on the perception of falling childhood immunisation coverage and the unique level of access to these children accorded to GPs, by virtue of their role.

With the decision to pursue the systems approach embodied in the Seven Point Plan, this thinking crystallised into the GPII scheme, which formally commenced from 1 July 1998. The first SIP was paid in July 1998 and the first outcomes payments were made in August 1998. The NGPIC position began from April 1998, with SBOICs and DICs commencing at various points in time after that date.

The GPII scheme was funded through the Alternative Funding for General Practice Services Program, which falls under a separate appropriation to other population health programs funded by the Commonwealth.

Also, the GPII scheme is referred to in the Memorandum of Understanding (MOU) between the Commonwealth of Australia and the RACGP, RDAA and ADGP. The MOU aims to improve the quality of clinical practice and with a commitment from the Government to guarantee minimum funding for GP services under Medicare.

The MOU guarantees the continuation and funding for the Alternative Funding For General Practice Services Program, with explicit reference to the GPII as a part of that program. It also requires the signatories to agree on quarterly monitoring and annual review processes for the GPII, to be effected by the Commonwealth Government.

From its inception, the scheme was intended to run for an initial two year period and to be evaluated within that time frame.

The GPIIAG was established to oversee the development and design of the components of the scheme and to advise on its introduction and ongoing operation. The group was chaired by an officer of the Commonwealth Department of Health and Aged Care and included representatives from:

- ADGP, SBOs and the Divisions of General Practice (collectively);
- RACGP;
- AMA;
- consumers;
- HIC;
- State and Territory Governments; and
**the Commonwealth Department of Health and Aged Care.**

The terms of reference for GPIIAG are included at Appendix 5. The GPIIAG first met in December 1997.

Since its inception, the scheme has had a number of changes in administrative arrangements within the Commonwealth Department of Health and Aged Care. The scheme originally was managed by the General Practice Branch and was passed to the Medicare Benefits Branch in November 1998. There have been four different Departmental officers responsible for the scheme (and for chairing GPIIAG) since the first meeting of the group.

Such change in Departmental arrangements did not materially affect the implementation of the scheme. However, it did raise some uncertainty in the minds of others associated with the scheme. Such uncertainty can complicate processes when present in the minds of key stakeholders.

### 5.1.1 Consultation between Government and GPs

The level and nature of the consultation process between the Commonwealth Department of Health and Aged Care—on behalf of the Government—and the GP sector was perceived differently by different stakeholders.

Within the Commonwealth Department of Health and Aged Care, the view generally was positive that the process had worked well and, in some ways, offered a good model for future consultative processes with the profession. This view was somewhat endorsed by those members closer to the higher level of negotiation and consultation over the development of the scheme.

However, as discussed in section 4.3, there were some GP concerns at the grass roots level. These concerns may reflect either the views of a few individuals who were dissatisfied with the outcome, or may be symptomatic of a wider disaffection with a perceived lack of opportunity for GPs to have direct input into the design and development of the GPII scheme.

The study of the introduction of the GPII scheme (HCA, 1999) supports this cause for concern. While there was a broad awareness of the scheme itself, among GPs, there was a lack of knowledge and understanding of the components of the scheme (such as the SIP and outcomes payment).

It should be noted that the conduct of this study and the later follow-up study (HCA, 2000) itself demonstrates the level of effort expended on obtaining GP input into the design and operation of the scheme. In addition, the Minister released a discussion paper in August of 1997, about the operation of the scheme, as a means for raising awareness further and soliciting GP views.

Given the level of involvement of the GP sector in GPIIAG deliberations, these marketing exercises, the consultative engagement of representative groups and the use of the GP Forum, these facts suggest a communication problem as the root cause of the sense of not being consulted (see section 5.1.3). This may be intertwined with a lack of overt support from the representative bodies, caused by doubt over the reliability of the ACIR and the experiences with the BPP. Such support is an important aid to increasing the receptiveness of GPs to new policies and information relating to those policies.
5.1.2 Eligibility and registration of GPs

The scheme was opened only to general (medical) practices and GPs. This eligibility was linked to the criteria embodied in the Health Insurance Act 1973. Under that Act, payment of Medicare benefits is governed by clause 19(2), which prevents such payments for services provided by or on behalf of the State, Federal or local government. The Minister of Health and Aged Care is able to make specific directions for exemptions from this clause.

This criterion meant that certain classes of GP-type providers, most notably some Aboriginal Medical Services (AMSs), were unintentionally excluded from access to the GPII scheme incentives. Following representations from the National Aboriginal Community Controlled Health Organisation (NACCHO) and support from the GPIIAG, the Commonwealth Department of Health and Aged Care agreed to align eligibility for SIP with the MBS. This meant that AMSs with an exemption to receive Medicare benefits pursuant to section 19(2) of the Health Insurance Act 1973, by virtue of this exemption were eligible to receive SIP under the GPII scheme.

It should be noted that some specific exemptions of this ilk existed prior to the inception of the GPII scheme. Following the alignment of SIP eligibility with the MBS, these AMSs received backdated payments under the GPII scheme. A wide-ranging direction to exempt (Medical Officers at) AMSs from clause 19(2) was issued, effective from 30 June 1999. This wide-ranging exemption is time-limited and is due to expire on 30 June 2002.

One of the key aspects of the GPII scheme was the need for practices to register to participate in and benefit from the scheme. There were no concerns raised by stakeholders and respondents to surveys over this requirement nor over the associated registration process.

The registration forms for PIP and the GPII scheme were combined into a single form, to streamline administrative processes at both ends of the information flow. This raised some initial concerns with GPs but these were quickly allayed. These concerns may have been linked to a sense of distrust associated with perceptions of the majority of GPs about BPP. A number of stakeholders indicated that such distrust was prevalent and hampered initial acceptance of the GPII scheme.

At the time of the first outcomes payment calculation run in August 1998, a little over 3,000 practices were able to be included in the calculation (see Figure 5-1). Only a little over 500 more practices registered over the next two quarters. However, with the announcement of a one-off incentive in April 1999 for practices who registered with PIP, GPII registrations grew by almost 1,700 in the next two quarters.
By August 2000, 5,516 practices were registered for GPII. It is not clear how many practices in total operate in Australia. A number of different, widely varying estimates exist. Therefore, it is difficult to decide whether or not the GPII scheme has achieved its target of 90% of all practices being registered with the scheme. The Department currently uses a figure of 5,965 general practices operating in Australia (Campbell Research & Consulting, 1997). Using this number, 92.5% of these practices are registered with the GPII scheme.

The vast majority of registered practices—94.2%—are registered both for PIP and for GPII. The remaining 5.8% (340 practices) have chosen to register for the GPII scheme only. The low level of this proportion is important, when considering whether schemes such as the GPII scheme should be funded as programs in their own rights or integrated with PIP.

Comment must be made on the role of the DICs in the uptake of the scheme by GPs. From survey returns and stakeholder interviews, it is clear that some DICs engaged in demonstrating to GPs the benefits of involvement in the GPII scheme. No doubt, this helped in the encouragement of GPs to register with the scheme.

This observation is pertinent to the question of whether uptake might have been more rapid if DICs had been in place and operating earlier in the implementation of the scheme.

5.1.3 Communication and information dissemination

A consistent theme among GPs was that information about the advent and operations of the scheme was not well disseminated to the GP sector. It is clear that the GPIIAG gave ample consideration of the need for an effective communication strategy with GPs. Such a strategy was developed early in
1998 and information kits were distributed in June 1998 to all practices registered with the BPP and to all individual GPs not registered with BPP.

In spite of this campaign, there was still significant confusion among GPs as to the detail of the scheme’s operations and the financial incentives available (HCA, 1999). Anecdotally, many GPs never saw the information kits that were distributed and relied on workshops, journal articles, Divisions and practice support staff for information about the scheme.

It should be noted that, in early April 1999, the HIC circulated to all Divisions of General Practice a comprehensive information kit that contained details of the GPII scheme and the ACIR. In addition, the NGPIC instituted a series of fortnightly newsletters to GPs.

A factor in the apparent failure of these strategies to elicit widespread understanding and awareness of the scheme may be the relatively late establishment of the DICs and SBOICs. These roles were more closely aligned to dealing with Divisions and GPs at the local level and “in their practices”, as one stakeholder put it. As such, they have had greater success at communicating some messages than the earlier, more generic approaches.

A clear view expressed among stakeholders was that those who did receive and read the information kits felt that the material needed to be much more succinct and simple. Because of its complexity, GPs could not immediately see the benefits of the scheme and so were reluctant to participate.

The apparent lack of effectiveness of the information campaign among GPs is of concern, since significant effort was invested to get the message across. Most stakeholders acknowledged that the scheme was introduced at a time when there was a high degree of uncertainty among GPs of centralised programs, stemming in part from the BPP experiences. As referred to earlier, this manifested in a lack of overt support from bodies such as the AMA, RACGP and the RDAA, which impaired the acceptance by GPs of the messages being communicated.

There is now an established system of regular communication with participating practices that is working effectively and engages the attention of GPs. Linking future communications to this system may offer a means to disseminate information of this ilk in the future. In addition, general practice is becoming more computerised and the use of the Internet by GPs will increase (for example, through the ACIR site for the ACIR). This may offer opportunities for locating some information in a single web site, for practices to access through the normal course of their business.

### 5.1.4 Data collection, reporting and feedback

When the GPII scheme was first introduced, there was a widely held perception that the ACIR data were inaccurate. This was particularly true among GPs. As a consequence, GPs doubted the capacity of the ACIR to accurately measure their performance in delivering higher immunisation coverage. The first evaluation of the ACIR had indicated that, at the time, these data concerns were justified (HCA, 1997).
However, the ACIR was essential to the implementation of the GPII scheme. It would have been impossible to introduce the scheme without some means whereby to collect information on childhood immunisation at the practice level. The main concerns around the quality of the data were:

- **inaccurate information on the register, usually when records indicated a child was not immunised when, in fact, he or she was immunised**;
- **timeliness of data**; and
- **inaccurate data on residential address**.

These problems meant that GPs were expending unnecessary effort in following up children who already were immunised or who were no longer living in the area. It also meant that practice coverage rates were underestimated, impairing their ability to access outcomes payments.

GPs also were somewhat unhappy about the amount of paperwork that would be required to receive the incentives. This criticism tended to ignore the compensatory nature of the SIP and the fact that the outcomes payment was targeted at practices, rather than to GPs, to recognise that the recording, tracking and following up of the immunisation status of children was a practice-wide function.

There was a high level of criticism levelled at the GPII scheme that centred on the quality of data in ACIR. This criticism appeared in a wide range of media, including the press and medical journals. Since the introduction of the scheme however, the attitudes of GPs have changed somewhat, with around 70% of GPs now expressing satisfaction with the quality of data in ACIR (HCA, 2000).

Since the inception of the ACIR, over half of GPs feel that the data have improved, while 42% feel that there has been no change or are unsure of any change in data quality.

Queensland, the ACT and the NT each had central immunisation databases in place when the GPII scheme was implemented. Decisions were negotiated between the Commonwealth and relevant States and Territories to maintain these databases and to institute a process whereby these databases were used to collect immunisation data and then to transfer those data to ACIR.

This decision meant that these databases needed to be modified to provide the capacity to report to ACIR. In the NT, this presented a major problem, as the NT Childhood Immunisation Database (CID) did not routinely record Medicare number—the unique identifier used by ACIR—as many of the providers in the NT did not bill Medicare for GP-type services.

At the commencement of the scheme, less than 50% of records on CID had a Medicare number (GPDNT & THS, 2000). Furthermore, many of the Aboriginal and Torres Strait Islander children on the CID had more than one Medicare number, due to a complex set of cultural reasons. Given that 40% of children under 7 in the NT are of Aboriginal and Torres Strait Islander background, this presented a major barrier to achieving reasonable levels of accuracy for ACIR data on NT children.

Consequently, there was little scope for immunisation coverage for NT practices to reach the threshold values required to receive outcomes payment. This was recognised by GPs in the NT, who consequently were unmotivated to pursue improvements in their immunisation without perceived prospect of reward. It must be noted that these GPs still had access to SIP as a source of reward for...
performing more immunisations. However, analysis of stakeholder responses suggests that the high copayments involved for patients attending urban practices in Darwin led to (private) GPs referring these patients to community health clinics, where immunisation was available at no charge to the patient. This strategy would have reduced the effectiveness of SIP in these circumstances.

Local or population specific data issues such as this one are highly important when considering the scope for other GP-focused incentive schemes for delivering population health interventions. This observation resonates with the view canvassed in section 4.3, concerning the need to recognise existing arrangements within States and Territories.

In recognition of the unique circumstances prevailing in the NT, the GPIIAG, in April 1999, supported a grant of $108,000 from the Commonwealth Department of Health and Aged Care to General Practice Divisions NT. The grant was to fund the updating of the ACIR immunisation data for NT children aged under seven years. Following completion of the project, significant improvements resulted in the reported levels of immunisation for both the Central Australian and Top End Divisions (GPDNT & THS, 2000). In addition, the HIC committed substantial resources to dealing with these issues in the NT.

More recently, the NT Government and HIC have agreed to change the data submission process. Immunisation providers now are reporting directly to ACIR, with data from the ACIR then being forwarded to the NT for inclusion into the CID. At this stage, this model is working successfully, and it may be an appropriate time to consider such an approach for the ACT and Queensland.

5.1.5 Establishment of infrastructure

There was general agreement across stakeholders that insufficient clarity of roles and responsibilities for the three levels of coordination and support was provided, when the scheme was implemented. The minutes of GPIIAG meetings indicate that there was some consideration of the roles that DICs could play, and some thought given to the SBOIC role. However, there was no indication of how the NGPIC position should operate. In addition, there was no indication of how the various roles should relate to each other.

The NGPIC position originally resided within the RACGP. The role encompassed facilitation of communication and the passage of information between different stakeholders. The range of stakeholders was comprehensive, including:

- the Commonwealth Department of Health and Aged Care;
- GPIIAG and other committees;
- the NCIRS;
- State and Territory health authorities;
- Divisions of General Practice;
- SBOs;
- Divisions and ADGP;
- GPs; and
- other stakeholders.
When the NGPIC position was filled, no SBOICs were in place. Consequently, the NGPIC initially was heavily involved in establishing links with and networks among Divisions. Thus, it began by establishing a working relationship directly with Divisions and, to a lesser degree, with States and Territories. In the longer term, it was clear that it would need to maintain strong links through the hierarchy of SBOs and Divisions. To enable this role to be carried out more effectively, the decision was taken to relocate the NGPIC position to the then recently established ADGP.

As SBOICs took up their positions, some confusion about NGPIC and SBOIC roles emerged and this confusion persisted among Divisions as the respective roles were resolved informally. Over time, it has become apparent that the responsibility for liaising directly with Divisions and GPs has devolved to the SBOICs and DICs, respectively, and is working effectively.

The NGPIC also has advisory, liaison and coordination roles at the national level and between the national and State and Territory levels. This role has become more important in the latter stages of the scheme’s development.

The criticism of lack of clarity of roles and responsibilities also was reflected by stakeholders who felt that Divisions received insufficient guidelines on how to apply their funding. While they appreciated having the flexibility to tailor their funding to their unique requirements, generally they would have liked to receive some direction from the Commonwealth regarding options for using the money. Some felt they wasted time and money by ‘reinventing the wheel’ and going off on tangents, and thought this could have been avoided with some broad guidelines.

Also, stakeholders were critical of payments to GPs before the Divisions had received their funding. They felt that, had Divisions received their funding before GPs, they could have assisted GPs with understanding the scheme and increased their uptake of it. Divisional interviewees said that once they met with GPs, explained the scheme to them and how they could benefit from it, the GPs were much more open to it and keen to get involved.

A similar criticism was levelled at the implementation of the scheme occurring as the SBOs were being established. This complicated the establishment of SBOIC roles and their becoming active quickly. Two stakeholders though, suggested a counter view that the advent of the SBOIC role gave the nascent SBOs a medium through which to establish meaningful relationships and networks with Divisions, quickly.

The GPII scheme currently is managed by of the Medicare Benefits Branch of the Commonwealth Department of Health and Aged Care. Originally, it lay within the General Practice Branch, but was transferred in November 1998. PIP also is managed within the Medicare Benefits Branch.

A number of stakeholders suggested a degree of existing or emerging synergy between the GPII scheme and PIP. The elements of the GPII scheme relating to the quality of the immunisation service and the principles of population health practice resonate well with the objectives of PIP. The PIP objectives around increasing use of information technology in general practices also support the use of patient tracking and call-back systems for immunisation purposes, as well as providing the mechanism for more efficient transmission of immunisation data between practices and the HIC.
In relation to this view, it must be noted that the General Practice Strategy Review, in recommending the creation of PIP, also recommended that it include incentive programs targeting population health activities. It further recommended that the first of these be the “Immunisation Incentives Program” (GPSRG, 1999).

Countering this view is the position that something that is working well should not be subject to a change of such magnitude, unnecessarily. This view should be seen in the light of one significant administrative change having occurred within five months of the GPII scheme starting, and subsequent changes in key staff within the Commonwealth Department of Health and Aged Care.

5.2 Operation of the GPII scheme

This section deals with the ongoing operation of the GPII scheme, focusing on issues identified from document analysis, stakeholder interviews, survey returns and data analysis.

5.2.1 Service Incentive Payment

Figure 5-2 shows the expenditure on SIP, the numbers of providers to have received SIP and the average payment per provider, for each month since the inception of the GPII scheme. Figure 5-3 shows similar statistics for ACIR notification payments. Note that the June figures in both Figures have been affected by the redevelopment of the ACIR and that partial payments only have been made. These will be revised in subsequent payment periods.

The trend for SIP is reasonably consistent with the trend in registration for the scheme (see section 0). The expenditure for 1999-00 has exceeded the total expenditure for all of 1998-99, while the number of providers receiving SIP each month has remained stable since January 1999. Consequently, the average SIP amount paid per provider has grown.
Figure 5-2  Service incentive payments, providers and payments per provider

<table>
<thead>
<tr>
<th>Month</th>
<th>SIP ($)</th>
<th>Providers*</th>
<th>Average payment ($)</th>
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<tr>
<td>July-98</td>
<td>213,638</td>
<td>4,211</td>
<td>50.73</td>
</tr>
<tr>
<td>August-98</td>
<td>1,028,896</td>
<td>9,430</td>
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</tr>
<tr>
<td>September-98</td>
<td>1,168,053</td>
<td>10,170</td>
<td>114.85</td>
</tr>
<tr>
<td>October-98</td>
<td>1,660,301</td>
<td>11,216</td>
<td>148.03</td>
</tr>
<tr>
<td>November-98</td>
<td>1,431,271</td>
<td>10,606</td>
<td>134.95</td>
</tr>
<tr>
<td>December-98</td>
<td>1,179,782</td>
<td>9,716</td>
<td>121.43</td>
</tr>
<tr>
<td>January-99</td>
<td>2,118,509</td>
<td>11,612</td>
<td>182.44</td>
</tr>
<tr>
<td>February-99</td>
<td>1,608,002</td>
<td>10,783</td>
<td>149.12</td>
</tr>
<tr>
<td>March-99</td>
<td>1,582,434</td>
<td>11,140</td>
<td>142.05</td>
</tr>
<tr>
<td>April-99</td>
<td>1,587,522</td>
<td>11,223</td>
<td>141.45</td>
</tr>
<tr>
<td>May-99</td>
<td>1,200,021</td>
<td>10,236</td>
<td>117.24</td>
</tr>
<tr>
<td>June-99</td>
<td>1,354,681</td>
<td>10,371</td>
<td>130.62</td>
</tr>
<tr>
<td>1998-99</td>
<td>16,133,110</td>
<td>120,714</td>
<td>133.65</td>
</tr>
<tr>
<td>July-99</td>
<td>1,501,312</td>
<td>10,966</td>
<td>136.91</td>
</tr>
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<td>August-99</td>
<td>1,313,907</td>
<td>10,386</td>
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</tr>
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<td>September-99</td>
<td>1,448,772</td>
<td>10,735</td>
<td>134.96</td>
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<td>October-99</td>
<td>1,331,722</td>
<td>10,475</td>
<td>127.13</td>
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<td>November-99</td>
<td>1,764,937</td>
<td>11,321</td>
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</tr>
<tr>
<td>December-99</td>
<td>1,326,542</td>
<td>10,377</td>
<td>127.83</td>
</tr>
<tr>
<td>January-00</td>
<td>1,594,052</td>
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<td>152.45</td>
</tr>
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<td>February-00</td>
<td>2,186,015</td>
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</tr>
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<td>March-00</td>
<td>1,999,776</td>
<td>12,084</td>
<td>165.49</td>
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<td>April-00</td>
<td>1,757,611</td>
<td>11,911</td>
<td>147.56</td>
</tr>
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<td>May-00</td>
<td>1,585,709</td>
<td>11,634</td>
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<td>June-00**</td>
<td>722,988</td>
<td>9,500</td>
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</tr>
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<td>1999-00 (YTD)</td>
<td>18,533,353</td>
<td>131,657</td>
<td>140.77</td>
</tr>
</tbody>
</table>

* GPs and practices, when nominated by the practitioner.
** The June payment was the first to occur after the re-development of ACIR. Due to the system not being completely available, only a partial payment occurred.
### Figure 5-3 ACIR notification payments, providers and payments per provider

<table>
<thead>
<tr>
<th>Month</th>
<th>ACIR payment ($)</th>
<th>Providers *</th>
<th>Average payment ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>July-98</td>
<td>728,742</td>
<td>11,517</td>
<td>63.28</td>
</tr>
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<td>August-98</td>
<td>764,595</td>
<td>11,566</td>
<td>66.11</td>
</tr>
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<td>September-98</td>
<td>995,004</td>
<td>12,492</td>
<td>79.65</td>
</tr>
<tr>
<td>October-98</td>
<td>717,408</td>
<td>11,596</td>
<td>61.87</td>
</tr>
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<td>November-98</td>
<td>863,124</td>
<td>12,149</td>
<td>71.04</td>
</tr>
<tr>
<td>December-98</td>
<td>597,996</td>
<td>10,780</td>
<td>55.47</td>
</tr>
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<td>January-99</td>
<td>1,059,162</td>
<td>12,704</td>
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<td>February-99</td>
<td>904,443</td>
<td>12,021</td>
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<td>March-99</td>
<td>808,650</td>
<td>12,437</td>
<td>65.02</td>
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<td>April-99</td>
<td>778,845</td>
<td>12,280</td>
<td>63.42</td>
</tr>
<tr>
<td>May-99</td>
<td>667,350</td>
<td>11,409</td>
<td>58.49</td>
</tr>
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<td>June-99</td>
<td>683,358</td>
<td>11,549</td>
<td>59.17</td>
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<tr>
<td><strong>1998-99</strong></td>
<td><strong>9,568,677</strong></td>
<td><strong>142,500</strong></td>
<td><strong>67.15</strong></td>
</tr>
<tr>
<td>July-99</td>
<td>777,549</td>
<td>11,970</td>
<td>64.96</td>
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<td>August-99</td>
<td>697,473</td>
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<td>60.72</td>
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<td>September-99</td>
<td>716,337</td>
<td>11,718</td>
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<td>October-99</td>
<td>677,364</td>
<td>11,575</td>
<td>58.52</td>
</tr>
<tr>
<td>November-99</td>
<td>845,328</td>
<td>12,266</td>
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<td>December-99</td>
<td>620,493</td>
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<tr>
<td>January-00</td>
<td>917,544</td>
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<td>February-00</td>
<td>843,378</td>
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<td>March-00</td>
<td>920,553</td>
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<td>835,257</td>
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<td>May-00</td>
<td>772,962</td>
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<td>61.24</td>
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<td>June-00**</td>
<td>395,193</td>
<td>10,473</td>
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<td><strong>1999-00 (YTD)</strong></td>
<td><strong>8,919,431</strong></td>
<td><strong>143,654</strong></td>
<td><strong>62.09</strong></td>
</tr>
</tbody>
</table>

* GPs and practices, when nominated by the practitioner.

** The June payment was the first to occur after the re-development of ACIR. Due to the system not being completely available, only a partial payment occurred.
The SIP data also show increases in the amounts paid, the numbers of providers paid and the average payment per provider in the first five months of 2000. This may reflect the impact of two other Seven Point Plan strategies.

First, the school entry requirements in several States may have effected an increased demand for immunisation among children of school entry age. This can be seen in the first two months of the year, just prior to first term intakes.

Second, the 30 April 2000 deadline for introduction of age appropriate immunisation as a prerequisite to receiving Childcare Benefit may have effected a similar increase in demand in March and subsequent months.

The rules governing SIP (that is, the requirements determining when each age-appropriate immunisation schedule is deemed complete) changed to reflect changes in the ASVS. The MMR2 vaccination was introduced in the immunisation schedule on 1 January 1999. For GPII purposes, a child born from 1 January 1995 must receive MMR2 as part of Schedule 6 to be fully immunised. MMR2 will be included in the assessment process for the first time from the May 2002 outcomes calculation.

Similarly, with the introduction of the new ASVS from 1 May 2000, the payment for SIP will alter. For children born before 1 May 2000, the old schedule will continue to apply, and for those born from that date onwards the new schedule will apply.

5.2.2 Outcomes payment

Figure 5-4 shows statistics for outcomes payments for each quarter since the first payments were made in August 1998. In recognition that there were significant issues with timeliness of data, the GPII scheme included a recalculation of outcomes payments, three months after each quarterly calculation was run. This allowed more data to get on to ACIR, with the likelihood that it would result in increased coverage for some practices. Any positive variances were paid to the practices concerned, while negative variances were ignored. These variances and the numbers of practices to receive them are also shown in Figure 5-4.

As the figure shows, outcomes payments have increased steadily over each quarter since the scheme began, driven by relatively stable payments per practice and increasing number of practices that receive the outcomes payment.

The variance payments have maintained their order of magnitude as well as the number of practices requiring a variance payment each quarter. This indicates that there still is an issue with timeliness of getting the data onto ACIR. For this reason, the practice of quarterly recalculation and variance payments needs to continue.
Evaluation of the General Practice Immunisation Incentives scheme
November 2000

Figure 5-4  Outcomes payments, practices, payments per provider, variances and variance per practice

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Outcomes payments* ($)</th>
<th>Average payment ($</th>
<th>Variance payments ($)</th>
<th>Average payment ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Practices</td>
<td></td>
<td>Practices</td>
<td></td>
</tr>
<tr>
<td>Aug-98</td>
<td>937,782</td>
<td>1,066</td>
<td>879.72</td>
<td>203,184</td>
</tr>
<tr>
<td>Nov-98</td>
<td>1,359,689</td>
<td>1,525</td>
<td>891.60</td>
<td>167,304</td>
</tr>
<tr>
<td>Feb-99</td>
<td>1,629,636</td>
<td>1,817</td>
<td>896.88</td>
<td>212,714</td>
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<tr>
<td>May-99</td>
<td>2,196,351</td>
<td>2,455</td>
<td>894.64</td>
<td>109,647</td>
</tr>
<tr>
<td>Aug-99</td>
<td>2,845,261</td>
<td>3,295</td>
<td>863.51</td>
<td>178,398</td>
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<tr>
<td>Nov-99</td>
<td>2,997,010</td>
<td>3,481</td>
<td>860.96</td>
<td>234,834</td>
</tr>
<tr>
<td>Feb-00</td>
<td>3,231,191</td>
<td>3,778</td>
<td>855.26</td>
<td>170,218</td>
</tr>
<tr>
<td>May-00</td>
<td>3,501,133</td>
<td>4,100</td>
<td>853.93</td>
<td>n.a.</td>
</tr>
<tr>
<td>Aug-00</td>
<td>3,722,656</td>
<td>4,355</td>
<td>854.80</td>
<td>n.a.</td>
</tr>
</tbody>
</table>

* Excludes variance payments.

n.a. Not available at the time of writing this report.

There is some concern among stakeholders with respect to the formula that is used to calculate the outcomes payment. This concern revolves around three issues:

- The inclusion of conscientious objectors in the “denominator” of the calculation.
- The complexity of the calculation formula itself.
- The rules used to ascertain immunisation status at the time of the calculation, and specifically the treatment of catch-up vaccinations and conscientious objectors.

Conscientious objectors

In the survey of practices, the respondents were asked to estimate the proportion of conscientious objectors within their practice’s child population. On average, (from all responses), 1.78% of children were estimated to be unimmunised due to objection by the parent or guardian. This ranged from the bottom 2.48% who had no conscientious objectors, to the top 22.8% who had more than 1% conscientious objectors, while 54.5% of the sample did not respond. There were no marked deviations from this pattern across States and Territories.

By comparison, data from HIC on proportions of conscientious objectors by Division and by postcode are shown in Figure 5-5 and Figure 5-6, respectively. There they are compared with immunisation coverage. The figures show that no postcode nor Division exceeds 1% of conscientious objectors—in contrast to the estimates by general practices who responded to the survey.

The figures also show that objection and coverage appear not to be linked in any systematic way. Using the HIC data, the coverage calculation was revised, with conscientious objectors excluded from the denominator. As a result, no postcode...
nor Division crossed the 80% or 90% thresholds for the outcomes payment increments.

Note that this analysis is necessarily crude, reflecting the fact that postcode is a relatively coarse measure of population. It is quite possible that conscientious objectors may be concentrated within a particular practice’s client population, resulting in a more marked effect on their immunisation coverage than shows at the postcode level. Anecdotally, some GPs claim this to be the case.

**Figure 5-5 Conscientious objectors at May 2000 by coverage at 30 June 1999 for postcodes**
In the face of the conflict between the HIC data and the survey responses, it was hypothesised that the HIC data significantly under enumerate conscientious objectors. If this was the case, then the expectation would be that the quality of the HIC data may improve following the expiry, on 30 April 2000, of the amnesty in relation to the Childcare measures under the Seven Point Plan.

To test this, the rates of processing of conscientious objection forms by HIC were obtained. These forms are the means by which a conscientious objector is formally registered as such on the ACIR. This is a requirement for exemption from the immunisation prerequisite for the school entry and Childcare measures in the Seven Point Plan.

Figure 5-7 shows the numbers of history forms processed in the six weeks preceding the 30 April 2000 deadline and in the subsequent six weeks. In the preceding period, 738 forms were processed and in the subsequent six weeks, 711 forms were processed. The two weeks immediately prior to the deadline included the school holidays and the Easter and Anzac holidays periods, and these clearly have lowered the throughput in those two weeks. Also, it is likely that the resulting backlog led to increased throughput in the first two weeks of May.

In conclusion, there was no significant increase in throughput of conscientious objection forms as a consequence of the expiry of the 30 April 2000 deadline.
In comparison, Figure 5-8 shows the trends of processing of immunisation history forms for the seven months preceding the 30 April 2000 deadline and for the four months since. These forms are the means whereby historical data on immunisation encounters are lodged with the ACIR. Where immunisation has taken place (and records exist to substantiate this) and the data have not been registered with ACIR, a history form is used to update the register.

From Figure 5-8, clear trends associated with the school entry and the Childcare measures can be seen. These are similar in nature and timing to those observed for the SIP data, with peaks in the early months of 2000 and again in May 2000. This latter observation suggests a real increase in throughput of history forms due to the expiry of the 30 April 2000 deadline.

Taking the preceding two pieces of evidence together, they suggest that there was no notable increase in the registration of conscientious objection as a consequence of the expiry of the 30 April 2000 deadline. If the HIC data significantly under enumerated conscientious objectors, to the extent suggested by the practice survey returns, such an increase would have been expected.

While it can be suggested that the attitudes and characteristics of conscientious objectors are such that they might be reluctant to register their objection at all, we found no evidence to substantiate this view and so it remains conjecture.

Consequently, we conclude that the HIC data are currently the best measure of numbers of conscientious objectors. However, there is scope for work to be done to look more closely at the effects of conscientious objectors at the practice level. This would require a specific piece of research to be undertaken with cooperative practices with high proportions of conscientious objectors within their patient populations.
Complexity of the formula

As discussed in section 6.1.2, the outcomes calculation is algebraically sound but intuitively difficult for GPs and others to comprehend. This made it a barrier to acceptance of the scheme in its early days.

However, the reasons for the complexity are that it needs to drive a payment system that must deal with children who attend multiple practices and GPs. The formula was adapted from the payment method used for PIP (standardised whole patient equivalents), which was recommended by the GPSRG (GPSRG, 1999).

As time has passed, sentiment from the stakeholder interviews suggests that the resistance and mistrust of the formula has abated. To say that it is now embraced would be too strong, however, there appears to be underlying acceptance of its complexity.

Immunisation status rules

The rules used to determine immunisation status for the outcomes payment calculation treat children who receive catch-up immunisations as being unimmunised. This is much stricter than the current national due and overdue rules applied for the ACIR (HIC, 2000). These latter rules are based on the latest ASVS and its protocols for catch-up vaccinations.

Using the stricter outcomes payment rules creates three problems. First, GPs now have two sets of rules to relate to when dealing with catch-up vaccinations, one of which is unrelated to the ASVS.

Second, the incentive to pursue catch-up vaccinations is reduced. The ASVS includes protocols for delivering catch-up vaccinations because it is seen as good immunisation practice to follow these patients through. There was a limited view among stakeholders that catch-up vaccinations generally will require more effort from the GP than will those who present of their own accord. It is arguable that
the rules for the outcomes payment should operate to encourage catch-up vaccinations, rather than to discourage them.

Third, the effect of classifying catch-ups as unimmunised is to reduce the calculated coverage for a practice, by up to 3% (Hull & McIntyre, 2000). This will result in some practices receiving lower or no outcomes payments.

The question of conscientious objectors is a vexed one. The argument for excluding such children from the outcomes calculation rests on the premise that it is unfair to penalise the practice for a decision made outside of their control.

The converse argument is that to exclude conscientious objectors from the outcome calculation would reduce the incentive for the practice to try to influence the parents who have an objection to immunisation. Thus, excluding conscientious objectors from the outcomes calculation is unlikely to realise any population health benefit.

From the practice survey, the level of conscientious objectors is between zero and three percent for the vast majority of practices. So, potentially, the impact on a practice’s outcomes calculation would be increases of similar order, if conscientious objectors were excluded from the calculation. Consequently, it seems likely that some practices would receive more outcomes payments than at present. No practice would receive less.

5.2.3 Divisional Immunisation Coordinators

Analysis of the returns from the practice survey show that approximately two thirds of respondents had received a visit(s) from their DIC. Of those who had received a visit, 36% saw the DIC’s role as important or very important to their practice. Some 42% saw the role as somewhat important to them and the remainder did not see the DIC role as important.

The Division survey results indicate that, on average, the scheme funds 80% of immunisation activities within Divisions. Over half of respondents fund all of their immunisation activities from the GPII scheme. Thus, around half of Divisions carry out immunisation activities funded through other means.

This fact is not surprising, given that, in 1997-98—prior to the GPII scheme commencing—77% of Divisions were conducting immunisation activities (Magarey et al., 1999). The nature of these activities may well have exerted significant influence over the ways in which the DIC roles were established and operated in the Divisions.

The DIC role is part-time for 89.5% of Divisions, averaging 15.59 hours per week. Of the DIC’s time, 32% is spent explaining best practice to Practices or GPs.

Respondents to the Divisional survey reported that DICs spent about half their time explaining the components of the scheme, the data reports, calculation of payments to GPs and practices, and about a third of their time explaining immunisation best practice (such as cold chain management).
5.2.4 The State Based Organisation Immunisation Coordinators

Respondents to the Divisional survey reported that SBOICs primarily disseminated information, provided workshops, training and education sessions, and offered support, ideas and liaison. Only one respondent reported not knowing what activities were undertaken by their SBOIC.