

## OBJECTIVES

Our recommendations to the Minister seek to achieve six major objectives.

### Access and quality

Strategies to improve access to health services and the quality of patient care.

### Funding

Strategies to create more equitable, efficient and effective funding systems which increase the value for money of expenditure on health care.

### Clinical leadership

Strategies to increase the involvement of clinicians (doctors, nurses and all other health workers) in determining health care priorities and in setting and monitoring the standards of clinical practice.

### Consumer and community empowerment

Strategies to empower individuals and communities in decision-making about health care.

### Corporate governance, planning and accountability arrangements

Strategies to improve planning, administrative and accountability arrangements to ensure the effectiveness and efficiency of decision-making.

### Health improvement

Strategies to foster a stronger focus on the promotion and maintenance of good health.

## ISSUES EXAMINED

To achieve our objectives we undertook six pieces of work. The resultant Working Papers were used to guide our recommendations and are available publicly.

Specifically we examined:

- options for improving **the delivery and organisation of health services** in the areas of critical care (Intensive Care Units (ICUs) and Emergency Departments), the management of planned and acute hospital admissions, and the care of people with chronic and complex health conditions, such as cardiovascular disease, respiratory illness and cancer (Working Paper 1)
- the need for **better planning and decision-making about the role and location of metropolitan health services** (Working Paper 2)
- options for enhancing **services to rural communities** (Working Paper 3)
- options for improving **information technology systems** to support patient care and more informed decision-making by health managers (Working Paper 4)
- options for improving **funding levels and funding systems** in order to increase access to services and the effectiveness of care (Working Paper 5)
- options for further engagement of **consumers and communities** in decisions about their own health care and the planning of health services (Working Paper 6)

In examining all six areas and finalising our recommendations, we recognised the role and contribution of the private and non-government sectors within the NSW health system.

We also examined how planning, accountability and governance arrangements could be improved to support the implementation of our recommendations.

The Working Papers were prepared with the assistance of reference groups made up of clinicians, managers and consumer representatives. Membership of the reference groups are listed in the working papers. The proposals put forward in the Working Papers have informed our recommendations.

## FOCUS

We have focussed our review on improvements to clinical care. We are conscious that we have not been able to deal comprehensively with all of the areas which make up a successful health system. Examples include public health, population health, dental health, drug and alcohol services, mental health, Aboriginal and Torres Strait Islander health and training and research. Work must continue in these areas as part of the implementation of our report.

It is important to acknowledge that some of these matters such as drug and alcohol services, mental health and Aboriginal and Torres Strait Islander health are already the subject of a concerted State-wide effort. We also believe that many of the changes we are putting forward will directly benefit these and other parts of the wider health system. For example, many patients with mental health and drug and alcohol conditions who frequently have urgent admissions via the Emergency Department will benefit from the recommendations we have made to improve emergency care, such as better management in the community to avoid crisis situations and urgent admissions. Similarly, the recommendations we have put forward relating to improving the provision of health care to people with chronic and complex health conditions will assist many Aboriginal and Torres Strait Islander people who are vulnerable to conditions like heart disease and diabetes.

## CONTEXT

Our recommendations have been influenced by a number of factors, which can be summarised as:

- the NSW Government's decision to increase **funding** to NSW Health and provide funding certainty – this decision was taken during the life of the NSW Health Council
- the importance of recognising and building on the existing **strengths** and **achievements** of NSW Health
- the challenge of achieving lasting improvements to health care in the context of increasing and potentially unlimited **demand**
- the recognition that a review of any State health system can only deal with part of the picture and that some changes will need **Commonwealth, State** and private sector cooperation

## More dollars for health and funding certainty

An important feature of our work has been an ongoing dialogue with the Minister and senior NSW Government officials about our findings and recommendations. During the course of our review we met with many clinicians and Area Health Service managers. They explained the pressures they were facing in meeting growing demand in a climate of budget uncertainty, annual budget reviews and a lack of predictable growth funds. We were also aware of the problems facing some Area Health Services whose funding did not reflect the growth in their populations.

In our discussions with the Minister and our work on funding options we recommended several changes to funding levels with the condition that they should be tied to achievable reforms of the health system. First, we recommended the need for budget certainty and three-year budgets. Secondly, we outlined the need for real growth funds and a predictable growth formula to meet future demand. Thirdly, we highlighted the urgent need to address the problems of some Area Health Services whose funding had not kept pace with the growth in population. Finally, we outlined the need for stability of funding in specific areas of the State, such as isolated rural health services.

At the time of finalising our recommendations the Minister advised that the NSW Government had given approval to growth funding over three years, three-year budgets and recurrent funds in addition to growth funds to support the service improvements we have recommended.

A total of \$105 million (\$35 million per annum for three years) will be provided to support reforms in the following areas:

- \$15 million for additional ICU beds and a network of ICUs
- \$30 million to help tackle the pressure in Emergency Departments and to deal with blockages between Emergency Departments and the rest of the hospital
- \$45 million to provide incentives for widespread implementation of better approaches to health care for people with chronic and complex conditions like cardiovascular disease, respiratory illness and cancer – these will be called Priority Health Care programs and will focus on a State-wide approach to early detection and the provision of health care plans for individuals and their carers (see Chapter 2)
- \$15 million for demonstration projects in two selected Area Health Services, to fast-track service improvements such as the introduction of new technology and changes to clinical practice

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**\$105 million**

## Building on achievements

By international standards NSW Health performs very well. The dedication, commitment and professionalism of those who work within it are key features in this success. We were conscious of the need to build on and sustain its existing strengths, including:

- the principles of universal entitlement and access
- the focus on tertiary education and research
- the adoption and use of new and advanced technologies
- a growing awareness of the importance of health promotion and the prevention of illness

There is compelling evidence that NSW Health has achieved a great deal, in terms of:

- **productivity**  
NSW Health has achieved an average productivity gain of 2.3% per annum since 1990/91.<sup>8</sup>
- **number of people assisted**  
Over recent years the number of people being assisted in NSW Health has steadily increased. For example, in 1998/99 there were 2.4% more public patients admitted than in the previous year. Similarly, for non-inpatient services – including Emergency Department attendances and community health services – there was a 2% increase compared to the previous year.<sup>9</sup>
- **changes to the way health care is provided**  
In recent years there have been significant changes to the way that health care is provided. For example, whereas 15 years ago people with diabetes were routinely hospitalised for stabilisation of blood sugar, this is now the exception rather than the rule.
- **mortality rates and health status**  
There have been significant improvements in the health status of the general population. For example, since 1985 life expectancy at birth has increased by 4.4 years for males and by 3.2 years for females. Deaths due to cardiovascular disease have steadily declined since the late 1960s. Since 1989 the mortality rate for stroke has declined by an average of 3.7% per year for males and 3.6% per year for females.<sup>10</sup>
- **successful efforts at prevention and health promotion**  
Together with the rest of Australia, NSW has made significant gains in some areas of prevention and health promotion. Since 1977 smoking rates in NSW have declined by around one third. Between 1991 and 1998 HIV/AIDS transmission rates declined by 53%.<sup>11</sup> The NSW Breast Screening Program carries out over 270,000 screens per annum.<sup>12</sup>

- **capital investment**

NSW Health has been steadily improving its capital infrastructure. This includes both existing and new services. Many of the changes to the design and function of services will support new approaches to providing health services which we have outlined in our report.

Since 1995/96, a total of \$2.3 billion has been allocated to improving facilities. Some examples include:

- **The New Children's Hospital**

\$314 million was allocated to a state-of-the-art, 350-bed paediatric hospital.

- **Illawarra Area Health Service Strategy**

\$73 million was allocated to upgrading Wollongong Hospital to teaching hospital status and creating a new multipurpose complex – Hickman House.

- **Lithgow Hospital**

\$26 million was allocated to provide a comprehensive local service made up of inpatient beds, a co-located medical centre and a rehabilitation unit.

- **Coffs Harbour Services**

\$80 million was allocated to constructing a new service made up of the public hospital, community health, mental health and a new ambulance service on the one site. It is worth noting that our work on improving rural health services (Chapter 3) recommends that this approach of co-locating services is ideal for rural communities.<sup>13</sup>

## Implications

We recognise that there have been significant achievements in the provision and advancement of health care. However, these achievements pose challenges for the way we organise and fund ongoing delivery of service. Increased life expectancy continues to provide challenges to the health system, and less intrusive treatments will require innovative thinking about the most successful way to deliver health care.

The medical reforms of 25 years ago were principally about equity of access of all to the health system. With increased demand and increased cost we must now focus on how the health system can better deliver care. If we fail to meet this challenge, the system will come under more pressure and equity of access will be at risk.

## The challenge of growing demand

We have produced this report at a time of ongoing growth in the demand for publicly funded health services. This demand is being driven by advances in treatment and the growth of technology. This is evidenced by the following:

- There has been a steady growth in hospital admissions. (Over the period 1992/93 to 1998/99 there was an average growth per year in overall admissions of 4.5% and an average growth per year in public patients of 8.1%.<sup>14</sup>)
- In the period 1997/98 – 1998/99 there was a 7.2% increase in demand on Emergency Departments.<sup>15</sup>
- The cost per patient has increased by 2.7% per annum (from 1994/95) which is influenced by wages, goods and services, medical supplies and pharmaceuticals.<sup>16</sup>
- The complexity of demand is also increasing with the proportion of the population aged over 65 estimated to rise from 12% to 18% by 2021.<sup>17</sup>

Increasing demand has been paralleled by a decline in private insurance from 55% of the population at the start of Medicare in 1984 to about 30% at present.<sup>18</sup>

It is against this backdrop of increased demand and increased cost that our recommendations for change need to be understood. In this report we put forward a package of initiatives which we believe will improve access and quality to health care. However, we believe that the success of our reforms, and also the success of the health system to date, will be eroded unless Commonwealth and State Governments and clinicians lead a community debate about the need for realistic expectations about what a health system can deliver, and the need to ensure that health care is appropriate.

Meeting this challenge will require sustained and thoughtful community education. It will require a focus on lifestyle, on diet and on individuals taking more responsibility for their own health. It will require Governments and communities to tackle the problems of disadvantage that lead to sickness.

Finally, meeting this challenge will require a more informed and balanced debate about what makes up a good health system. We believe that a successful health system is characterised by a far wider range of factors than the numbers of hospital beds. This will require a shift in expenditure to providing more care in the community, and an increased emphasis on both early intervention and keeping people well.

Unless there is widespread recognition of the need to deal with increasing demand, the cost of health services may well extend beyond the capacity of Governments and the community to pay for it.

## Commonwealth-State cooperation

There has been considerable public debate about the respective responsibilities of the State and Commonwealth Governments.

We have suggested a number of ways that Commonwealth-State relationships could be improved. These will go some way to improving coordination and the effectiveness of expenditure. These include:

- the need for a national health policy (This should deal with the respective roles and responsibilities of the State and Commonwealth Governments, desired health outcomes and the most effective ways of delivering patient care.)
- the need for greater parity in funding allocations to respond to growth (We note that over the last 10 years, State contributions have risen at a greater rate than Commonwealth contributions. In the period 1991/92 to 1998/99, the NSW Government has increased its recurrent expenditure by 5.3% per year in real terms. This compares with an increase of 3.9% per year in Commonwealth recurrent funding for the same period.<sup>19</sup>)
- the urgent need for an agreed Commonwealth and State approach to improving health information technology and to linking general practice to other parts of the health system
- the need to address the lack of progress – particularly in rural areas – in providing appropriate care for aged people who are living in hospital beds due to the shortage of suitable nursing home or hostel accommodation
- the need to resolve the issue of lack of flow-on funding for award increases to NSW Health staff employed under Commonwealth-funded programs where the Commonwealth has not provided additional funding to the States to compensate for wage increases – for example HIV/AIDS programs and Home Nursing Services
- the need for clarity about the role of private health insurance, and how to maximise the benefits of insurance for consumers
- the need to improve links between GPs and other parts of the health system, such as hospitals and community health teams, and to provide greater financial incentives for GP after hours services
- the need for the Commonwealth and the State to ensure that their level of funding is adequate to meet the health needs of communities (In our work on rural health services, we express our concern that funds for medical and pharmaceutical benefits currently do not reflect population needs but the location of health providers. Where there is a shortage of providers some communities are not able to take up their fair share of potential Commonwealth expenditure for their health needs.)

The Council supports the call for further work at the national level to improve the effectiveness of Commonwealth and State arrangements in the delivery of health care. We believe this should be commenced quickly, to support and enhance the changes we have put forward at the State level to improve the quality and effectiveness of health care for the people of NSW.

## CONCLUSION

The provision of additional funds by the NSW Government is a great step forward – on condition that they are tied to reform. The changes we put forward in this report are intended to achieve that reform. We believe that our recommendations are practical, that they build on the successes of the existing system, that they will relieve pressure on doctors and nurses and all other health workers and that they will create a 21st century health system designed around the needs of individuals and communities.

- 8 Analysis undertaken by NSW Department of Health, Structural and Funding Policy Branch, 1999.
- 9 NSW Health Annual Report 1998/99, NSW Department of Health and data from Evaluation and Monitoring Branch 1999.
- 10 Health of the People of NSW, Report of the Chief Health Officer, 1999. NSW Department of Health (in press).
- 11 *ibid.*
- 12 BreastScreen NSW, 1999.
- 13 Advice from NSW Health, State-wide Services Development Branch.
- 14 NSW Health – Inpatient Statistics On-line Collection, 1999.
- 15 NSW Health Annual Reports, 1997/98 and 1998/99, NSW Department of Health.
- 16 Analysis undertaken by NSW Department of Health, Structural and Funding Policy Branch, 1999.
- 17 NSW Health Annual Report, 1998/99.
- 18 Private Health Insurance Administration Council, December, 1999.
- 19 ABS Australian Government Financial Estimates, Cat No. 5501.0 and Commonwealth and State Government Budget Papers, 1990/00.

## OBJECTIVES

Improved access to health services and improved quality of patient care.

## FINDINGS AND OBSERVATIONS

Access to health care services and the quality of patient care are influenced by a number of factors, including:

- whether the level of overall funding provided to the health system is adequate
- whether the processes of providing care are well organised – including the roles and responsibilities of various providers, communication systems and the interaction between various providers
- the availability of a skilled workforce
- how well resources (such as hospital beds and technology) are utilised to provide appropriate care
- whether the distribution of health services meets the needs of particular communities
- the extent to which administrative systems, work practices, training and even the design of hospitals are adapted to respond to changes in the way care is provided

This chapter deals with improvements to service delivery and the processes of providing health care. Our key finding is that there is a link between the way services are organised and the accessibility and quality of health care.

Additional funding will go some way to improving the effectiveness of the system. However, unless services are properly organised and properly planned, then the Government and the community will not realise the full benefits of these additional funds.

From our discussions with clinicians, managers and consumers we make a number of observations about the need to improve service delivery.

- There are many examples of innovation in clinical practice which if applied more widely across NSW Health would improve both the system's cost-effectiveness and its capacity to respond to demand. We believe that the implementation of recommended clinical practice should not be left to the discretion of 17 Area Health Services. More incentives are needed to promote the widespread implementation of innovations.
- We are concerned that the current shortage of skilled nurses in the State's health system is impacting on the quality and cost of health services.
- We believe that urgent improvements are needed to patient information systems in order to improve links between health care providers (such as hospitals, GPs and community health teams) in the delivery of patient care.
- We conclude that improvements to service could be better supported by improving the planning and distribution of services (see Chapter 3).
- Finally, we believe that funding incentives could be more closely linked to supporting recommended clinical practice (see Chapter 4).

## DIRECTIONS FOR CHANGE

We propose the following improvements to service delivery:

- improving the management, funding and coordination of critical care (Emergency Departments, emergency services and ICUs)
- improving the management of planned and acute hospital admissions
- providing better coordinated care to people with chronic and complex conditions such as cardiovascular disease, respiratory illness and cancer
- developing further strategies to attract and retain a skilled nursing workforce in NSW
- overhauling patient information systems and the development of an Electronic Health Record

We selected the above service improvements because we believed they would respond to the most pressing and urgent issues facing the State's health system and would have positive and lasting flow-on effects.

### Recommendations:

#### Intensive Care Units

1. That the Department should urgently implement a strategy for the improved management of Intensive Care Units and the allocation of the additional funds announced by the NSW Government in December 1999.
2. That this strategy should be concentrated on improving the coordination and networking of Intensive Care Unit services and the implementation of a new method of funding.
3. That these improvements to Intensive Care Unit services and the distribution of the additional funds should be overseen by a group of clinicians and health service managers, including doctors and nurses from a number of facilities.
4. That this group should advise on the impact of the additional funds, and undertake a further investigation into the anticipated demand for Intensive Care Unit facilities over the next five years.

### Improving service delivery in critical care

#### Intensive Care Units

There is a need to address current shortfalls in the numbers of tertiary referral ICU beds<sup>20</sup> and to plan properly for future patient demand. In simple terms, the type of surgery and treatment being performed in hospitals is now more complex than 20 years ago, and thus requires increased capacity within ICU services. The increased availability of ICU services and improved planning about their location and availability will improve access in other areas. For example, the number of ICU beds affects the amount of elective surgery that can be performed, and the speed with which critically ill patients can be moved from the Emergency Department.

In December 1999 the NSW Government announced that it would allocate an additional \$15 million over three years to ICU services. We propose that these additional funds should be tied to changes in the coordination, quality and funding of ICU services, as follows:

- ICU beds across metropolitan Sydney must be better networked so that at any given time it is possible to assess where beds are available.
- There must be more consistent standards for classifying an ICU service and about the appropriateness of ICU admissions. These standards should relate to workforce availability, clinical skills and the volume of patient activity needed to maintain those skills.
- ICUs must be funded in a way that reflects their high fixed costs and the need to be available at all times to the most critically ill.



## Emergency Departments and hospital emergency services

Improving the operation of Emergency Departments and their connection to the broader hospital is important to the ongoing accessibility and quality of health services. We reviewed a significant body of work from both NSW and other States, which demonstrates that the problems being experienced within Emergency Departments are often caused by demands on other parts of the hospital. These can include demand for operating theatres, demand for ICU beds and demand for beds in wards. Such blockages mean that patients may be forced to remain in the Emergency Department, or that ambulances are required to bypass a hospital.

Our discussions with clinicians and managers from Emergency Departments and other parts of hospitals have highlighted some key issues that need to be addressed. Emergency Departments have experienced a significant increase in demand: in the period 1997/98 – 1998/99 the increase was 7.2%.<sup>21</sup>

Some of that demand is attributable to repeat demand from patients with recurring conditions like a mental illness, or elderly patients with respiratory problems. We believe that there needs to be better management of these patients in the community to help them avoid crisis situations that require urgent admissions through the Emergency Department.

For some people, Emergency Departments have become a substitute for GP services. It is arguable that a number of these patients, particularly in rural communities, are using the Emergency Department because they cannot access a GP after-hours, or because there is no bulk-billing in some communities. This has prompted some Area Health Services to co-locate GPs in Emergency Departments, or to set up GP after-hours services.

There are currently no formal guidelines between the State and Commonwealth Governments for funding GP after-hours services, and there has been no real evaluation of respective Commonwealth and State responsibilities for the provision of emergency care.

We acknowledge that there is no single solution to the surge in demand on Emergency Departments. We have received a number of suggestions about ways to relieve the pressure on Emergency Departments, including:

- increased use of senior medical staff, with greater authority to admit and discharge patients from public hospitals
- bed management strategies for the entire hospital to ensure that patients can be moved from the Emergency Department to wards or operating theatres, requiring more flexible discharge and admission practices
- 24-hour availability of senior clinical staff, to undertake more comprehensive assessment of people presenting to the Emergency Department
- more use of short-stay wards, to provide care to people who need treatment but do not need to be admitted to hospital

## Recommendations:

### Emergency Departments and hospital emergency services

5. That the Department develop a three-year emergency care plan which incorporates:
  - projected demand and likely pressure points
  - work on the future roles and numbers of Emergency Departments in metropolitan Sydney
  - the allocation of the \$30 million over three years (and other growth funds) to promote initiatives which improve the flow of patients between Emergency Departments and the hospital, and Emergency Departments and the community
6. That a new funding system for Emergency Departments be introduced from 1 July 2000.
7. That the three-year plan be led by a group of clinicians and senior managers who provide advice on the distribution of additional funds and on long-term planning about the role and distribution of Emergency Departments.
8. That the Department and the Commonwealth Government negotiate an agreed set of guidelines for the funding of GP after-hours services and/or the co-location of GPs in emergency rooms, to clarify objectives and funding responsibilities.
9. That the Department (and in particular the Centre for Mental Health) should fund the provision of specialist mental health nurses to assist with the management of mental health clients in Emergency Departments. Priority should be given to those Area Health Services with a high presentation rate of mental health clients in Emergency Departments, including rural communities.

- better coordination of operating theatres – and where volume necessitates, more theatre time provided to emergency cases
- where appropriate, the location of mental health nurses to assess and plan appropriate discharge care of patients presenting with a mental health condition
- more effective case management of people who are frequently admitted to hospital via the Emergency Department, who could avoid admissions if their care were better coordinated in the community
- providing more incentives for GPs to provide after-hours services, and in some cases to provide those services adjacent to a major Emergency Department

We propose that the NSW Government's allocation of an additional \$30 million over three years to Emergency Departments should be targeted to ensure that these kinds of initiatives are more widely implemented throughout all public hospitals. It is critical that managers and clinicians should be given an opportunity to find the best solution for their hospital. Expenditure should focus on strategies to improve the flow of patients, either into other parts of the hospital or (where appropriate) back into the community with proper referral to their GP or community health team.

In addition to sponsoring local initiatives, there are three State-wide actions which should be undertaken to address the problems in Emergency Departments:

- We recommend that a new funding arrangement should be introduced for Emergency Departments. This would be similar to that proposed for ICUs, where only a small percentage of funding is based on the volume of patients treated. The majority of funds would be provided on a fixed basis, in recognition of the high fixed costs of Emergency Departments and the fact that they must have adequate staff available at all times to assist those who are critically ill.
- We recommend that the Department should facilitate the development and implementation of a three-year emergency access plan. This will support existing strategies as recommended by the Access Block Working Party,<sup>22</sup> and the strategies implemented by Area Health Services to respond to increased demand in winter.
- The three-year emergency plan should consider the most appropriate distribution and role of Emergency Departments now and in the future, particularly across metropolitan Sydney. An agreed plan for the role and distribution of Emergency Departments will ensure that the right level of services is available to meet the needs of the local population, and that the correct level of infrastructure is available to support the Emergency Department – such as ICU beds, operating theatres and the availability of key specialists.



The provision of three-year funding, coupled with \$30 million over three years, will enable clinicians and managers to develop a long-term plan in order to find permanent solutions to the problems of access to emergency care. Again, the emphasis is on those strategies that will better link Emergency Departments to the wider hospital and to the community.

As with ICUs, we recommend the need for a broad range of clinicians to be involved in the development of the three-year plan. They should also provide advice about the distribution of the \$30 million over three years, and about the priorities for distribution of Emergency Departments throughout metropolitan Sydney.

This group should involve representatives from Emergency Departments, operating theatres, ICUs, hospital management and community health representatives.

## **Improving the management of planned and acute public hospital admissions**

We believe that better access to public hospitals and better quality of care can be achieved through improved utilisation of hospital beds, rather than through increased numbers of hospital beds. We have carefully examined the results of the ongoing National Demonstration Hospitals Program (NDHP),<sup>23</sup> in which some NSW hospitals have been successfully introducing the type of changes we recommend.

Some of the key successes of hospitals participating in the NDHP include:

- cancellation of surgery on the day of admission decreased by 50%
- unplanned, unbooked readmissions within a month of surgery reduced by 26%
- 61% of participating hospitals showed overall efficiency gains, and the program has generally been associated with efficiency gains of \$90 million to \$110 million annually<sup>24</sup>

We believe that NSW Health should move to system-wide implementation of some of the features of the NDHP, as set out below. This will have significant benefits to NSW Health in improving the utilisation of beds and the quality of patient care. This will in turn have significant flow-on effects in reducing cancellations for elective surgery and improving access to public hospitals.

### ***Admission on day of treatment/surgery***

Improved utilisation of hospital beds and access to hospital care will be facilitated by the requirement that patients be admitted on the day of their treatment. This now operates in many NSW hospitals. At present 60.3%<sup>25</sup> of NSW hospitals admit patients on the day of their treatment, with some hospitals performing well in excess of this figure.

### **Recommendations: Improving the management of planned and acute public hospital admissions**

10. That the clinical practice targets for admission on day of treatment/surgery and day-only admissions we proposed be introduced from 1 July 2000.
11. That the Department should lead the way in identifying priority conditions and treatments, and that there be an expanded use of clinical case managers and clinical pathways in all NSW hospitals.
12. That NSW Health work with the Divisions of General Practice and the Commonwealth Government to develop a standard (preferably electronic) discharge summary for NSW public hospitals.
13. That together with senior managers, expert leading clinicians should oversee the setting of clinical practice standards, as well as strategies to provide assistance and advice to other hospitals in reaching those targets.

Based on the results of the NDHP and the performance of many NSW hospitals, we believe that the majority of patients being admitted for electively should be admitted on the day of their planned treatment, and that a target of 80% can be achieved.<sup>26</sup> We recognise that the implementation of this target relates to a number of interdependencies, including the use of pre-admission clinics and better communication between GPs and specialists in order to arrange tests prior to admission. We are also mindful that there will need to be some flexibility with this target, and that in each case the ultimate discretion must remain with the clinician. For example, some elderly people or people living in remote locations may not be able to be admitted on the day of their surgery or treatment. We recommend a sensitive implementation of this change, and that providers be given assistance to reorganise their administrative arrangements.

#### ***Day-only admissions***

Across the world there has been a growth in the number of procedures and treatments that can be provided on a day-only basis. This is a direct result of advances in clinical practice (including the use of minimally invasive procedures), improved medical technology and the increasing trend toward ambulatory care.

We recommend the implementation of the Department's target of 60%<sup>27</sup> for all surgery, on a same day basis, be met by 1 July 2001. However for individual procedures (including some medical) we believe there is considerable room for improvement and we recommend that the Department set specific targets for these procedures. We acknowledge that a move to day-only admissions will have substantial implications for work practices, information technology and (importantly) the role and design of many hospitals, such as increasing the availability of procedure rooms and operating theatres.

Our work on metropolitan and rural health services (see Chapter 3) makes a strong case for the need to take account of these changes to clinical practice in planning the role and distribution of services.

#### ***Appropriate health care***

We recommend that there must be a continuous focus on delivering appropriate health care. We are concerned about significant variations between Area Health Services in the type of treatment being provided and in admission rates to hospital. For example, for one procedure alone – tonsillectomy and adenoidectomy – children living in some Areas are twice as likely to undergo the procedure as children living in some other Areas (324 per 100,000 children compared with 169 per 100,000).<sup>28</sup> While obviously each individual case is different and variations always arise, we believe that it is vital that clinicians and managers examine the appropriateness of admissions. We further examine this issue in Chapter 6, where we recommend greater clinical leadership and accountability for the appropriateness of health care.



### ***Clinical pathways***

The widespread use of clinical pathways is an important strategy for improving the overall utilisation of hospital beds. A clinical pathway is developed by expert clinicians in order to define on average how long a person should be in hospital, when they should be discharged and the various health milestones they need to reach in the course of their treatment. While each individual case is different and complications can and will occur, we believe the widespread use of clinical pathways will have the following benefits:

- assisting in more timely discharge – that is, if it has been pre-agreed that a person should be in hospital for say three days based on meeting certain milestones, then the authority to discharge can be devolved to a wider range of clinicians
- facilitating better overall bed management by ensuring more predicability in the admission and discharge planning of patients
- giving patients and their families certainty about when they will be discharged, to enable them to organise their after-care and home situation

### ***Case management***

The NDHP illustrates the value of dedicated clinical case managers, particularly for patients having complex treatment. We have visited hospitals in NSW and other States and seen the benefits of having a single contact point to coordinate pre-admission activities such as tests, and discharge activities such as organising a visit by a community nurse. We believe that the increased use of clinical case managers will benefit people with chronic and complex conditions. We recommend that NSW Health should promote the expansion of these types of positions in all NSW public hospitals.

### ***Discharge planning***

Structured discharge planning is important in order to improve the quality of patient care. We note that discharge planners<sup>29</sup> are common in many hospitals. We recommend that the number of discharge planners should be expanded in all NSW hospitals, particularly for patients having complex treatments. We are concerned that there is no strategy for a uniform, computerised approach to a discharge summary from hospitals to GPs, and from GPs or hospitals to community health or mental health teams. This must be addressed, with cooperation at both the State and Commonwealth levels.

### ***Private sector and non-government sector involvement***

We have met with private sector and non-government providers of health care, who highlight the need for structured planning between the public, private and non-government sectors. At a time when some public hospitals have limited capacity and are under pressure, some private facilities have an occupancy rate of only 72%. This compares with an average occupancy rate of 84.7% in public hospitals.<sup>30</sup> There should be a serious effort to involve other sectors in health service planning in order to encourage more flexible use of all health resources.

## Recommendations:

### Improving health care for people with chronic and complex health conditions

14. That State-wide Priority Health Care programs be developed for cardiovascular disease, respiratory illness and cancer.
15. That the Department establish an advisory group of leading clinicians and managers, to determine:
  - which specific conditions will be targeted within the broader categories, and a priority timetable for the programs
  - priorities for the expenditure of incentive funds of \$45 million over three years to achieve specific goals
  - which local structures need to be put in place to ensure programs achieve changes to local practice
16. That negotiations commence with the Commonwealth Government to ensure that GPs are involved in these programs.
17. That work commence immediately on the feasibility of developing a separate funding stream for chronic and complex conditions, and in the interim implementing the following:
  - separate reporting of hospital admissions
  - monitoring the frequency and length of admissions, particularly those through the Emergency Department

That is, a private or non-government hospital may be able to assist with peaks in demand, or to provide a particular service as part of a wider network of public, private and non-government services.

## Improving service delivery for people with chronic and complex health conditions

### The case for change

We recommend that NSW Health must improve the provision of health care to people with chronic and complex health conditions.

We believe that there must be a concerted effort to improve early detection, early intervention and the provision of a continuity of care between general practice, hospitals and community health providers. We also believe that it is important to reduce the numbers of urgent admissions through Emergency Departments experienced by people with these conditions.

As the population ages and the number of people in NSW with chronic and complex conditions increases, there is a need for early intervention and to improve the management and coordination of their health care. The case for developing new approaches is compelling:

- We analysed six conditions (congestive heart failure, renal failure, diabetes, chronic obstructive airways disease, stroke and HIV/AIDS) and identified that people with these conditions (11% of all people treated in hospitals) accounted for \$1.2 billion of public and private hospital services.
- People with these six conditions rely heavily on the public hospital system, with 85% of their admissions being to public hospitals.
- Around 30% of admissions for people with these six conditions are through Emergency Departments.<sup>31</sup>

If we take heart failure as a more specific example and provide more detailed analysis, the case for change is even more compelling:

- In NSW 23,000 people are admitted to hospital with heart failure each year.
- This accounts for 58,000 hospital admissions.
- 30,000 of these admissions are urgent, through Emergency Departments.
- 4,000 people with heart failure are admitted four or more times in a year.<sup>32</sup>

The provision of health care for people with chronic and complex conditions is often more complicated than for other people in the community. This is not only because they have more frequent and unplanned hospital admissions (including urgent admissions through Emergency Departments), but because they need to interact with a number of health care providers and health services and other Government services at any given time. This includes GPs, specialists, community health workers, mental health workers, allied health and Home and Community Care. Patients are often required to coordinate their own care, putting them at risk of receiving different advice from different providers.



The particular needs of people with chronic and complex conditions present a challenge to the way health care is organised, requiring health care providers to communicate with each other, to work as a team and to avoid duplicating tests and procedures. It also requires better information technology so both the individual and their health care providers have access to accurate and timely information about their health and treatment history.

Improving health care for people with chronic and complex conditions is a fundamental issue of social justice. Individuals with these health conditions are often unable to work, have to meet additional expenses associated with their illness, suffer with chronic pain, and require a great deal of support from their carers and families.

Due to major advances in health care and changing demographics, the proportion of the population aged over 65 is estimated to rise from 12% to 18% by 2021.<sup>33</sup> Consequently, the demand for health care for people living with chronic and complex conditions is increasing in NSW.

In establishing new ways of providing care – such as the use of improved information technology, and providing more care in the community – there is a strong case for giving priority to those who are highly vulnerable and who depend most on the health system to improve their quality of life.

### **Priority Health Care programs**

Our objectives in trying to tackle this complex issue are:

- to improve quality of life of people with chronic and complex conditions
- to improve the quality of life of their carers and families
- to prevent crisis situations and urgent admissions to hospitals

We recommend that NSW Health introduce new approaches to providing care to people with chronic and complex conditions as part of three additional State-wide Priority Health Care programs, namely cardiovascular disease (including the risk factors of diabetes and stroke), respiratory illness and cancer. These would be additional to the existing focus on mental health, drug and alcohol services and Aboriginal and Torres Strait Islander health.

We have not identified the specific conditions that fall within these broad categories of cardiovascular disease, respiratory illness and cancer. The selection of specific conditions will be a matter for a group of leading expert clinicians and managers, which we recommend should oversee the implementation of these programs.

The Government has provided \$45 million over three years to fund initiatives under these programs.

We recognise that the implementation of a State-wide approach will be complex and that change must take place at both a State-wide and a local level. We don't want to prescribe a formula. We want to stimulate debate and provide incentives for change.

We suggest there are three elements to implementing these programs in NSW. First, there is a need to deal with State-wide issues relating to efficiencies in information systems and cross-Government issues. Secondly, it is important to sponsor local projects and assist providers to change clinical practice at the point of care, at the same time involving patients in controlling their condition and reducing their risk factors. Thirdly, there is the more long-term need to investigate whether there are better ways of funding the care of people with these conditions.

#### *State-wide issues*

The following key issues need to be resolved at a State level:

- There needs to be agreement about desired **health outcomes** for specific conditions, and **performance indicators** identified that would assist in measuring these outcomes.
- New **clinical practice** guidelines – informed by research into current successes and innovations in clinical care – need to be agreed.
- **Consumers** must be involved in identifying the services they need.
- New **information systems** must be developed to facilitate the easy transfer of information about an individual's health history and diagnostic information - between GPs, other health workers and hospitals.
- **Cross-Government** issues need to be resolved. There is no point having a focus on health care only. It is important that services like Home and Community Care and Housing are included in the establishment and implementation of the programs, to ensure that the full range of necessary support is in place for individuals and their families.
- **GPs** must be fully involved in planning and delivery at both the State and local levels. The Commonwealth's decision to fund GPs to coordinate care is an important step.<sup>34</sup> This funding and the expanded role of GPs now need to be incorporated into the design of the Priority Health Care programs, particularly at the local level.
- A strong focus on **training** and support for local providers will be important.
- Finally, this can only be driven by **clinical leadership**. Clinicians with proven success in innovation must drive and lead this process alongside senior health managers, many of whom have supported clinical innovations in these areas.

#### *Local projects*

We recommend that the primary focus of activity should be at the local level. This should involve the use of individualised health care plans which focus on early detection, comprehensive assessment, prevention and lifestyle, and which define and link the activities of a number of health workers around the needs of the individual. These health care plans are usually medium-term, and patients are involved in their preparation.



We recommend that the \$45 million allocation over three years should be targeted mainly to support local projects. These would not be pilot projects. They would be directed to encouraging and financially supporting different local approaches to providing care. Consortia of clinicians across Area Health Service boundaries, across the acute, primary and community sectors and across public, private and non-government sectors should be invited to submit plans for projects consistent with the State-wide direction.

#### *New funding arrangements*

We believe that over the next three to five years there should be a serious examination of how funding arrangements should be organised in order to support greater continuity of health care and early intervention. The most important priority is to ensure that the quality of health care improves, along with health outcomes. To a large extent this will drive what types of funding incentives will deliver the best care.

Over time it should be possible to develop a separate funding stream for the Priority Health Care programs. This would involve providing funding to cover the full range of an individual's needs – ranging from visits to their GP, their admissions to hospitals, and services provided by community health, allied health and Home and Community Care. The intention of this type of approach to funding should be to focus on the individual receiving the care, rather than on the institutions providing it.

Any approach of this kind will need to be carefully staged. At present information systems within the State's health care system are simply not well enough developed to separate the full cost of an individual's care over, say, a 12-month period.

As stated, the top priority is to improve the quality of clinical care, including access by clinicians to better data on past treatments and diagnosis. However, a number of questions or issues need to be resolved about ways to improve funding methods in order to support the provision of better quality health care and improved health outcomes. These include:

- how to assess the total costs of the care needs of each patient
- how to provide financial incentives so that the right care is provided at the right time to achieve better health outcomes (for example, it may be better to invest health funds in preventive activities, such as diet and exercise programs, to maintain someone's health)
- how to use funding to encourage links between various health care providers and foster a team approach to providing care during an episode of illness

We recommend that as the first and most sensible step, NSW should identify hospital admissions for patients who fall within the Priority Health Care programs so that there is a capacity to monitor factors such as length of stay and the frequency of admissions, particularly in the Emergency Department.

## Recommendations:

### Nursing workforce

18. That NSW Health continue and expedite its research into the triggers that would encourage registered nurses not actively employed in the State's health care system to return to the workforce.
19. That the outcome of that research be supported with specific initiatives to increase the numbers of registered nurses working in NSW Health.
20. That the Commonwealth and State Governments work together to reduce the cost of nursing education and increase the availability of places in post-graduate specialities.

## Attracting and retaining a skilled nursing workforce

Currently there is a shortage of nurses in Australia, as is the case worldwide. It will be essential to address the shortage of nurses in NSW in order to improve service delivery. Many of our recommendations – including to expand the numbers of clinical case managers, to provide more care in the community to people with chronic and complex conditions, to expand ICU services and to increase access to Emergency Departments – will depend on an adequate and stable skilled nursing workforce.

The following information makes a compelling case for action by both the Commonwealth and State Governments:<sup>35</sup>

- NSW Health is currently actively recruiting 1,000 full-time equivalent nursing positions.
- There are significant shortages in areas such as mental health, community health, midwifery, critical care, aged care, emergency care, and cardiothoracic services.
- NSW Health is currently using 2,215 casual staff, of which 400 are from commercial nursing agencies. This adds to cost and does not facilitate a team approach to the provision of care.
- There are an estimated 40,000 registered nurses in NSW who are not working as nurses in the State's health care system.
- These shortages are affecting both rural and metropolitan services.<sup>36</sup>

We are conscious that in the long term the capacity to attract and retain a skilled nursing workforce will depend on changing the culture of the State's health care system. Nurses, like all other health workers, must be valued and respected and there must be realistic expectations about their workloads. This will require changes in the relationships between clinicians (doctors, nurses and other health workers) and between clinicians and administrators.

A number of strategies have already attempted to address this problem. We recommend further action, based on the following considerations:

- We support the proposed research which is to be undertaken by the Department into why registered nurses are not pursuing nursing careers, and what triggers would return them to the workforce.
- We believe that the outcomes of that research must be followed up by State and Commonwealth support for initiatives to encourage nurses to return to NSW Health, including funding where appropriate. These initiatives might include training and development, expanded opportunities for progression within clinical career structures, and access to accommodation in remote locations.
- Finally, Commonwealth Government support is required in NSW to assist with increasing the affordability of all educational programs and increasing the availability of places in post-graduate specialities.



## Improving information technology systems to support service delivery

### Issues and challenges

We recommend that the Information Management Technology and Telecommunications (IMT&T) strategy for NSW Health should be reviewed to support improved service delivery. We conclude that there is substantial evidence internationally that information technology systems (particularly patient information systems) can be powerful tools to support clinicians to provide care, and to provide consumers with both access to more information and more control over their own health records.

We conclude that both NSW Health and the State's health system have fallen behind many other industries where information technology has revolutionised responsive and effective client service. This is evidenced by the comparatively low rate of investment in information technology in NSW Health, where expenditure is less than 1% of the budget.<sup>37</sup>

There are a number of challenges that will need to be overcome for NSW Health to take full advantage of innovative approaches to information technology in delivering more effective and quality patient care:

- As with many other health systems and many industries, there are a number of legacy systems which have been developed over many years but which are incompatible, do not allow for the transfer of information between providers, and/or do not provide a complete record of a patient's history.
- There are inconsistent standards for coding and classifying patient information and clinical information, and inconsistent standards about privacy and confidentiality.
- There are variations in work practices that impede the introduction of more uniform systems.
- The community has legitimate privacy and confidentiality concerns about the increasing use of computerised information, and these will need to be carefully addressed.
- Information technology is often not seen as a core part of clinical practice, and there will need to be substantial training of clinicians and managers to ensure that there is widespread acceptance of technology as a tool to assist in the care of patients.

We recognise that building a modern information technology platform for a system as large as NSW Health will be a complex task and may need considerable investment. However, we strongly believe that the benefits to consumers, and to the overall effectiveness of the system in the short- and medium-term, will justify that investment.

We strongly advocate the need for a clear and unifying, up-to-date strategy with a strong focus on supporting clinical care.

### Recommendations: Improving information technology systems to support service delivery

21. That the Department should cooperate closely with Area Health Services and the Commonwealth Government to revise its IMT&T strategy to set out a State-wide strategy to develop an Electronic Health Record for every individual in NSW. This strategy should detail:
  - what the record will cover – for example, tests, diagnostic information, treatment history and pharmaceutical information
  - an agreement with the Commonwealth Government about timing, implementation and the inclusion of Commonwealth-funded sources
  - how privacy and security issues will be resolved
  - how clinicians and consumers will be involved in developing the strategy
22. That as part of its work in developing an Electronic Health Record, NSW Health should undertake the following:
  - the introduction of a Unique Patient Identifier, starting with two Area Health Services and the Priority Health Care programs
  - improvements to patient management systems to link services such as hospitals, community health and general practice
  - the immediate mandating of data standards, security standards and the development of classification systems
23. That the IMT&T strategy should set a timeframe for staging an Electronic Health Record for the Priority Health Care programs, and for two Area Health Services. This should include relevant evaluation criteria to assess their impact in improving the quality of care.
24. That the Department work together with the Office for Information Technology to produce a telecommunications strategy designed to support improvements to patient information systems and the expanded use of telemedicine, as outlined in Chapter 3.

### **Impacts of the current system on patient care**

The information technology challenges that confront NSW Health have direct implications for the quality and responsiveness of patient care.

Unless rectified urgently, they will stifle and limit the important changes we recommend throughout this report. These include linking all health care providers in caring for individuals, linking metropolitan and rural health services and providing information via call centres and on the Internet.

The current system has the following limitations:

- There is no single record that contains a person's health history – including illnesses they have had, information about treatments or surgery they have undergone, and any adverse reactions to drugs. This record should also include risk factors such as obesity, family history of disease, smoking and allergies. Although GPs are increasingly computerised, such information is confined to each individual practice.
- There are no computerised links to network GPs, hospitals and community and mental health teams. This limits a clinician's capacity to communicate, for example GPs cannot transfer test results before a patient visits a specialist or is admitted to hospital. As a result, tests may be repeated, and the patient may have to attend a pre-admission clinic or be admitted to hospital before the day of their surgery or treatment.
- Information cannot be transferred between hospitals. Although each hospital has a patient administration system, its data capture is confined to that hospital. In some cases information cannot be transferred between different parts of a hospital, for example from the Emergency Department to a ward or to the ICU.
- Computerised discharge information cannot be transferred from a hospital to a GP or a community nurse. GPs often remain unaware that their patient has been in hospital, and do not necessarily receive any formal information from the hospital, which would give them reliable information about the treatment their patients received.
- There is no single identifier which allows health providers to identify with certainty the identity of the particular individual to whom they are providing services. Again, this hinders the ability to link a number of health providers in the provision of care.
- Consumers have little or no access to records, either in hospitals or through their GPs. Also, there is currently no mandatory requirement for a GP to release a patient's health record when that patient exercises their right to change providers, or when the GP moves on. This is particularly important in rural communities, where the turnover of GPs tends to be higher than in metropolitan communities.
- There is presently no way to link the cost of Medicare and pharmaceutical payments and the costs of State-administered health services such as hospital admissions and community health visits.



One result of these limitations is that the only continuous record of information is the patients themselves. This becomes a high-risk and high-cost strategy when a patient is unconscious in an Emergency Department, is confused or disoriented or simply overloaded with different information from different providers.

We emphasise that difficulties with implementing major advances in health information technology are not confined to NSW Health. However, various health systems around the world do offer examples of outstanding success, which should be examined.

### **The need for an Electronic Health Record**

We recommend that the IMT&T strategy for NSW Health should be revised to accelerate the planning and introduction of a secure Electronic Health Record for every individual in NSW.

An Electronic Health Record is a single, complete patient record of all health care information which relates to an individual. It records all information about treatments that an individual has received – including hospital admissions – and diagnostic information such as test results.

We recognise from the outset that this recommendation will raise legitimate community concerns about privacy and confidentiality. The NSW and Commonwealth Governments and NSW Health must lead the way in developing and implementing the strongest privacy legislation and the strongest security and confidentiality standards.

We believe that the benefits that will flow from the introduction of the Electronic Health Record – including dramatic improvements in the quality of health care and improvements to the effectiveness of the health system – will more than justify the introduction of this record in NSW. However, we emphasise that a careful and staged approach is essential.

### **Features of an Electronic Health Record**

The Electronic Health Record will have the following features:

- It will be accessible to the individual consumer and their providers, regardless of location and with appropriate attention to privacy and security safeguards.<sup>38</sup>
- The individual will need to give consent about the type of information made available, and the transfer of information between providers.
- The record will contain clinical records, advice, specialist referrals, pharmacy details, diagnostic tests and results.
- The Electronic Health Record will be able to provide GPs, specialists, public and private hospitals, community health centres, and other health providers with access to relevant information about an individual's medical history with the patient's consent.
- It will facilitate the use of computerised discharge summaries.
- It will be linked to clinical protocols and clinical pathways and assist the health care provider in clinical decision-making.

- An information system based on the Electronic Health Record will allow the collection of data (with careful regard to security and privacy) that can be used to measure the quality and performance of health care provision, and to assist the consumer in making informed health choices.

The use of an Electronic Health Record is now widely regarded as a high priority in health care reforms in countries such as Scandinavia, the United Kingdom, Canada and the USA.

### **Benefits of an Electronic Health Record**

The introduction of an Electronic Health Record will have a number of benefits to both patients and health care providers:

- A clinician will have all the relevant information before them to diagnose a patient and provide treatment or organise a referral to another clinician.
- When patients are referred to another clinician relevant information can be transferred electronically if the patient consents. This will include test results and possible risk factors such as history of adverse reactions to certain drugs.
- The onus will no longer be on the patient to retain and recall vital and often complex diagnostic information and advice.
- When a person's doctor arranges tests, the results can be transferred electronically to other relevant providers, thus avoiding the inconvenience and cost of having tests repeated.

We believe that to maximise the benefits of the Electronic Health Record, NSW Health consider the introduction of a Health Smart Card for individual consumers. The Health Smart Card would not contain all the information held in the Electronic Health Record, but would act as a pointer to how information could be accessed and identify the type of information that is held.

The Health Smart Card would belong to the consumer. Its value will be in improving an individual's knowledge and control over information contained in the Electronic Health Record.

We recommend NSW Health investigate the use of a Health Smart Card as a means of increasing consumer control over information and that consumer groups should be involved in its development and implementation.

### **A staged approach to introducing the Electronic Health Record**

The move towards introducing an Electronic Health Record must be staged, the subject of open and informed community debate, tested via a number of demonstration projects and subjected to rigorous security and confidentiality standards.

We have identified a number of steps in this process and we recommend a staged approach to the introduction of the Electronic Health Record, as follows:

- The IMT&T strategy should be revised to include the staged introduction of an Electronic Health Record, allowing for the involvement of consumers, clinicians and relevant privacy bodies.



- The strategy should identify the types of information to be recorded, and specify privacy and confidentiality standards.
- This strategy should establish a timetable for a number of steps which are essential to introduce an Electronic Health Record. These include a Unique Patient Identifier, improving links between patient management systems, mandating standards and improving clinical care systems.
- The introduction of the Electronic Health Record should commence with and be evaluated through a number of demonstration projects, including health conditions which fall within the Priority Health Care programs and selected Area Health Services.

### ***A Unique Patient Identifier***

The ability to establish with certainty the identity of an individual who is seeking treatment and to link their identity with existing treatment records is essential, both to implementing the changes we recommend to clinical practice and to supporting greater continuity and quality of health care.

Without a Unique Patient Identifier it is difficult to coordinate a person's interaction with a number of health care providers, especially over time and between locations.

Currently there is no uniform Unique Patient Identifier system for NSW Health. Nor are there mandated requirements or strategies to link patient identification systems between the Commonwealth- and State-funded services.

The Unique Patient Identifier needs to link all activities that an individual can access in an Area Health Service, including inpatient and outpatient activity in a hospital, and community and allied health services.

We propose that the most sensible starting point for this initiative is to develop the Unique Patient Identifier for the three Priority Health Care programs we recommend, and in at least two Area Health Services as part of the demonstration projects recommended in Chapter 8.

A staged approach to the introduction of the Unique Patient Identifier would have the advantage of initially confining its use to a smaller group of people. It is probably of most value to people who regularly access multiple providers, such as people with chronic and complex health conditions. Careful consultation with both consumer organisations and clinicians will be essential.

The Commonwealth Government and the Health Insurance Commission must also be closely involved, as there is little point in a Unique Patient Identifier being confined to State-administered services unless the number can be used when accessing GP services.

Clearly, the strategy for implementing a Unique Patient Identifier for the Priority Health Care programs and for two Area Health Services must be complemented by the development of a strategy for the entire State.

### ***Upgrading patient management systems***

The Department must update its IMT&T strategy to introduce immediate changes to patient management systems, to allow:

- fast-tracking a capacity to transfer information used for clinical care between Emergency Departments and the wider hospital
- accelerating moves to link patient information and discharge information between hospitals and community health providers
- developing the capability to identify individual patients within the Priority Health Care programs through the use of a Unique Patient Identifier
- fast-tracking the ability to transfer information between hospitals within Area Health Services and between Area Health Services
- urgent action to provide computerised discharge information to GPs, and a strategy to establish a computerised link between GPs and Area Health Services

### ***Mandating standards for patient management systems***

In order to introduce the Electronic Health Record, the Unique Patient Identifier and improve the links between existing patient management systems, it will be necessary to define and mandate core standards and practices.

Technical infrastructure and application systems will only be effective if they are accompanied by information system reform in the areas of privacy, standards, classification systems, and work practices.

All parts of the State's health system must adopt consistent data standards, terminology and classifications. Unless they do, information held by different service providers cannot be shared and exchanged.

The failure to adopt and implement uniform standards corrupts the quality of the data, producing unacceptable risks to the consumer where information is to be used for clinical care.

For electronic systems to exchange data, clinical information must be coded in a common language. Until this common language is defined, accurate electronic communication between service providers and the use of technology to support decisions is not possible.

We recommend that the Department mandate standards for data, privacy and security and work practices, to be used in all patient management systems in NSW Health.

### ***Clinical care systems***

In order to diagnose a patient's condition and to develop treatment plans to bring about the best possible outcome for the patient, clinicians require information which is both timely and of high quality.



Such information is fundamental to the delivery of best practice clinical pathways.

Where feasible, the Patient Management Systems should be extended to include results and the entry of orders. This would encompass the ordering of pathology tests, radiology examinations and consultations, and the potential to dispense drugs on-line.

We recommend that when revising the IMT&T strategy clinical care information systems are identified, in consultation with clinicians, and an implementation timetable is established and costed. We also recommend that these clinical care information systems are integrated with existing or proposed systems, and have the capability to deliver information for clinical decision-making to all health care providers at the point of care.

#### **Demonstration projects for the Electronic Health Record**

We recommend that within two years NSW must be in a position to introduce an Electronic Health Record. Again, this should commence with the Priority Health Care programs

to allow for proper evaluation and negotiation of relevant privacy issues. Its introduction must be on a voluntary basis for patients. We also recommend that it should be introduced in two Area Health Services as part of demonstration projects (see Chapter 8).

#### **Improving the telecommunications network**

The availability of a quality telecommunications infrastructure linking all parts of the State's health system is critical to achieving an integrated health information system. Such an infrastructure and consequently such integration are most conspicuously absent in rural areas. We note with considerable concern that there is no agreed telecommunications strategy to address this problem. This will need to be developed for a number of Government departments to avoid wastage and mismatches between Government agencies.

#### **Implications for funding**

As stated, while we recognise that there may be additional capital costs associated with improving patient information systems, we advocate that these must be weighed against the substantial savings and improvements to patient care that can be realised. These savings and improvements include a reduction in the duplication of tests between GPs, specialists and hospitals and the capacity to support early intervention in patient care, thereby reducing urgent admissions (sometimes through the Emergency Department) to hospitals.

## **Achievable benefits – Improving service delivery**

### **Critical care**

- Improved coordination of Intensive Care Unit services will reduce Intensive Care Unit transfers between hospitals.
- The increased availability of Intensive Care Unit services will improve access in other areas such as surgery, and reduce blockages to access in Emergency Departments.
- A three-year emergency care plan will provide a long-term strategy to access problems in Emergency Departments.
- Expanded GP after-hours services will reduce the pressure on Emergency Departments.

### **Planned and acute hospital admissions**

- The better utilisation of hospital beds will mean better access for all patients, reductions in waiting times and an increased capacity for the system.

### **Chronic and complex health conditions**

- Health outcomes for patients with these conditions will improve, as will their quality of life.
- Urgent admissions through the Emergency Department will be reduced.
- There will be a new focus on maintaining good health, through early intervention and the provision of more care in the community.

### **Recruiting and retaining a skilled nursing workforce**

- The capacity to attract and retain a skilled nursing workforce will support improvements to service delivery, and reduce the high extra costs currently incurred in the employment of casual and agency staff.

### **Improving patient information systems**

- The State's health system will gain the capacity to revolutionise health care and link health care providers.
- There will be a vastly improved capacity for early intervention and the coordination of care.
- Consumers will have better access to information about their health care, and greater control over security and privacy issues.
- The duplication of tests will be reduced.
- GPs, hospitals and community health providers will be better able to work towards delivering a seamless health care service.



- 20 Defined by NSW Health as Level 6 Role Delineation, and the Faculty of Intensive Care as Level 3.
- 21 NSW Health Annual Reports, 1997/98 and 1998/99, NSW Department of Health.
- 22 The Access Block Working Party was convened by the Minister to advise on delays in transferring patients from Emergency Departments to ward beds, and to identify practical solutions to address these problems.
- 23 The National Demonstration Hospitals Program is a national initiative to improve care in hospitals, commenced in July 1995. Stage 1 was completed in June 1997, Stage 2 in July 1998, and Stage 3 will run through until March 2001. Participating NSW hospitals are St George, Prince of Wales, Liverpool Health Service and John Hunter Hospital.
- 24 Australian Resource Centre for Hospital Innovations, National Demonstration Hospitals Program Phase I Review, 1997.
- 25 Day of surgery performance for booked admissions in NSW, December 1999.
- 26 These procedures include endoscopy and cardiac catheterisation.
- 27 Same Day Surgical and Endoscopic Procedures Policy, NSW Health, 1999, p14.
- 28 Analysis undertaken by the Health Services Research Group, University of Newcastle, 1999.
- 29 A discharge planner organises discharge activities, such as referral to the community health team, transfer of information to the GP, and assessment of post acute care needs.
- 30 NSW Health Annual Report, 1998/99.
- 31 Analysis undertaken by NSW Department of Health, Structural and Funding Policy Branch, 1999.
- 32 Analysis undertaken by NSW Department of Health, Structural and Funding Policy Branch, 1999.
- 33 NSW Health Annual Report, 1998/99.
- 34 In November 1999 the Commonwealth commenced the payment for the three new Medicare Benefits Schedule items that will enhance Primary Care. These items cover annual voluntary health assessments for all people 75 years of age and over, case conferencing and care planning. Spending for the new MBS items will total around \$110 million over four years. (Source: Peter Davidson, Manager of General Practice Program, Health Services Development Branch, Commonwealth Department of Health and Aged Care.)
- 35 Information supplied by the Chief Nursing Officer, NSW Department of Health 1999.
- 36 Information supplied by the Chief Nursing Officer, NSW Department of Health 1999.
- 37 Information supplied by Information & Assets Services – NSW Department of Health.
- 38 For example, a diabetes patient with a clinical case manager will be able to update their record daily with their blood sugar readings.