GP Gateway Progress Report
30 May 2001

1 Project Deliverables

1. An interface based on web-technology that will enable GPs to access hospital information on patients in their care, with sufficient speed as to make its use feasible in short patient consultations
2. An agreed accreditation process that gives GPs authority to access data held by hospitals in the local Area Health Service (Illawarra Area Health Service)
3. A system of improved data security and transfer between computers of Area Health Services' hospitals and local GPs
4. Interim and final reports that describe the development of the interface and its evaluation.

2 Background

This document is written as an accompaniment to the first interim report presented on 28 February 2001. The first interim report is available from the IDGP internet website at http://www.idgp.org.au/InterimReportFeb2001.doc

2.1 GP Computing Environment

Almost 45% of the 240 Illawarra GPs have dialin access to the Illawarra Area Health Service (IAHS) network for e-mail facilities and access to selected pages on the Illawarra Division of General Practice (IDGP) and IAHS intranet. The GP Gateway website has been published to the IAHS intranet and is accessible to all the GPs who have dialin authorisation. A demonstration version of the GP Gateway website has been published to the IDGP internet site http://www.idgp.org.au.

2.2 GP Working Party

Nine GPs are members of the GP Working Party.
Four GP Working Party meetings have been held to date.

1. The first meeting, in August 2000, set out the design philosophy and the layout of the webpages and produced a priority list of patient information to be included on the website. Clinically based patient information including investigation results i.e. pathology results and radiology reports, and discharge medications were of greatest priority with information from surgery, cancer, etc seen as relevant but of lesser priority in day-to-day general practice.
2. For the second meeting, in December 2000, GPs were able to use an operational version of the prototype website to assess its features. The GPs suggested improvements and enhancements to further clarify the information being displayed.
3. The third meeting, in March 2001, covered the design of post-consultation referral forms and proformas for hospital to GP correspondence. This is not related to the formal discharge referral process being developed by NSW Health. Recommendations from GPs included:
    - A form should be setup for the hospital-based service provider to respond to the GP's e-mail referral. Content of the form should include,

- Consultation date
- Action to be taken at the consultation
- Phone contact
- Name of person assigned, if known

Perceived benefits to the GP were:

- If the GP knows the appointment date, patient management strategies can be put in place to cover the time up to the date of the consultation.
- Often the patient will contact the GP for details of the consultation rather than contacting the service provider. The GP would have the details to be able to inform the patient.

- Page layout changes
  The search page should include all of the following:
  - Name, year of birth, approximate age, client ID, address
- Proforma for hospital to GP correspondence should include:
  - Diagnosis or opinion (if diagnosis is not available)
  - Complications or problems that need a follow up or for the GP to be aware of
  - Investigation results or investigations pending (yet to be done)
  - Therapy e.g. medication regime, physiotherapy
  - Ancillary services actioned or required to be actioned
  - Planned date of review
  - Who will be participating in the review?
  - Has a booking been made or is the patient to make the booking?
  - Checkbox: Is a referral needed for the review?
  - Checkbox: patient has been requested to visit their GP within ___ days
  - What should the GP action?
    e.g.
    - recheck tests that have been done
    - adjust therapy
    - monitor blood pressure
    - further supplies of medications

It was suggested that the proforma should be treated as the minimum patient information required by the GP with hospital departments adding their own specific information as required.
The proforma has been circulated to the Wollongong Hospital Emergency Department, Renal Service, Oncology Daycare and the Diabetes Service to assist in the design of their document templates.

4. The recent meeting, in May 2001, covered the usability features of the website, a discussion of the GP training requirements and review of the *Website User Guide*.
   - GPs were satisfied with the overall progress of the website developments. During the meeting, attendees were able to use the website. All GPs

viewed their list of inpatients and associated investigation results. Some GPs had progressed to trialing referral forms.
- GPs felt that discharge medication lists, outpatient intervention results and pathology results would be required to make the website of greater use.
- GPs indicated that the *website user guide* could be used as a step-by-step accompaniment while navigating the website and minimal training would be required for other GPs with basic computer skills.
- When approached on the subject of patient's objecting to GPs accessing hospital information from their surgery, GPs felt that the only patients who may object were the mentally impaired patients.

2.3 Steering Committee

The IDGP-IAHS IT Projects Committee is the steering committee for the project and is now a subcommittee of the IAHS IT Clinical Committee. Recent tasks being undertaken include:
- a draft letter to GPs informing them of the requirements to receive information about patient interventions from the IAHS,
- inclusion of GP and consent in the standard waiting list letter,
- procedures for recording a patient's signed consent,
- GP gateway access to pathology results,
- Memorandum of Understanding between IAHS and IDGP is being developed and will include guidelines for sponsorship and ongoing maintenance of joint projects.

2.4 Website Applications

The IAHS has recently produced a website for internal use that is similar in concept to GP Gateway. The IAHS website developments have provided GP Gateway with access to radiology, gastroenterology and nuclear medicine reports and discharge summaries.
The IAHS intranet now hosts two separate client information sites, one for use by GPs and one for use by internal IAHS staff. Both sites have access to common data sources but the rules for access to patient information are different for both sites.
The potential exists to have a common site for online referral forms. GPs refer to hospital services as well as hospital departments referring patients to other departments within IAHS e.g. Emergency Department to Ambulatory Care. Further discussion is required with the various departmental managers to coordinate the processes and procedures.
The use of common interfaces and forms will ensure the ongoing support and maintenance of the GP systems.

3 Current Status

The website has progressed through four iterations of development over the last six months. The efforts of the GP Working Party and IAHS staff have culminated in the fully operational version of the website being published on the IAHS intranet on 8 May 2001. GP members of the Working Party were the first to be

notified of the production website and on 25 May 2001 notification was sent to all existing GP intranet users.

The DocMail message process, where GPs are notified of their patient admission and discharge status, has been updated to include a link to the patient's details on the GP Gateway website.

A revised demonstration website has been published to the Illawarra Division of General Practice (IDGP) website http://www.idgp.org.au/cidemo/gpgateway.htm

A *Website User Guide* has been prepared as an accompaniment for GPs using the website. Any GPs requesting assistance with access to the intranet will be managed by the IDGP IT Helpdesk staff. One-to-one training is available for GPs who want to become more familiar with web browsing techniques.

An earlier version of the website was presented to the Director General of NSW Health, Mr Reid at an informal presentation arranged by the IAHS. Mr Reid's main interests were the diversity of data linkages, use of a unique identifier and rules used to collate the information presented on the website. A prior presentation to the NSW Health Minister, Mr Knowles, covered issues including use of patient consent, realtime access to data and the processes required to provide results reporting to GPs.

The project risk assessment (Appendix D) has remained consistent over the last three month reporting period.

4 Comment on Outcomes

Description of Outcomes for the Period	Indicators
• *Prototype 1 piloted by GPs*	• *10 GPs participating in pilot* *Feedback from pilot*
Progress: The layout of the first prototype of the website was acceptable to GPs. Content of clinical intervention reporting was seen as lacking. GPs suggestions for enhancing the patient search facility and introducing quality assurance measures were adopted. 9 GPs are participating in the working party.	
• *Revised Prototype piloted by GPs in General Practice setting*	• *10 GPs participating in pilot* • *Feedback from pilot*

Progress: GPs tend to use the website to view their inpatient list and peruse the inpatient interventions. Some use has been made of the Antenatal Shared Care notification forms. 9 GPs are participating in the working party.	
• *Further revised Prototype upgraded based on evaluation findings*	• *Final prototype developed*
Progress: The final version of the website was published on 8 May 2001. The functionality of the website was guided by the GP requirements and the potential of delivery of functionality during the timeframe of the project. There are three outstanding areas of importance to GPs that have not been delivered to date: discharge medication lists, patient's intervention results/reports for outpatient services (currently only available for inpatient services) and pathology test results. Reasons for these undeliverables has been documented in section 5 of this report. A document has been forwarded to the South Eastern Area Laboratory Services requesting a quotation for the costs of providing GP access to pathology results.	
• *Training course conducted for each pilot GP*	• *10 GPs attended training*
Progress: Each GP in the working party has been approached about their training needs. The majority of GPs have indicated that they are satisfied to access the website using the *Website User Guide* manual. Three GPs have requested one-to-one training.	
• *Report to ADGP*	• *Report completed* • *Report received by ADGP*
Progress: Report compiled An abridged version of all reports to ADGP will be/are available on the IDGP internet site http://www.idgp.org.au	

5 Issues

The current project issues are outlined below.

5.1 Response to Privacy Issues

In response to the privacy and confidentiality issues forwarded to NSW Health, a draft guideline was developed by the NSW Health Information Management and Clinical Systems Branch. The main emphasis of the draft centred on patient consent, and preferably signed consent, as the indicator of GP access to patient information.
Further guidance will be sought on the guidelines for the patient's GP accessing information about outpatient interventions at IAHS services. The GP may have provided the patient's letter of referral to the service or may have been nominated by the patient at the time of registration. Currently, very few outpatient computer systems and manual processes capture outpatient consent.

5.2 Website Fulltime Access

IDGP believe that one reason for GPs limited access to online information is the adhoc nature of the connection to the IAHS network. In the current situation, GPs access the intranet for very limited periods during the day to check e-mail and/or browse their inpatient list.
IDGP will be offering support to GPs to access the IAHS network continuously during business hours. The IAHS offers e-mail, intranet and internet services to GPs. The hypotheses being tested is that GPs will have greater utilisation of electronic resources on the intranet and internet if those resources are immediately available. The time required to initiate a dialup (up to 2 minutes) currently precludes use of online services during a standard consultation.
The offer of continuous or permanent connection to the IAHS network will be conditional upon the GPs providing their own PC, modem and phone line. IDGP will be providing the onsite support to GPs and facilitating the communications between GPs and IAHS.

5.3 Access to Patient Data

A large number of existing clinical reporting systems are proprietary and lack a web compliant architecture. As a partial solution, IAHS has setup a datawarehouse process for capturing and storing clinical reports for the major areas of radiology, gastroenterology and nuclear medicine. This step has allowed GPs to access inpatient reports from these clinical areas using GP Gateway that otherwise would not have been available.
Microsoft Word templates are being used by some IAHS departments to generate referral letters to GPs. For GPs receiving their referral letters by e-mail, the size of the MS Word document attachment is a cause for concern especially as all GPs access the IAHS network using modem connections. A review of the document creation process is underway at IAHS to devise a way of creating minimal size documents to send to recipients of electronic discharge referrals. The discharge referral documents are loaded daily into a database to provide effective reporting and time efficient display of the referrals using the intranet.

5.4 Discharge Medication List

Liaison with the IAHS Chief Pharmacist indicated that the guidelines for release of the patient's discharge medication list to the patient's GP requires the hand signature of a hospital doctor. Communication of the discharge medication list cannot be only from the pharmacist to the GP, it must also include correspondence from the hospital doctor to the patient's GP.
The software version of the computer application, STOCCA, used by the hospital pharmacists to record patient medications, does not have the facility to provide patient medication lists in a suitable format for GPs. A consortium of NSW Area Health Services manages the software development. Software enhancements that relate to correspondence with GPs rates low on the consortium's priority list. Internal reporting requirements and stability and reliability of the application are considered high priority issues.
It appears that discharge medication lists will not be a component of the GP Gateway website during the timeframe of the project.

5.5 Recording of GP and Consent

The IAHS staff at Medical Records and Admissions have started working on a paper-based form suitable for use as a patient signed consent form. A draft has been circulated to appropriate IAHS managers and a meeting is to be convened in June to progress the design of the form. The NSW Health Information Management and Clinical Systems Branch has asked to review the wording on the form prior to implementation.
As appropriate, the patient will be requested to complete and sign the consent form at the time of the service. The form will include acknowledgment of the patient's GP and preference for consent. Data entry for the hospital computer systems will be taken from the signed consent form.
A request has been sent to NSW Health to consider including GP nomination and consent in the standard waiting list letter. The patient would have an opportunity to consider their response prior to admission.

5.6 Informed GP participation

GPs who elect to receive hospital-based patient information from IAHS will be requested to sign a declaration that details the guidelines for release of patient information to the GP. A draft of the document is being prepared for submission to the IDGP-IAHS IT Projects Committee in July 2001.

5.7 Saving documents electronically

IAHS hospital departments are being encouraged to save documents electronically and to introduce a policy of storing indefinitely electronic documents containing patient clinical information. The Information Services Department is providing document storage and design of document templates for departments who provide patient information for access via the IAHS intranet. Consultation is underway with IAHS departments with regard to the clinical documents that could be accessible to GPs via the GP Gateway website.

5.8 Service Level Agreement

A service level agreement is being developed to document the maintenance and support arrangements with IAHS that will follow the completion of the project. Topics to be covered will include:

- management of website users,
- process for website modifications,
- hours of support,
- reporting requirements,
- the roles and responsibilities of each party.

5.9 Shared computer systems

A request for quotation has been submitted to the South Eastern Area Laboratory Services (SEALS) for GP access to selected pathology results using the CouRieR web interface. The IAHS has recently introduced a new pathology recording system that is administrated outside the Area. The new pathology system includes a website that authenticates users then provides access to a broad range of patients and associated test results.
The GPs requirements are different to the internal users of the system. The patient's nominated GP would require access to test results for one patient based on a date and time interval that coincides with the period of patient consent. Following the return of the quotation, IDGP will make the decision on whether to proceed with the requested enhancements.

5.10 GP Desktop Support

The software used on the GP desktop needs to be compatible with the operation of the website. The network setup of surgeries is not standardised and conflicts do arise between server setup, modem sharing software and website access requirements. IDGP IT staff are supporting GPs to setup their systems to access the GP Gateway website.

5.11 Notification of website unavailability

There are times when the website will be taken out of service for planned maintenance. A procedure needs to be developed to notify the participating GPs that the website will be unavailable. In a LAN based situation, it is usual practice to issue a broadcast e-mail message several days beforehand notifying users of the website being unavailable. In a WAN based environment, GPs may not be accessing the network between the time of the broadcast message and the start of the interruption to service.
Arrangements will form part of the service agreement discussed in section 5.8.

6 Lessons Learned

6.1 Coding Standards

To be able to maintain the website following the completion of the project, a standard for coding web-based programs is necessary. A standards document

has been developed (see Appendix F) detailing the layout of each file that is created and a guideline for documenting modifications.

6.2 Access to the system by GPs

GPs in the working party have indicated that their major use of the website will be to keep informed of the current location and status of their patients. GPs will view their inpatient list before beginning consultations for the day and will possibly view one or more test results. If there was access to pathology results and emergency department services, GPs would be more inclined to use the website as a timely source of patient information.
The Community Health referral form has been available on the website since 30 April 2001. To date, the central intake desk at Community Health has received no e-mail referrals. Some GPs have printed the referral and one GP indicated that being at an alternate surgery all the information was not available to complete the online referral. As the website becomes more utilised during business hours, the use of the website facilities is expected to grow (see Section 5.2).

6.3 Hospital - GP Communications

The introduction of online referrals to the GP Gateway website has generated considerable interest amongst contributing GPs and hospital staff.
Staff from IAHS hospitals involved with the project have requested that GP referrals include a clear statement about the type of service the GP is expecting the IAHS to provide.
The GPs in the working party have asked to receive referrals from the IAHS that include a clear statement of how the GP is being asked to participate in the continuing care of the patient.
Work is continuing to refine the referral process to meet the expectations of both parties.

6.4 Interdependence of data

The rules for GPs access to inpatient data on the website involves a cross check of patient consent and GP authorisation, prior to the display of every page of patient information. This data is recorded in the Admissions Terminations Separations (ATS) section of the Patient Administration System (PAS). If the ATS is unavailable then all the patient data usually accessible from the website will not be available to the GPs during the time of the outage.
The ATS has data, including the patient's GP and consent, available online for the previous three years. When the data is archived, GP and consent are no longer available. The effect is that the GPs link to data older than three years is removed. Hence, GPs access to inpatient information is restricted to the interventions that occurred during the previous three years eventhough peripheral systems may have the capacity to record patient data indefinitely eg surgery system.
The restriction has impact on the GPs work practice. If a patient has had a baseline intervention, the GPs may need to record the results in their own records because in 3 or more years the results would not be available to them

using the website. The IAHS would have the data available electronically but due to rules of GP access and the operation of internal systems the link between patient-GP-results would no longer be accessible electronically.
This will not be an issue until possibly 2003 as patient consent and GP were not recorded accurately before 1999. A decision on a new PAS is expected by July 2003.

7 Next Phase

The main building blocks of the website are complete and the final stage of the project is underway. GP training has commenced and the *Website Training Guide* is available for use by GPs.
Progress with patient consent forms, further development of the online referral processes and the final evaluation will be covered in detail in the next report.

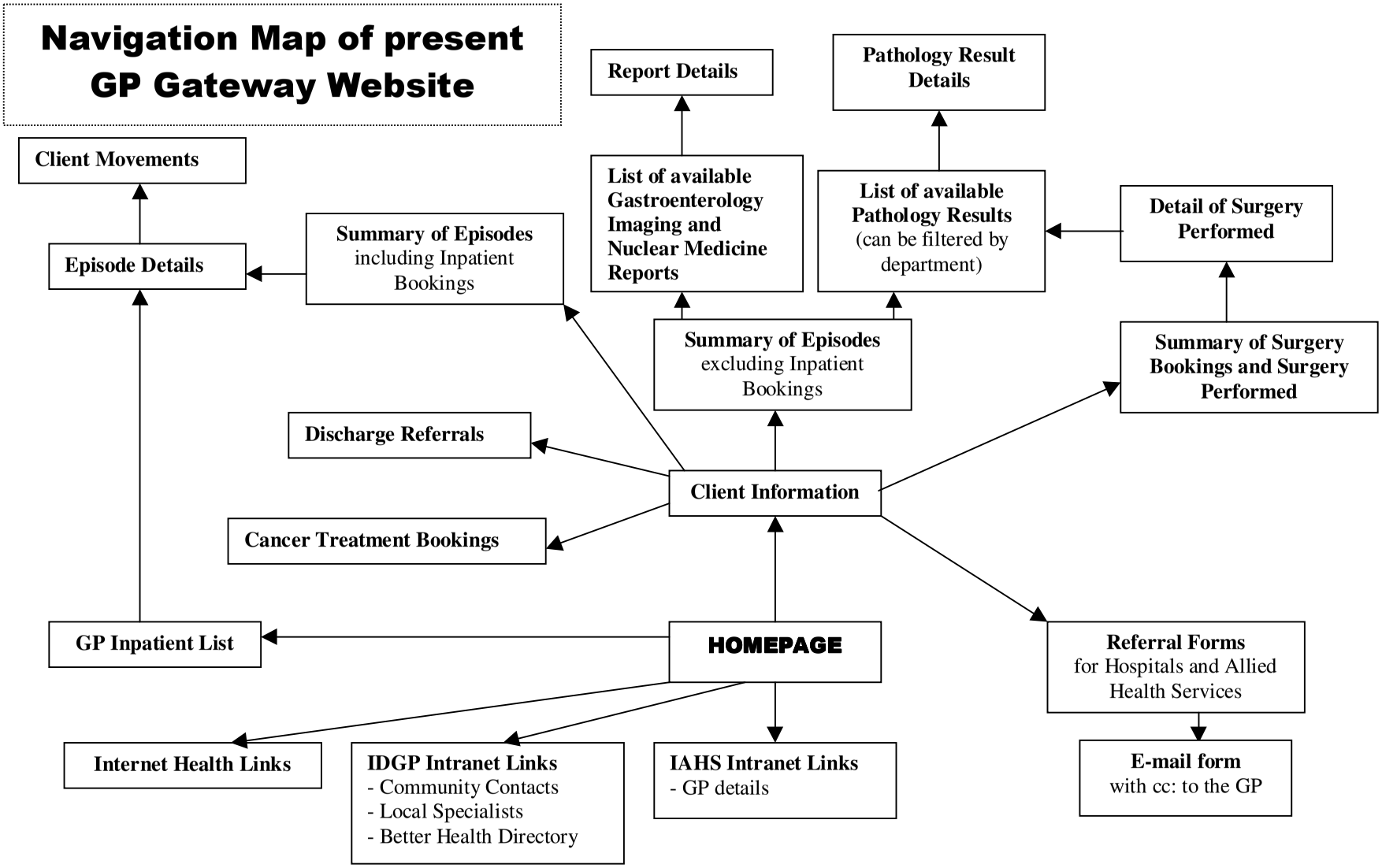
8 Appendix A: Clinical and Administrative Patient Data

GPs in the Working Party have requested the following information be provided on the website:

System	Data Requirements
Antenatal	Baby births Statistics including height, weight, APGAR
Bookings	Future bookings for the patient at the hospital clinics
Cancer Care	Clinic Treating Doctor Treatment provided Appointment date Patient attendance
Discharge Summary	Date of discharge Discharge Diagnosis Full discharge summary document
History	List of previous interventions for the patient including inpatient and outpatient services
Investigations	All to include Date of Test and Test Performed
Pathology	Haematology Biochemistry Microbiology Hystopathology
Imaging	CT Scan MRI Ultrasound X-Ray
Nuclear Medicine	
Pharmacy	Discharge Medications Medication Plan
Theatre	Date of Surgery Surgery Performed Surgeon Pathology results, where applicable Final Diagnosis
Allied Health	All to include Date of consultation and the following: • Interventions • Diabetes • Physiotherapy • Rehabilitation
Surgeons Waiting List	List of Surgeons Waiting list time per surgeon
Pathology Companies	List of local pathology companies Link to pathology results per patient

9 Appendix B: Website User Guide

10 Appendix C: Layout of Website



- A request has been sent to SEALS for a quotation for GP access to Pathology Results.
- Patient information available on the website is for inpatient interventions.

11 Appendix D: Project Risk Assessment

Risk	Impact	Comment
1. Performance		
1.1 Dialup connection not adequate	High	1.1 GPs do not have permanent connection to the health network.
1.2 Connection speed not adequate	Medium	1.2 Dialup modem is the method GPs use to connect to the health network.
1.3 Data search speed not timely	Medium	1.3 The patient information is not indexed by GP.
2. Access to information		
2.1 Privacy rulings need to be applied.	High	2.1 How to apply privacy rulings is not fully understood.
2.2 All patient data is not recorded electronically.	High	2.2 Most clinical information is stored in paper-based systems.
2.3 Consent and GP are not electronically recorded in all hospital systems.	High	2.3 Outpatient systems e.g. cancer care, do not record patient consent or GP.
2.4 Hospital policies are not defined regarding the information available to GPs.	High	2.4 Issues relating to GP access to patient information have been raised with IAHS management.
2.5 Lack of participation by hospital department managers and their staff.	Low	
2.6 Change of major feeder systems is planned e.g. laboratory system, patient admission system.	High	2.6 Replacement of major software started 24 February 2001.
3. Implementation		
3.1 Access to an analyst familiar with the data sets may be restricted.	Medium	3.1 Limited number of hospital staff who know the data integration components of the systems.
3.2 Hospital priorities may change overtime.	Low	
3.3 GPs not willing to use the system.	Medium	
3.4 Staff may change at the hospital's Information Systems Department.	Low	
3.5 Project management may change at IDGP.	Low	
3.6 Adequate resources may not be available to meet the GP requirements.	High	3.6 A large number of business systems are not fully electronic and/or do not have privacy provisions.
4. Sustainability		
4.1 No benefits may be realisable to the hospital and its departments.	Low	4.1 Many hospital staff have expressed interest in using the system.
5. Participation		
5.1 GPs are not familiar enough with web technology to contribute to the development of the web interface.	Low	5.1 90% of the anticipated number of GPs are currently participating in the web interface design

12 Appendix E: Website Screen Images

13. Appendix F: Coding Standards

13.1.1.1 Purpose

Each file created for use with the Cold Fusion web server will comply with the following standards for coding and documentation.

The coding standards were developed to provide a framework for creation and maintenance of Cold Fusion files.

This document should be regarded as a live document where enhancements can be made if the current wording is found to be incomplete or where an alternate standard would provide greater expediency of document creation and maintenance.

Many of the guidelines have been derived from the Cold Fusion Studio design toolset.

13.1.1.2 Standard Template

Each file is to be created using the standard template.

13.1.1.3 Formats

- For normal presentation, the font style should be Arial size 10pt.
- For headings, the font style should be Arial bold size 14pt.
- To **bold** text use   tags.
- Use a relative link to define the path to a file.
- All CFML tags should be entered in lower case.
- When using <cfif> or loop statements, indent the code inside the tag using a minimum of four spaces to improve readability.
- When using nested tags, use a comment beside the end tag to indicate which start tag the end tag relates to.

Tables

- The <tr> tag should appear on a separate line to the <td> tag.
- Each <td> tag should start on a separate line.

13.1.1.4 Naming Conventions

- The name of the field must indicate what the field represents e.g. Dischargestatus
- The name of the file must indicate its purpose e.g. InpatientSummary.cfm
- Each word used in the file/field name must start with an uppercase character.
- Fieldnames, created within the file, are to be one alphanumeric with no spaces.

13.1.1.5 Format of the file

Each file should be created in the following format, in top to bottom order:

13.1.1.6 Heading

The first line of the file is to indicate the document type.

<!doctype html public "-//W3C//DTD HTML 4.0 Transitional//EN">

<html>

<head>
The heading is to include:

- a <title> tag that has a short description of the purpose of the file e.g. Policies & Procedures
- a link to the style sheet for the application, where the stylesheet is accessible in the templates folder

<cfhtmlhead>
To be used when any components about the file need to be available in the heading only.

13.1.1.7 Comments

All comments are to begin and end with the Cold Fusion standard three dashes i.e. <!--- --->. Comments using two dashes should be reserved for other coding languages e.g. JavaScript.

As a chronology of the file, it is necessary to include:

- The date the program was created and by whom.
- A short description of the functions of the program.
- A list of parsed parameters that are accepted into the program.
- History of modifications giving date of the changes and person making the changes. The most recent entry will be at the bottom of the list.

```
<!---
    Created: 1/5/2001 by Bill Smith
    Description: Display the contact details for a nominated employee
    Parsed: Lastname, Firstname
    Last modified: 10/5/2001 by Hugh Ryan
    History:
        3/5/2001 Included fax number in list of displayed details.  Bill Smith
        10/5/2001 Included link to white & yellow pages. Hugh Ryan
--->
```

If large blocks of code need to be commented out, include a comment giving:

- a short reason,
- name of the person making the change,
- date of the change.

13.1.1.8 Parsed Parameters

- If a field name is used in the file, the field name should be prefixed with its origin e.g. URL.Givennames, Form.Familyname. Local constants and variables will not have a prefix.
- Use the Trim function on all parsed character-based fields.

The order of parsed parameters in the sending file should match the order given in the description comment at the top of the receiving file.
Check to see if parsed parameters exist i.e. <Isdefined> function. If the parameters are required and do not exist, abort and return to the previous page.

13.1.1.9 Constants and Variables

<cfset>
All constants and variables to be initialised are to be included in the one region of the file. A reason for creating each of the constants and variables needs to be explained.

13.1.1.10 Templates

A new template should be created where the code is used more than once in the application.

The <cfinclude> tag can be placed as appropriate throughout the file.

13.1.1.11 Queries

<cfquery>
All queries, except queries that rely on a decision step before execution, are to be included in one region of the file. A short description of the purpose of the query and the type of database is to be documented preceding the query code.

The elements of the <cfquery> tag should be 'name' followed by 'database'.
A maximum of two fieldnames should exist per line of the query.
The where clause is to be arranged for readability with the 'and' and 'or' to be at the start of the line.

13.1.1.12 Database Fields

The table name is to be used in uppercase. The fieldnames are to have the first character only being uppercase e.g. REPORT.Episode.

13.1.1.13 Application.cfm

Each application is to contain a file application.cfm to provide the error handling for the application. Unexpected errors are to generate an e-mail to the Website Administrator and the System Administrator.

The format of the comment at the top of the file should be as follows:

Description:	giving the reason for the project
Sponsor:	who is the registered sponsor for the project
Maintenance:	who is maintaining the application
SLA:	agreement in place for support of the application
Operating Environment:	the components required for the application to function e.g. CF2.5 / Attunity V3 / MS IIS4 / MS NT 4

13.1.1.14 Folders

The application is to be organised into a series of folders. Standard folder names include 'template' and 'images'.

13.1.1.15 Logic Statements

Consider using a <cfswitch> tag in preference to a <cfif> tag.

Positive logic should be used in the <cfif> tag, where possible. If it is necessary to use reverse logic, provide an explanation of the logic prior to the statement.

When the logic of the <where> clause is lengthy and complex (more than 5 fieldnames involved), provide an explanation of what is to be returned by the query.

An explanation should be provided for calculations performed or subqueries called in the <select> section of the query.

13.1.1.16 Style Sheets

The use of style sheets is encouraged. The stylesheet file should have the extension .css and be placed in the 'templates' folder of the application that uses the stylesheet.

13.1.1.17 Images

Images should be optimised to reduce the bandwidth for download.
All images should be placed in the 'images' folder.

13.1.1.18 Displaying Data

If no data is available, a message should be displayed indicating **No *type* records available.** Where *type* is the category of data e.g. radiology, surgery, etc.

If there are conditions relating to the presentation of the data, display the conditions as a note at the bottom of the data e.g. Note: Results updated 2am daily.

13.1.1.19 Error Handling

Capturing of errors should be managed by Application.cfm so that unexpected errors display a message to the user to contact the System Administrator.

All priority one errors should generate and e-mail to the System Administrator and the Cold Fusion Administrator.

14. Appendix G: Newsletter Articles

Newsletter articles about the GP Gateway project have been published in the IDGP GP News.

15. Financial Statement

16. Further Information

Further details about the GP Gateway project are available by contacting:

Illawarra Division of General Practice
Phone (02) 4226 7052
Fax (02) 4226 9485
E-mail: idgp@idgp.org.au