

SA Divisions of General Practice Inc

Discussion Paper & Responses (final)

A statewide electronic messaging system
for General Practice in South Australia.

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**SA Divisions
of General
Practice Inc**



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1 Purpose

The purpose of this document is to instigate discussion on the development of a common statewide electronic messaging system for General Practice and other parts of the health sector in South Australia. As a result of this consultation it is planned to establish a shared set of requirements of any such messaging system.

2 Target audience of this paper

Primary

- Divisions of General Practice in South Australia
- General Practice in South Australia

Secondary

- Hospitals in South Australia
- Allied Health in South Australia
- Interstate Divisions and State Based Organisations
- other stakeholders

3 A brief history of health e-messaging in SA

The vast majority of primary health care providers in South Australia prior to 1999 received all communications from external providers by paper e.g. discharge summaries. The closest this came to e-messaging was a fax machine. Over the past five years the national push of computerization, particularly in General Practice has seen doctors move from paper to the hard disk. These Electronic Health Records (EHR) are largely practice centric and typically operate in parallel with a paper based system. This has resulted in considerable inefficiencies and fragmentation of a patient's medical records.

The continued reams of paper flowing from the fax machine or post box have frustrated practices that have attempted to move to a complete EHR. The only success being pathology and radiology results. Practice's who have managed to do so have had to resort to scanning in documents and manually inserting the files into the patient's EHR e.g. specialist letters. This has considerable resource costs to the practices in terms of practice staff time and IT/IM systems.

General Practice has progressed in computerization to the point where it is being held back by the inability of other health care providers being able to electronically communicate with it. As the hub of patient care General Practice by nature deals with the multitudes of other health care providers and as such suffers mostly from the fragmentation of the health records and the different modes by which this information flows.

Over the past 3 years the Commonwealth Government has undertaken a research and development program to address these and other issues i.e. privacy. Although there are two existing trials and future ones planned, any future Health Connect roll out (including MediConnect) will involve the building of standardized bridges between existing systems developed at the state and territory level. Within South Australia this is likely to be linked through *Oacis* within the public hospital system.

4 The time is right

With the notable exceptions of pathology and radiology there is little health e-messaging occurring in South Australia. The following lists some major areas of work in SA that will have a need for a future common secure messaging system.

- The DHS *Oacis* statewide hospital computer system – the ability to deliver separation summaries and other health information securely and electronically to General Practice. This will include referrals (including outpatients) and presentations to Accident and Emergency departments.
- The SA/NT GP Registry (<https://www.healthproviders.com.au>) will be expanded to hold and manage PKI (Public Key Infrastructure) certificates. This phase 2 will also include specialist contacts details via the respective specialists colleges (see <http://www.sadi.org.au/gpry> for the specialists' briefing paper).
- As outlined in the above briefing paper the practices on the register will be able to access other doctors' encryption certificates via LDAP (see reference) interface.
- The recent approval of the Commonwealth's Medicare Plus package has resulted in South Australia being one of the first two implementation sites for Health Connect in Australia. (total \$80 million)
- A number of Divisions are moving into the field of data aggregation in partnership with their local practices and other stakeholders. A necessary part of the required infrastructure to aggregate this data real time (or close to) will be a secure messaging system.
- There is an imminent need for a system that will allow 'after hours' practices to communicate back to a patient's regular doctor. An example of this is the Eastern Suburbs After Hours Practice which is being facilitated by the Adelaide Central and Eastern Division of General Practice.

This above list is unlikely to be exhaustive with further examples welcome .

5 What's happening nationally?

The General Practice Computing Group (www.gpcg.org) has commissioned a project as a part of their phase one work plan (2001-2004, Outcome 2) titled 'Health Professionals Communicate Electronically'. The purpose of the project is to evaluate current activities and messaging systems in Australia. It is expected to be released in April 2004. See http://www.gpcg.org/publications/docs/workprogram2001_2004.pdf for more details.

There are various local initiatives occurring across Australia, dominantly at a local level, examples are the Canning and Hunter Valley DGP after hours services, *Health Connect* Trials in NT and Tasmania, the Authority Notification System trial in Ballarat and the two *MediConnect* trials in Victoria and Tasmania.

6 What would this system look like?

(shared set of requirements)

The following provides the starting point to develop a shared set of requirements of any such messaging system. Not until you understand what you need can you determine which is the best product for the job. Potential solution providers are listed in section 8 of this paper.

Mandatory Requirements

1. Messages will need to be securely sent using encryption certificates (Privacy).
2. These encryption certificates to be retrieved from the SA GP Registry via a LDAP connection.
3. It will be able to transfer the messages using open standards such as HL7, PIT, XML and CSV.
4. The messages will be able to be transmitted and received by disparate systems ranging from an email client e.g. MS-Outlook to Clinical Software e.g. Medical Director.
5. If the recipient chooses to receive the message into their clinical software it needs to occur in a way that is seamless to the practice and doctor.
6. The system provides auditing capacity to ensure that a message has been delivered and opened (including logs).
7. Is not cost prohibitive to General Practice or any other health care provider utilizing the system.

Preferred Requirements

8. Divisions maintain a role in the ongoing development and direction of the messaging system.
9. The messaging system will need to support PKI
10. The messaging system (application) is built upon open standards
11. The messaging system is open source and is based upon a GPL (licence)
12. That messages are sent directly from one health care provider to another i.e. there is not a third party or gateway.
13. That a provider will be able to utilize their existing Internet connection
14. The messaging system does not require the same product at both ends.

7 Scope

- South Australia. (statewide)
- General Practice and other health care providers that interact with general practice (see diagram below).

note – content design or format of the messages is out of scope

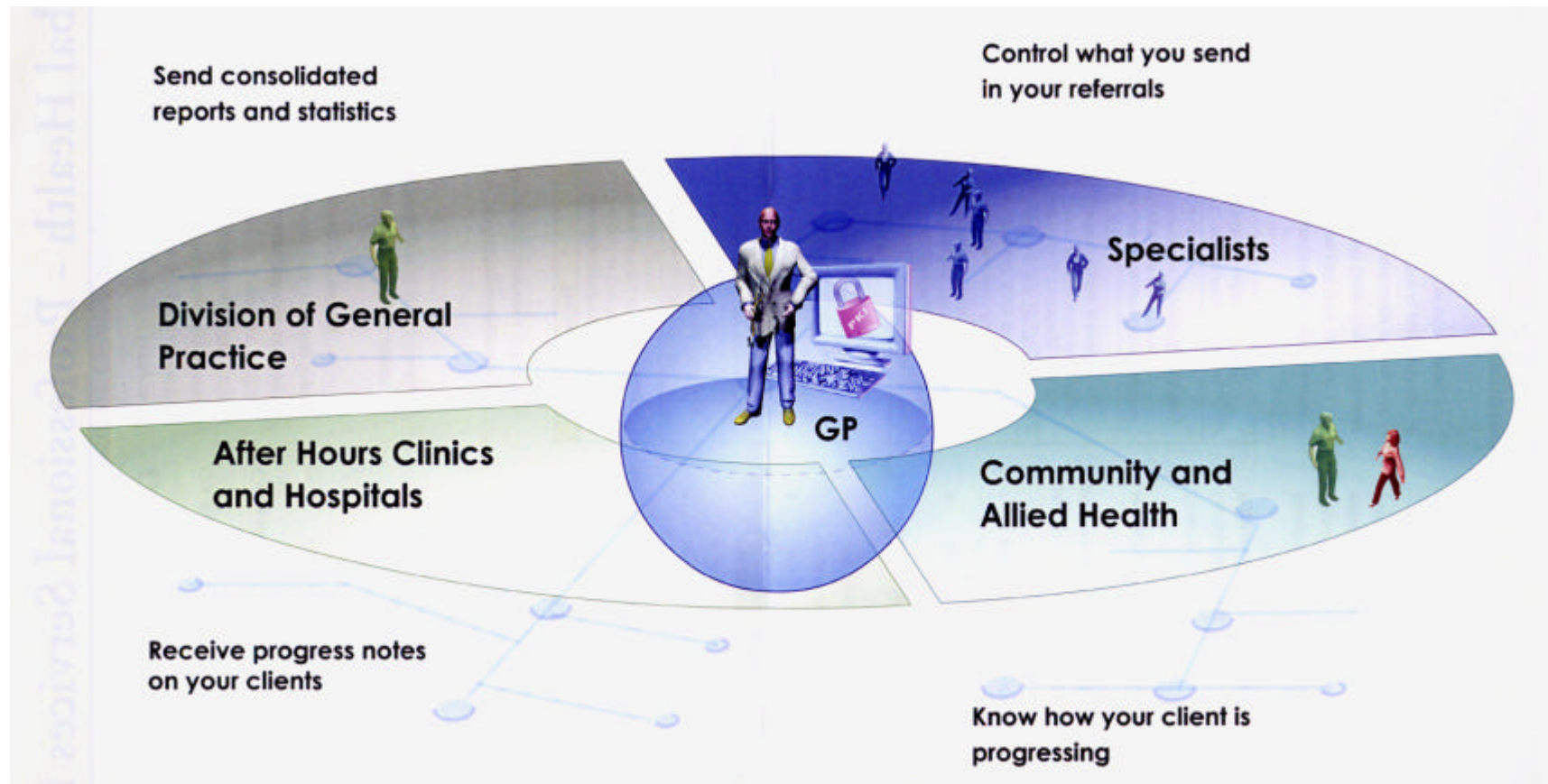


Diagram courtesy of: Global Health

8 Potential Messaging Solutions (Vendors)

1. Healthlink
2. IBA
3. Argus (Argus Foundation)
4. Whitepaper (Autoreport)
5. E-Switch (Global Health)
6. eClinic (Clinic)
7. Data_Management (a vendor working in other sectors)
8. SeeBeyond (Hobart Health Connect trial)

9 In Conclusion

It is my fear that if we do not agree on a common messaging system for e-messaging General Practice we will end up with a multitude of disparate and incompatible systems that cannot communicate with each other.

This will not only increase the infrastructure costs to General Practice in maintaining multiple messaging systems it will greatly impede the likely success of any messaging initiative. It is blatantly obvious that we need a shared infrastructure and common standards rather than a repeat of the rail gauge fiasco of the last century.

10 The next steps forward

In May 2004 SADI will convene a two-day statewide Divisional IT/IM forum. This forum will provide an opportunity to

- a) Collectively discuss ideas and expressed needs from your own consultations.
- b) Modify and agree on the shared set of requirements as listed in section 4 of the paper.

The timing of this forum will ensure that there is adequate time for consultation with not only the Divisional network and their members, but also with other health care providers in SA e.g. hospitals. The goal is to seek informed input from all potential users of such a messaging system using this discussion paper to facilitate the process.

By this time the GPCG will have also finalized their report as outlined in section 4 of this paper thus providing the opportunity for national input.

The questions I would like to ask Divisions and health care providers;

- a) Is there a need for a common messaging system in SA that matches a shared set of requirements
- b) If so, are the shared set of requirements listed in section 6 adequate, do we need to reprioritise the requirements, remove or add new ones.
- c) Should Divisions in SA collectively use and endorse a particular solution provider that matches these requirements

11 Time Frames

Consultation : April – May 2004
Written feedback : May 15th 2004 (a response is needed from all the Divisions in SA)
E-Messaging Forum : 20th May 2004 (tentative)

12 Contact Details

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SUMMARY OF RESPONSES

Wednesday, May 19, 2004

The questions I would like to ask Divisions and health care providers;

a) Is there a need for a common messaging system in SA that matches a shared set of requirements

-YES

-While I agree there is a need for a common messaging system in SA, I would suggest that this should be broadened to be a common messaging system in Australia - rather than risk another "narrow gauge" situation. Services provided in SA border towns including Broken Hill would have to be given consideration.

b) If so, are the shared set of requirements listed in section 6 adequate, do we need to reprioritise the requirements, remove or add new ones.

-Regarding the shared set of requirements, I would suggest that some (perhaps all or most) of the preferred requirements should be moved to mandatory requirements.

Mandatory Requirements

1. Messages will need to be securely sent using encryption certificates
(Privacy).

-They need to be sent securely using the easiest system that provides adequate security. Technical experts need to help us to work out whether encryption certificates represent that easiest adequate system.

- *Yes*

2. These encryption certificates to be retrieved from the SA GP Registry via a LDAP connection.

-*If* we are going to use encryption certificates, they need to be retrieved automatically for us from *somewhere* - it doesn't really matter from where, as long it works fast and efficiently.

-*Yes*

3. It will be able to transfer the messages using open standards such as HL7, PIT, XML and CSV.

-Open standards seem essential.

-What does this mean?

4. The messages will be able to be transmitted and received by disparate systems ranging from an email client e.g. MS-Outlook to Clinical Software e.g. Medical Director.

-Essential.

-Yes

5. If the recipient chooses to receive the message into their clinical software it needs to occur in a way that is seamless to the practice and doctor.

-Essential.
-Yes

6. The system provides auditing capacity to ensure that a message has been delivered and opened (including logs).

-Probably essential.
-Yes

7. Is not cost prohibitive to General Practice or any other health care provider utilizing the system.

-Essential. Desirable = the less it costs, the better
-Yes

Preferred Requirements

8. Divisions maintain a role in the ongoing development and direction of the messaging system.

-Not necessarily - what do Divisions know about these matters? It may be more appropriate for GPCG to preform this role.
-No
-No
-Yes

9. The messaging system will need to support PKI

-If that is the best (i.e. most appropriate) method of security.
-With something secure/similar

10. The messaging system (application) is built upon open standards

-YES.
-Yes

11. The messaging system is open source and is based upon a GPL (licence)

-YES
-What is GPL?

12. That messages are sent directly from one health care provider to another i.e. there is not a third party or gateway.

-YES
-Is not owned by a central body (but rather with Divisions and practices), Does not have access by Departmental/Government

13. That a provider will be able to utilize their existing Internet connection

-Essential.

-yes

14. The messaging system does not require the same product at both ends.

-Essential.

-Yes

c) Should Divisions in SA collectively use and endorse a particular solution provider that matches these requirements

- this is an ideal area for the Division of General Practice to continue to support their G.P.'S.
- What do Divisions have to do with one health provider sending a message directly to another health provider, as stated in question 12?
- Yes, if useful, why are we not utilizing Dr Peter Del Fante, Argus?
- The dangers I see with Divisions in SA collectively using and endorsing a particular solution provider that matches these requirements would be:
What if the provider went down - for the hour/day/week?
What if the provider went out of business?
What if the provider decided to exercise their onopoly?
What if we lock into one provider and then a better one comes along?
My preference would be to define/find a standard that everyone one could use and then we would have choice/redundancy/open access/etc.



RESULTS OF CONSULTATION

a) Is there a need for a common messaging system in SA that matches a shared set of requirements.?

Answer : yes

b) If so, are the shared set of requirements listed in section 6 adequate, do we need to reprioritise the requirements, remove or add new ones?

Answer : yes with some changes, see below

c) Should Divisions in SA collectively use and endorse a particular solution provider that matches these requirements?

Answer : no, free market will determine this

Mandatory Requirements

1. Messages will need to be securely sent using encryption certificates (Privacy).
2. These encryption certificates to be retrieved from the SA GP Registry via a LDAP connection.
3. It will be able to transfer the messages using open standards such as HL7, PIT, XML and CSV.
4. The messages will be able to be transmitted and received by disparate systems ranging from an email client e.g. MS-Outlook to Clinical Software e.g. Medical Director.
5. The vendors will need to provide interoperability to ensure that messages will be able to be send and received between different products i.e. standards.
6. If the recipient chooses to receive the message into their clinical software it needs to occur in a way that is seamless to the practice and doctor.
7. The system provides auditing capacity to ensure that a message has been delivered and opened (including logs).

Preferred Requirements

8. Divisions maintain an advocacy role in the ongoing development and direction of the messaging system.
 9. The messaging system will need to support PKI
 10. The messaging system is open source.
 11. That messages are sent directly from one health care provider to another i.e. there is not a third party or gateway.
 12. There is no a transaction fee leveraged per message.
 13. That a provider will be able to utilize their existing Internet connection
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ENDORSEMENT OF THE SHARED SET OF REQUIREMENTS

The _____ Division of General Practice endorses the above-shared set off requirements.

(signatory) _____ (date) __ / __ / __

Name _____(position) _____