

Proposal for external funding of TUFH Project

a collaboration project
of the
Fiji College of General Practitioners
and the
Ministry of Health



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Executive Summary

The TUFH (Towards Unity for Health) Project intends to develop and integrate a General Practitioner database with the National Health Information System of Fiji's Ministry of Health.

On 21 June 2002, a Memorandum of Understanding has been signed between the TUFH Project initiator, the Fiji College of General Practitioners, and the Ministry of Health of the Fiji Government.

This proposal aims to give potential sponsors information about the TUFH Project's goals and objectives.

The estimate for phase 1 of the TUFH Project is F\$690,600.00.

The contribution of both the Fiji College of General Practitioners and the General Practitioners is F\$294,600.00. Expected contribution from WHO is F\$30,000.00

Ultimately, the amount of funding requested from the funding entity is F\$366,000.00

Background and reasons for project

FCGP initiatives and activities

The Fiji College of General Practitioners (abbrev. *FCGP*) was incorporated in 1992 to oversee the continuing medical education (CME) of the profession.

The College is divided into three faculties, which are determined by geography (Central, Western and Northern) and managed by an Executive Council with representation from each faculty and other official organs of the college.

The major publications of the college are the quarterly GP Journal and the bi-monthly GP newsletter.

In the field of CME, the college organises an annual conference, 5 mini conferences and 2 - 3 major workshops annually. As a measure of success, it is proud to announce that a total of 132 CME activities were organised in the 1999 - 2000 period. In 1996 the concept of Journal Clubs was introduced followed by establishment of Peer Review Cells in 1998. The next phase of development will involve Clinical Audits. Preliminary studies show that patient information systems at the individual GP level are diverse and not conducive to auditing until corrected by the use of a national standardized system.

The two segregated systems

Under the present system of National Health Data Collection, the data so collected purely originates from the government based health facilities.

There is no such collection system within the general practice cadre. There are currently eighty-five (85) general practitioners serving the various communities in Fiji.

Assuming an average daily consultation of 30 patients by each general practitioner (figures based on general consensus), it becomes apparent that approximately 2,500 - 3000 consultation data never reaches the National Data Collection System on a daily basis.

Existing MOH database

Current MOH database has been developed to a level, which can now be linked with other government departments and ministries. With advance in telecommunication provision, divisional hospitals and sub-divisional hospitals would be able to be connected into the main database.

The FCGP Project will also be in a position to be linked with the Ministry of Health system in the sharing of data and information exchange together with the partnership being made in GP research.

Health reform

The AusAID funded health reform has commenced development of a national computerized database and health information system under the supervision Ministry of Health. The two major focus includes

- an improved epidemiological information which has an emphasis on timely data analysis, presentation, dissemination and input into the planning cycle;
- a management information system which enables effective management of the health system at all levels.

Unfortunately an important segment of information from the GP sector will be excluded. GPs provide for a large proportion of cases having epidemiological significance. This project will

make it compulsory for reporting and merging of the two systems. Leaving aside a reform in the private medical sector will leave large gaps in national health management.

GP sector database underdeveloped and uncoordinated

Fiji has approximately 80 General Practitioners scattered around the urban areas of the two major islands. These are basically solo practitioners. There is very little, if any, health information exchange between these practitioners. However, all practitioners are required to maintain patient information systems. These range from files, cardex systems and computer-based systems.

Since the inception of the College of General Practitioners in 1992, the development of fellowship amongst the GPs has facilitated some information sharing. Research and morbidity studies are still in its infancy and poorly coordinated.

Non reporting is the norm

The Fiji Public Health Act stipulates compulsory reporting of Notifiable Diseases. Although this is practiced without fail within the State Health facilities, reporting by GPs is non-existent. Conservative estimates are that approximately 50% of patient data per day is never included in the national health statistics.

Developing and jumping onto the research bandwagon

The level of Research and research-oriented activities is presently undeveloped or almost non-existent in the General Practice sector. With the set up of a national GP database, and access to the same by all GPs, more research will be encouraged and facilitated. Development of the system will increase inter GP linkage and communication.

Current computer technology and government IT progress

The telecommunication system in Fiji is well advanced. Apart from this the Fiji Government's Information Technology Centre (abbrev. *ITC*) has directed the development of national IT policies and standards.

Although 50% of the GPs use computers in their practices, 2-3% utilize computer-based patient information systems. Only one practitioner uses the ICPC software for daily records.

Scarcity of resources for national health service

The National Budget on health expenditure needs to include sector outside the ministry towards the development of systems that will enhance information for decision-making process. Policy regarding allocation of funds should be taken up with the Ministry of National Planning.

Project partners

The project partners consists of

- Fiji College of General Practitioners including all members
- Ministry of Health
- WHO
- WONCA (World Organization of General Practitioners and allied organizations)
- Sponsor(s)

FCGP Executive Council

The Fiji College of General Practitioners Executive Council consist of

- President: Dr. Ram Raju
- Vice-President: Dr. Wahid Khan
- Honorary Treasurer: Dr. Sainesh Kumar
- Honorary Secretary: Dr. Pradeep Ram
- Faculty Presidents Central: Dr. R P Lochan
- Faculty Presidents Western: Dr. M Bhagat
- Faculty Presidents Northern: Dr. P Sharma
- Chair Research Committee: Dr. B P Ram
- Chair Publishing Committee: Dr. N Sharma
- Chair Building Committee: Dr. R P S Goundar
- Chair Education Committee: Dr. K Nadan
- Special Projects Officer: Dr. S Vueti

Project team and committee(s)

The FCGP TUFH Project Team consists of

- Chair: Dr. Wahid Khan
- Dr. B P Ram
- Dr. K Nadan
- Dave Singh

Project overview

The FCGP -TUFH (Towards Unity For Health) Project is part of the comprehensive health care program and National development initiative in partnership with the Ministry of Health.

The project is a major step towards improving health care service delivery with the following improvements in the health of the nation.

- 1. Information exchange between the General Practitioners and the Ministry for Health through the General Practitioners linkage and communication with the Public Hospitals and the Ministry Headquarters.
- 2. Enhanced collaborative effort between the FCGP programme for quality patient care program and MOH, Health Reform program with focus on Continuing Medical Education, Clinical Audits and Standard Management Guidelines.
- 3. Supporting General Practitioners needs for the core function of quality patient management and care and expanding the General Practitioners scope of control and care and command for community and family medicine through
 - a. Computerised GP database, finance management, inventory control and medical records.
 - b. Advanced mechanism for disease control through outbreak alerts and early warning systems.
 - c. GIS (Geographic Information System) profiles and emergency locator system e.g linkages to the country's hospital clinics, national and local humanitarian services (DISMAC) and local and overseas Medivac along with the patient tracing and unique identifier or locators of information.
 - d. Working and research along with comprehensive audits, GP networking for all aspects of medical program monitoring and evaluation.

The FCGP TUFH Project is managed by the FCGP Research and Information Committee headed by Dr. Wahid Khan, Medical Superintendent of J P Bayly Clinic, Suva, and Vize-President of the FCGP.

This project was conceived through the struggle by the General Practitioners in their pursuit for Continuing Professional Development since the inception of the Fiji College of General Practitioners in 1992 culminating in WHO/WONCA (World Organisation Of Family Doctors) meeting and immediate past Secretary Dr Wahid Khan bringing the idea back for GPs to take a new direction in managing their affairs.

Project conception

Project Title

Development and integration of General Medical Practitioner database into the Fiji's Ministry of Health (abbrev. *MOH*) National Health Information System

Project Goal

The project aims to make the General Practitioner (abbrev. *GP*) a more responsive, active and integral partner as a provider of Health Service armed with more relevant and timely data towards surveillance & early warning, influencing and contributing to the National Health Policy & Human Resources development and data for decision making.

OBJECTIVE 1

By end of year 2004 develop and integrate General Practitioners / Ministry of Health Notifiable Disease Reporting Systems.

OBJECTIVE 2

To develop a National General Practitioners Database for Major NCD and Risk Factors in parallel with Objective 1.

Project Significance

This project has major National significance in facilitating the integration of Health Information Systems (Hospital and Private Health providers) through this innovative and appropriate scheme.

Project tasks in phase 1

Overview

All member GPs will have access to the central server where information exchange and dissemination will be just a few key strokes. The FCGP can generate various reports and statistical analysis that will meet all their goals.

There will be various software modules. These modules will be for each task. The drug module will be categorised under usage and dispensed drugs. The disease module will be under various headings. MOH interface module will interchange designated data between FCGP and MOH. Alerts module will flag all alerts. Drug and disease interaction module and other task modules will be added as the need arise.

Discussion forums, video conferencing, etc will be established together with email server functions. GPs will be able to access specific medical databases e.g. COCHRANE library and MEDLINE searches.

Specific tasks to be implemented in phase 1

The exact tasks and system functionality will be part of the Accurate Scope Definition procedure of the TUFH project. However, at this stage the project team has identified the following:

- Secure firewall
- GP information database: location, contact, geographic location and area covered, hospital vicinity, etc
- International disease alerts
- Specialist Practitioners information
- General Information: e.g. dengue fever prevention, etc
- MOH Interface: uploads, downloads
- RFI (Request For Information)
- Access to Medline etc
- On-line training

In a later phase 2, the project team has already identified the following:

- Prescription, drug news, data on drugs interaction, side effects, etc
- GIS-based data mining, e.g. drugs by disease, by area etc
- Insurance
- On-line prescription: GPs, from Patients for RFR (Request For Repeats) etc
- On-line drug orders, prescriptions
- GP interaction with fellows GPs and patients

Project schedule

A detailed schedule will be developed after external funding for the TUFH project has been secured. The preliminary schedule here listed gives just an overview.

| | 2 0 | 2 | 2 | 2004 | | | | | 2005 | | | | | | | | | | |
|--|-----|-----|---|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------|
| | 0 | 0 2 | 0 | | | | | | | | | | | | | | | | |
| | | | | J a n | F e b | M a r | A p r | M a y | J u n | J u I | A u g | S e p | O c t | N o v | D e c | J a n | F e b | M a r | A p |
| Activities / Action Description | | | | " | D | ' | | y | " | | 9 | Р | | V | C | " | D | - | ' |
| Project workgroup meetings | | | | | | | | | | | | | | | | | | | |
| Formation TUFH Project Committee | - | | | | | | | | | | | | | | | | | | |
| GP needs analysis survey | _ | | | | | | | | | | | | | | | | | | |
| Agreement on preliminary project plan | _ | | | | | | | | | | | | | | | | | | |
| Project conception | | | | | | | | | | | | | | | | | | | |
| Memorandum of Understanding with Ministlry of Health | | | | | | | | | | | | | | | | | | | |
| Server purchase | | | | | | | | | | | | | | | | | | | |
| Legal arrangements | | | | | | | | | | | | | | | | | | | |
| Establish R&D team | | | | | | | | | | | | | | | | | | | |
| Identification of project sponsors | | | | | | | | | | | | | | | | | | | |
| Formulation of project charter | | | | | | | | | | | | | | | | | | | |
| Drafting of accurate scope definition | | | | | | | | | | | | | | | | | | | |
| Determining key scope elements | | | | | | | | | | | | | | | | | | | |
| Determining roles and responsibilities | | | | | | | | | | | | | | | | | | | |
| Minimum dataset & ICD 10 or chosen ICD workshop | | | | | | | | | | | | | | | | | | | |
| Obtaining formal sign-off by project sponsor(s) | | | | | | | | | | | | | | | | | | | |
| Project kick-off meeting | | | | | | | | | | | | | | | | | | | |
| Analysing project/program requirements & risk assessment | | | | | | | | | | | | | | | | | | | |
| Drafting of project management plan and project schedule | | | | | | | | | | | | | | | | | | | |
| Continuous project management | | | | | | | | | | | | | , | | , | | , | | |
| Formulation of work breakdown structure (WBS) | | | | | | | | | | | | | | | | | | | |
| Prototyping | | | | | | | | | | | | | | | | | | | |
| Software development | | | | | | | | | | | , | | | | | | | | |
| System documentation | | | | | | | | | | | | | | | | | | | |
| Training of pilot users | | | | | | | | | | | | | | | | | | | |
| Testing and pilot implementation | | | | | | | | | | | | | | | | | | | |
| Review & allowance for modifications | | | | | | | | | | | | | | | | | | | |
| User acceptance test | | | | | | | | | | | | | | | | | | | |
| Hardware evaluation and selection for all GPs | | | | | | | | | | | | | | | | | | | |
| Training of all users | | | | | | | | | | | | | | | | | | | |
| Implementation | | | | | | | | | | | | | | | | | | | |
| Progress reports | | | | | | | | | | | | | | | | | | | |
| Project evaluation & compilation of project closing document | | | | | | | | | | | | | | | | | | | |

Budget estimates

| | | | Results/Performance | | |
|--|--|---|--|-----|-----------|
| Activities / Action Description | Timeline | Responsibility | measure | Buc | lget F\$ |
| | Weekly discussion sessions TUFH Project Committee formed 28 | man Research & Information) | Minutes and Faculty Reports to the FCGP Council Project members | \$ | 6,000.00 |
| Formation TUFH Project Committee | October 2001 | Council | selected | | |
| GP needs analysis survey | November 2001 | FCGP – TUFH Project Committee | Survey completed | \$ | 1,200.00 |
| Agreement on preliminary project plan | November 2001 | FCGP Executive Council, (President) | Official Agreement reached 24th & 25th November 2001 Meeting | \$ | 1,600.00 |
| Project conception | Dec 2001 - May 2002 | FCGP, IT provider | | \$ | 2,000.00 |
| Memorandum of Understanding with Ministlry of Health | 21 June 2002 | FCGP Executive Council, (President) | MoU signed | \$ | 1,300.00 |
| Server purchase, legal arrangement, establish R&D team, identification of project sponsors, formulation of project charter | Jan - Dec 2003 | | Server purchase, legal contract drafted, R&D team appointed, project sponsor found, Project Charter completed | \$ | 22,000.00 |
| Drafting of accurate scope definition | January 2004 | FCGP – TUFH Project Committee, IT provider | Project scope definition completed | \$ | 5,000.00 |
| Determining key scope elements | February 2004 | FCGP – TUFH Project Committee, IT provider | Project key scope elements completed | \$ | 2,000.00 |
| Determining roles and responsibilities | February 2004 | FCGP – TUFH Project Committee, IT provider | Project roles & responsibilities defined | \$ | 1,000.00 |
| Minimum dataset & ICD 10 or chosen ICD workshop | March - April 2004 | FCGP/MOH/ WHO & WONCA | Adoption of minimum dataset | \$ | 30,000.00 |
| Obtaining formal sign-off by project sponsor(s) | March 2004 | | Sponsor's formal approval | | |
| Project kick-off meeting | April 2004 | FCGP – TUFH Project Committee, IT provider, MoH project member(s), other stakeholders | | \$ | 1,000.00 |
| Analysing project/program requirements & risk assessment | April 2004 | FCGP – TUFH Project Committee, IT provider | Program specifications | \$ | 7,500.00 |

| | | <u> </u> | | | |
|--|-------------------------|-----------------------------------|---------------------------------------|-----|---------------------------------------|
| | | FCGP – TUFH | | | |
| Drafting of project management plan and | | Project Committee, | | | |
| project schedule | April 2004 | IT provider | Project schedule | \$ | 5,000.00 |
| | | FCGP – TUFH | | | |
| | | Project Committee, | | | |
| | | IT provider, | | | |
| Continuous project management | April 2004 - April 2005 | | | \$ | 12,000.00 |
| | | FCGP – TUFH | | | |
| Formulation of work breakdown structure | | Project Committee, | | | |
| (WBS) | May 2004 | IT provider | | \$ | 2,500.00 |
| | | ' | Agreement on screens | , | |
| Prototyping | June 2004 | IT provider | & reports reached | | |
| Tototyping | Julic 2004 | i provider | Software ready for | | |
| Software development | July - Sept 2004 | IT provider | pilot | \$ | 240,000.00 |
| Software development | July Jopt 2004 | ir provider | | | |
| System desumentation | July Cont 2004 | IT providor | System & user documentation | | |
| System documentation | July - Sept 2004 | IT provider | uocumentation | | |
| Training of allah usan | C t t 2004 | IT provider, training | Dilat tusin a d | ф | F 000 00 |
| Training of pilot users | September 2004 | provider | Pilot users trained | \$ | 5,000.00 |
| | | FCGP – TUFH | Test procedure | | |
| | | | documented, test data | | |
| Testing and pilot implementation | October 2004 | IT provider | available | \$ | 5,000.00 |
| | | | Respective | | |
| Review & allowance for modifications | | Project Committee, | | | |
| (contingency) | Nov - Dec 2004 | IT provider | implemented | \$ | 10,000.00 |
| | | FCGP – TUFH | | | |
| | | Project Committee, | | | |
| | | IT provider, MoH | | | |
| User acceptance test | December 2004 | project member(s) | Test report compiled | \$ | 10,000.00 |
| | | FCGP – TUFH | | | |
| Hardware evaluation and selection for all 85 | | | Hardware purchased | | |
| GPs | Dec 2004 - Jan 2005 | IT provider | and installed | \$ | 255,000.00 |
| | | , | | - | · · · · · · · · · · · · · · · · · · · |
| | | FCGP – TUFH Project Committee, | | | |
| | | | Users trained, online | | |
| Training of all users | Jan - March 2005 | | training available | \$ | 40,000.00 |
| y or an acoro | 34.1 Mai 3/1 2000 | İ | a a a a a a a a a a a a a a a a a a a | Ψ | 10,000.00 |
| | | FCGP – TUFH | All users are actively | | |
| Implementation | Feb - March 2005 | IT provider | using the software | \$ | 20,000.00 |
| Implementation | | ' | using the sultware | φ | 20,000.00 |
| | | FCGP – TUFH | | | |
| | l 0 0 1 000 1 1 | | Reports delivered to | | |
| Drogrado roporto | | IT provider, | sponsor(s) & | ¢ | 2 000 00 |
| Progress reports | 2005 | external consultant | stakenoiders | \$ | 3,000.00 |
| | | FCGP – TUFH | | | |
| | | Project Committee, | | | |
| Project evaluation & compilation of project | | | Project closing | | |
| closing document | April 2005 | external consultant | document completed | \$ | 2,500.00 |
| Total project budget/cost for phase 1 | | | | \$ | 690,600.00 |
| hereof contribution by FCGP and GPs | | | | -\$ | 294,600.00 |
| expected funding from WHO | | | | -\$ | 30,000.00 |
| Total funding sought | | | | \$3 | 66,000.00 |
| rotal fallaling Sought | 1 | <u> </u> | L | ΨJ | 00,000.00 |

Contribution by FCGP and GPs

The FCGP TUFH Project Committee has already spent in excess of 120 man-hours on the project over the last two years on a completely voluntary basis. In addition, the selected IT provider has also voluntarily and without any cost to the FCGP contributed actively towards the TUFH Project.

Up to this stage of the project (October 2003), all project cost – e.g. travel, office expenses, computer hardware/software, etc – have been borne by individual General Practitioners involved in this project.

Appendices

Copy of Memorandum of Understanding between the Ministry of Health and the Fiji College of General Practitioners

Copy of support letter from the Ministry of Health