**Challenge Fund**



The Government of Peoples Republic of Bangladesh wants solutions of requirements from the people of Bangladesh

Access to Information Programme (a2i) is launching Challenge Funds, in collaboration with Government agencies aiming to assisting the Government to achieve the desired objective



**Challenge fund to Support innovative Research in health**

Despite many challenges, Bangladesh has made considerable progress over the last two decades in improving the health status of the citizen. Population health outcomes have shown marked improvement, with falls in maternal, infant and under-five mortality rates. There are significant reductions in total fertility rate, high levels of immunization have been achieved and life expectancy is increasing.

These improvements in health sector can be attributed to a number of health and non-health related factors such as delivery in a health facility, childhood immunization, management of diarrhoea with oral rehydration salts, women’s education, health care-seeking behaviour and improved economic circumstances. However, the persisting inequality, prolonged waiting time and weak referral mechanism is a concern. Poor population from rural, remote and hard to reach areas rarely use high quality health care services and experience higher rates of mortality and morbidity.

Though Bangladesh has made dramatic improvement in health sector, further improvement in health will certainly require innovations. Innovation in health is needed for strengthening the health systems and/or to improve the health outcome. To address health sector issues, a2i in collaboration with DGHS is announcing a request for applications for its small grants program to improve the quality of care and health state of the population. A2i will issue grants of up to 25,00,000 BDT to support the costs of piloting awarded research project.

**The Challenge**

The present call intends to prioritize the following two challenges:

1. An online referral system from Community clinic to tertiary care Hospital.
2. Medical Appointment System using ICT to reduce patient waiting time for improved quality of care.

**An online referral system from Community clinic to tertiary care Hospital:**

“Patient Referral” to hospitals, specialists and other institutions is an essential part of primary health care (PHC). Patients are referred to specialists when investigation or therapeutic options are exhausted in primary care or when option or advice is needed from them. Competent Referral system has considerable positive impact for patients, health care system and health care costs.

Indication for referral may be routine, urgent or emergency. A linked referral system will further improve the PHC system. An effective referral system ensures a close relationship between all levels of the health system. It helps to ensure the best possible care through a coordinated network of health service delivery among the health facilities and it reduces the risk of the patient. To refer a patient depends on many things including the availability of a health institution with specialist facilities, the quality of care at the referral institution, distance, transportation, communication, and feasibility of travel by the patient. However, the type of complication determines the level of care needed and the place to be referred to, and this makes the referral pathways complex. Linking the primary, secondary and tertiary levels of care will play critical role in improving primary health care. A referral system offers some degree of health care at every level of health care system while linking the different levels through an established communication transport system. As the capacity at the primary level of care to deal with complications is limited by the availability of skilled human resources and facilities, so an innovative approaches to functioning referral system is necessary at all level of the health facilities in Bangladesh.

**Benefits:**

* Urgent cases that require better treatment will get expedited referral
* Provides patients with high quality and safe care.
* Patient will receive economic optimal care at the appropriate level
* Hospital facilities are used optimally and cost-effectively
* Primary health services will be well utilized and their reputation will be enhanced

**Receiving facility:**

* Receive client with referral form
* Referral register
* Feedback to initiating facility

**Initiating facility:**

* Protocol of care and provide care
* Decision to refer
* Communicate with receiving facility
* Referral register
* Transport, communication, blood transfusion

**Fig: Referral system flows**

**Medical Appointment System using ICT to reduce patient waiting time for improved quality of care:**

Patient waiting time is a long-standing concern in health care. Patients often spend substantial amount of time in the facility waiting for services than actually consulting with health care providers. Shortage of human resources and existing work process are the determinants of patient waiting time in the general outpatient departments in Bangladesh. Very often these delays are detrimental to patients' health.

Patient waiting time is defined as the total time from registration until consultation with a doctor. During this time, registration, the payment process and record classification are made. Waiting time of the patient is an important indicator of quality of services and patients’ satisfaction towards the health care services.

Patients perceive long waiting times as a barrier to actually obtaining services. Lengthy outpatient waiting time can be a cause of stress for both patient and doctor. Long waiting times also affect the patients economically. It takes up the productive work time from the patient and attendant. The problem of long waiting period remains a common difficulty that can compromise patient satisfaction and quality of health care as a whole. An innovation is essential to reduce patient waiting time to an acceptable level.

**Judging Criteria**

The prize will be awarded to the successful applicants at the end of the contest. A jury formed by competent renowned figures will select the best solution from the application pool. The Jury will select the solution that demonstrates cumulative criteria for “Efficiency”, “Reliability” and “Innovative Design”. Some important criteria are mentioned below but they are not limited to these only:

* The proposed solution should not have any negative impact on the health system.
* The solution must be sustainable.
* The solution must be user friendly and easy to learn
* Data quality must be ensured
* Compliances with inter-operability standards will be considered as an asset.
* The proposed solution is expected to be user friendly.

**Who Cannot Participate**

Participants will be excluded if they are in one of the following situations:

* Bankrupt, being wound up, having their affairs administered by the courts, entered into an arrangement with creditors, suspended business activities or subject to any other similar proceedings or procedures under national law (including persons with unlimited liability for the participant's debts)
* declared in breach of social security or tax obligations by a final judgment or decision (including persons with unlimited liability for the participant's debts)
* found guilty of grave professional misconduct by a final judgment or decision (including persons having powers of representation, decision-making or control)
* convicted of fraud, corruption, involvement in a criminal organization, money laundering, terrorism-related crimes (including terrorism financing), child labor or human trafficking (including persons having powers of representation, decision-making or control)
* shown significant deficiencies in complying with main obligations under a procurement contract, grant agreement or grant decision financed by the GoB (including persons having powers of representation, decision-making or control)
* have misrepresented information required for participating in the contest or fail to submit such information
* Were involved in the preparation of the prize documents and this entails a distortion of competition.

**Schedule**

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| Registration information Publish: | DD MMM YYYY |
| Registration Begins: | DD MM**M** YYYY |
| Registration Close: | DD MM**M** YYYY |
| Short listed applicant list publish with evaluation details: | DD MM**M** YYYY |
| Demonstration begins: | DD MM**M** YYYY |
| Demonstration ends: | DD MM**M** YYYY |
| Award/Prize announces: | DD MM**M** YYYY |
| Ceremonial event: | DD MM**M** YYYY |

**Instructions for submission of Preliminary Application**

1. Preliminary application should be:
2. On the particular theme (Reduce patient waiting time, Strengthening referral mechanism )
3. Focused on Bangladesh
4. Must contain the following information:
   1. Project Title
   2. Name of the Innovator and the Team(if any)
   3. Background of the Idea
   4. Idea in short
   5. Detailed plan for implementation
   6. Timeline of activities for implementation