

Description of IMIS new features related to iCHF E-payment

1. Introduction

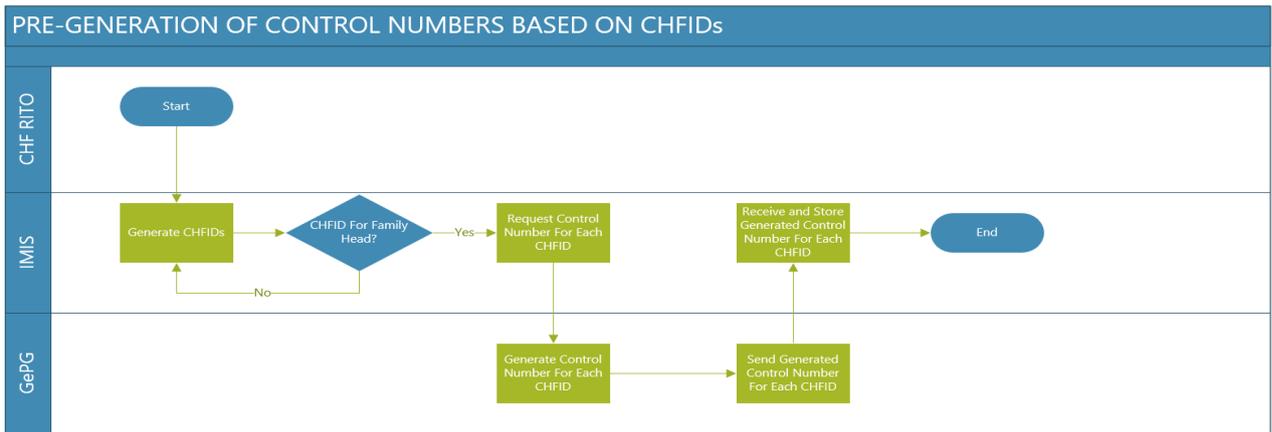
HPSS project as a champion for innovations and implementation of CHF Iliyoboreshwa still with role to ensure the structures put in place for management of CHF Iliyoboreshwa are supported and the Government is properly advised to develop and introduce effective management systems for CHF are well managed. As we know the working modality of CHF Iliyoboreshwa and its nature is a new element in the existing Government systems, responsibility to manage CHF finances and account for the same is now at regional level under a separated unit of CHF office. On the other hand, the Government is emphasizing the use of electronic systems for collection and management of public finances. Therefore, in order to ensure CHF collections/premiums are properly managed and are accounted for in compliance to government financial management regulations the need to develop and implement electronic payment system for CHF arises.

Therefore, PORALG in collaboration with HPSS project and MoFP decided to initiate and facilitate the development of **e-payment system** for **CHF** Iliyoboreshwa that will enable cashless collection of CHF premiums through mobile network operators (MNOs) as well as banks. The implementation of CHF e-payment system brings in some significant changes regarding enrolment procedures and funds collection and management processes at regional level. The new system aims to improve enrolment process, transparent in terms of funds collected, timely banking of collected premiums, reporting as well as accountability. The process to design/develop **CHF e-payment system**, integration between GePG and IMIS and testing is now at final stage.

New requests before finalization and roll-out of developed solution

1. The government of Tanzania (through PORALG) suggests and demands that there are should be pre-ordered CNs that will be associated with CHFIDs prior to the commence of the process of acquiring a policy with the clear intention of waving away the **lengthy process of requesting CNs by beneficiaries / Eos as the current the process deems to discourage, particularly beneficiaries to acquire a new or renewal a policy and for that case the following should be done on IMIS.**

The proposed process should follow the flow chart below.



Regional CHF IT officer will initiate the process on IMIS to generate CHF-QR-ID numbers and Request CNs from GePG – This process can be done concurrently.

Once CHF RITO has hit the button for generation of CHFIDs then we desire IMIS to start request CNs automatically from GePG based on the number of CHFIDs requested.

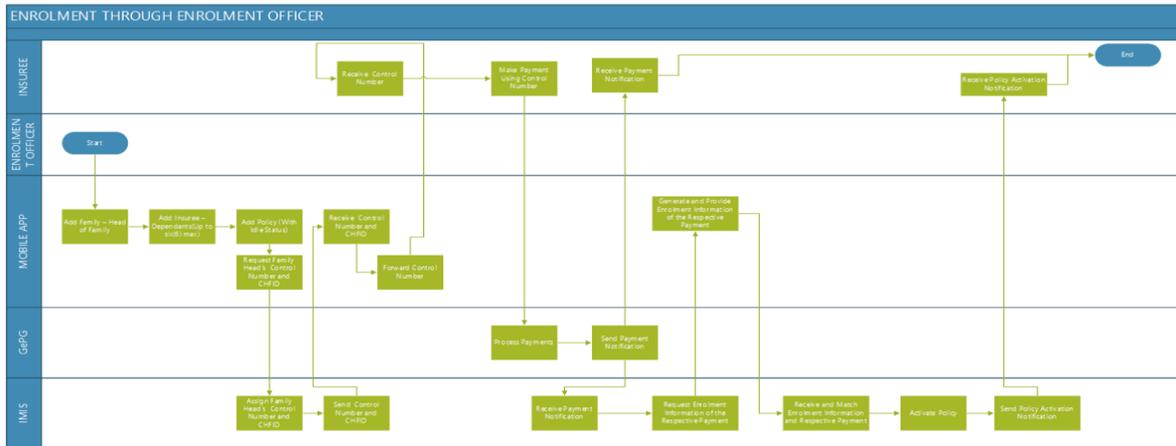
i.e (IMIS will execute the two requests by generating CHFID numbers locally and at the same time send external request to GePG for CNs)

- GePG will process the request from IMIS and Issue CNs and send back to IMIS.
- IMIS will receive the CNs from GePG and map them unto CHF pre-generated IDs.

2. The government of Tanzania (through PORALG) suggests and demands that, in the process of registration, after filling out, Head of family, Add Insurees and Policy then the app/web should automatically fetch the CN that is associated with head of family from IMIS and display it (CN) on the Application interface for making payment.

The proposed process should follow the flow chart below.

2. ENROLMENT THROUGH ENROLMENT OFFICER



Registration:

At the field level, during registration, EO with a mobile phone with pre -installed IMIS mobile application will do the following;

- i. Add the family – Head of the family
- ii. Add Insuree (Dependants)
- iii. Add policy
- iv. After the above steps, app will automatically fetch pre-ordered CN and display it on the interface for recording and presenting it to a beneficiary.
- v. Insuree or EO (on behalf) will make payment that will go to GePG for processing and notification will be sent to IMIS so to the beneficiary.

After the payment has been completed and notification sent, synchronisation of data between IMIS server and Mobile Application will take place to manage enrolment data.

- vi. Match payment occurs
- vii. Addition of contribution
- viii. The policy is activated
- ix. Policy activation message is sent out for confirmation and the client is ready to consume the service.

OTE: Currently (since phase 2) iCHF ID cards are printed by external vendors. The card is printed with ID number embedded with QR code. The formula/Algorithm for QR code generation is pre-defined by IMIS. Therefore, the printing company is responsible to generate the QR code and print the ID cards on the request/order from respective region. Each region was allocated with a range in which the generation of QR Codes/ID Numbers should fall in order to avoid conflicting codes between regions.

1. Generation of the QR through IMIS:

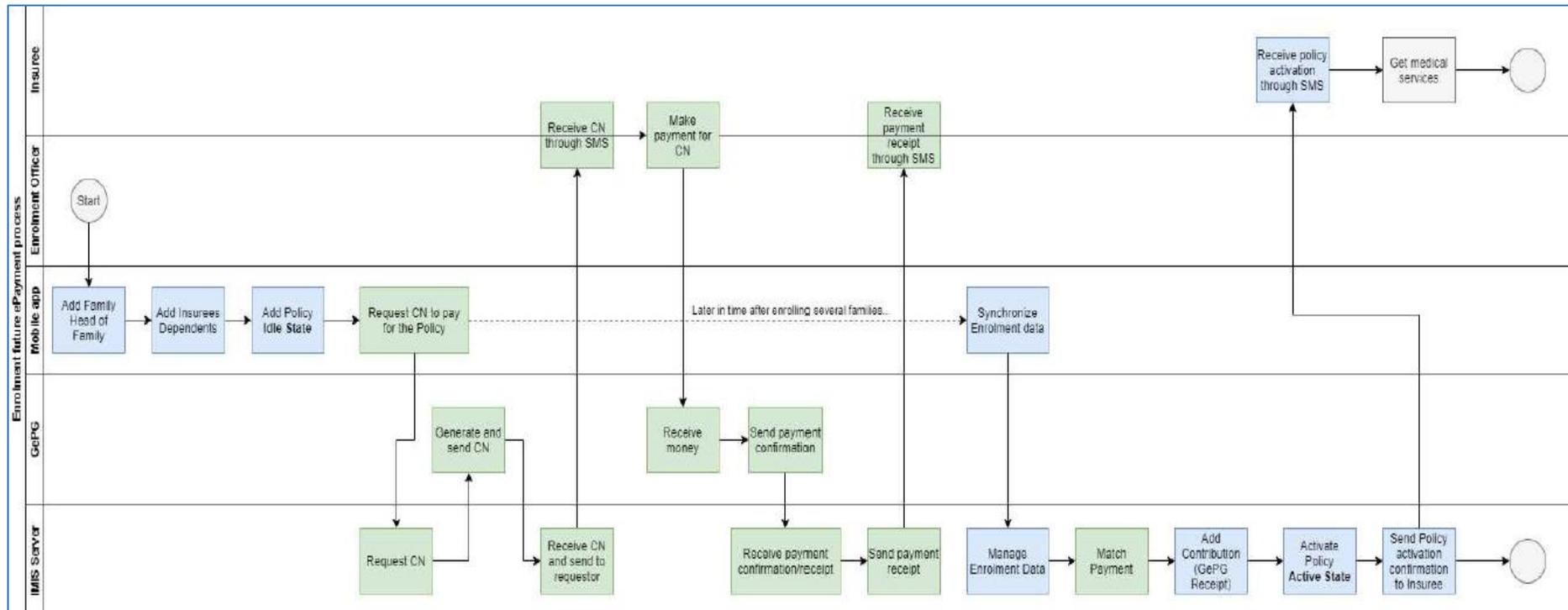
It is now proposed that QR codes/ID numbers be generated through IMIS then be shared/provided to the printing company for printing iCHF cards. The aim is to enhance control and security of CHF-IDs and reduce operational cost for the scheme. Technically, this feature seems to be possible in IMIS environment. However, there are some aspects to be considered in order the proposed improvement to meet expected results.

1. What changes need to be effected in the current practices and enrolment procedures?
2. What new responsibilities and who will be responsible for what? (e.g. day to day generation of QR codes, and other tasks outside IMIS)
3. What additional resources needed for IMIS to remain efficient?
4. Will these new feature necessitates re-training of users?

2. e-embedded CN/bulk request of CN:

In order to perfect the e-payment solution developed for iCHF, there is advanced option the can be useful simplify the process and reduce cost for iCHF epayment solution. On the current solution (now piloted in Shinyanga) the request for CN is initiated at the point of enrolment (by the client or by EO). That is, IMIS depends on the request initiated by EO/client which come with CHF ID that will be used for head of family/household. Then IMIS sends the same to GePG to request CN from that household. See the flow chart below.....

Currently developed e-Payment process- the flow chart



The proposed option is to enable IMIS to request CN in bulk and without client/EO intervention. The request for CN be initiated direct in IMIS server that will be matched with CHF IDs (of which will be pre-generated and stored in IMIS). According to GePG experts this feature will not bring any additional task/change to GePG platform/system; each QR Code can be associated with CN.

NOTE: Under the current business process and the existing SOPs, not all QR Codes/IDs are to be used to request CN for payment, only 1 ID/QR code among 6 is needed to request CN.

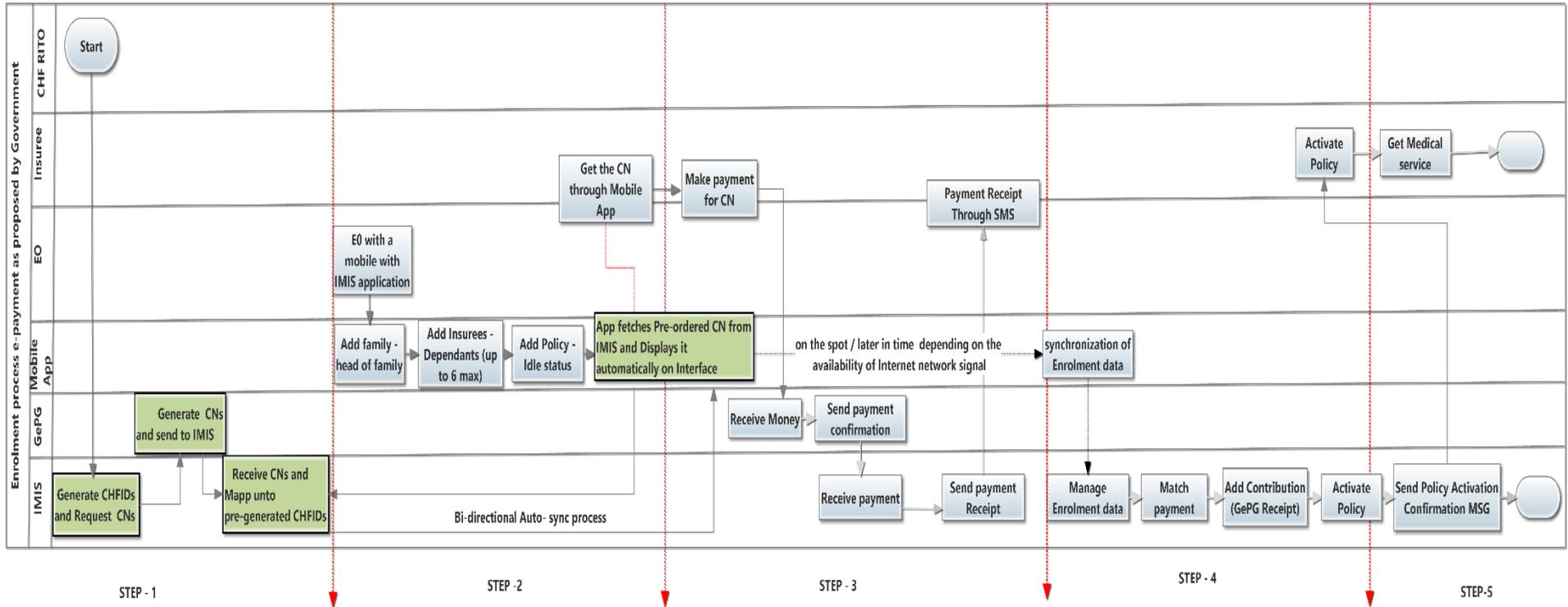
Therefore, on the new proposal we can think of generating QR codes/CHF ID in two categories;

1. QR codes/CHF ID for head of household (these will be used to request CN in bulk)
2. QR codes/CHF ID for dependants (these will not be embedded with CN), however the codes under this category should be able to call CN that has been used for the head of family to make payment – proposed structure will allow  re-use particularly during renewal.

The two categories can be differentiated in the structure of digits, or otherwise.

Therefore, if the new proposal will be implemented then the process flow will change as indicated in the figures below.

Complete Schematic diagram / process flow chart after implementation of the above proposals.



Description of the above flow chart

STEP – 1

Regional CHF IT officer will initiate the process on IMIS to generate CHF-QR-ID numbers and Request CNs from GePG – This process can be done concurrently.

- IMIS will execute the two requests by generating CHFID numbers locally and at the same time send external request to GePG for CN.
- GePG will process the request from IMIS and Issue CNs and send back to IMIS.
- IMIS will receive the CNs from GePG and map them unto CHF pre-generated IDs.

STEP – 2

At the field level, during registration, EO with a mobile phone with pre -installed IMIS mobile application will do the following;

- x. Add the family – Head of the family
- xi. Add Insuree (Dependants)
- xii. Add policy
- xiii. After the above steps, app will automatically fetch pre-ordered CN and display it on the interface for recording.

STEP – 3

After getting the CN, it is either the client/insuree or EO will make payment for the policy.

- GePG will receive the payment after it has been committed and send confirmation to IMIS.
- IMIS will acknowledge the payment and send receipt to EO/Insuree depending on who committed the payment.

STEP – 4

After the payment has been committed, synchronisation of data between IMIS server and Application will take place to manage enrolment data.

- Match payment occurs
- Addition of contribution
- The policy is activated

STEP – 5

Policy activation message is sent out for confirmation and the client is ready to consume the service.