

Introduction:-

we see many messages in social media about the need of money regarding health issues ,we don't know whether the money is sent to the person or not.

❖ Problems:

- 1)Is the message sent by people real or fake?
- 2)whether the tracking of data is possible from source to destination or not?

SOLUTION:-

- ✓ We can provide the proofs of the authorized hospitals .
- ✓ We can use the ledger to ensure the records can't be duplicated ,fake , manipulated or tamper-proof .
- ✓ We can track the channel ,the funds raised can be seen by anyone who is in that blockchain.

❖ Fabric components:-



Fabric Components

Ledger: It is a world state which contains the status of all assets that are tracked on the ledger.

Peer: These are the transaction endpoints for organizations and hosts the smart contract and ledger.

Channel: Holds the subset of network members who want to transact and communicate privately.

Smart Contract: Holds business logic and an application can interact with the ledger using these smart contracts.

Ordering Service: Ordering of transactions and bundles the set of transactions into blocks, and add to the blockchain.

Certificate Authority: Generate identity to all the entities within the blockchain network.

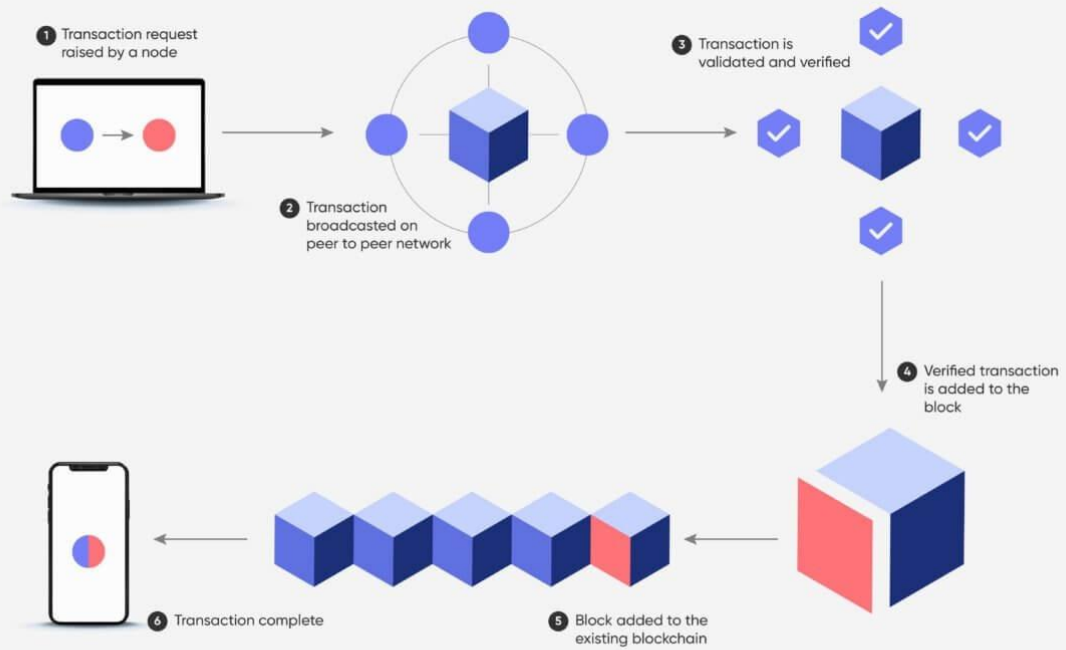
Events: Create notifications of any operations on the blockchain, like creation of a new block etc.

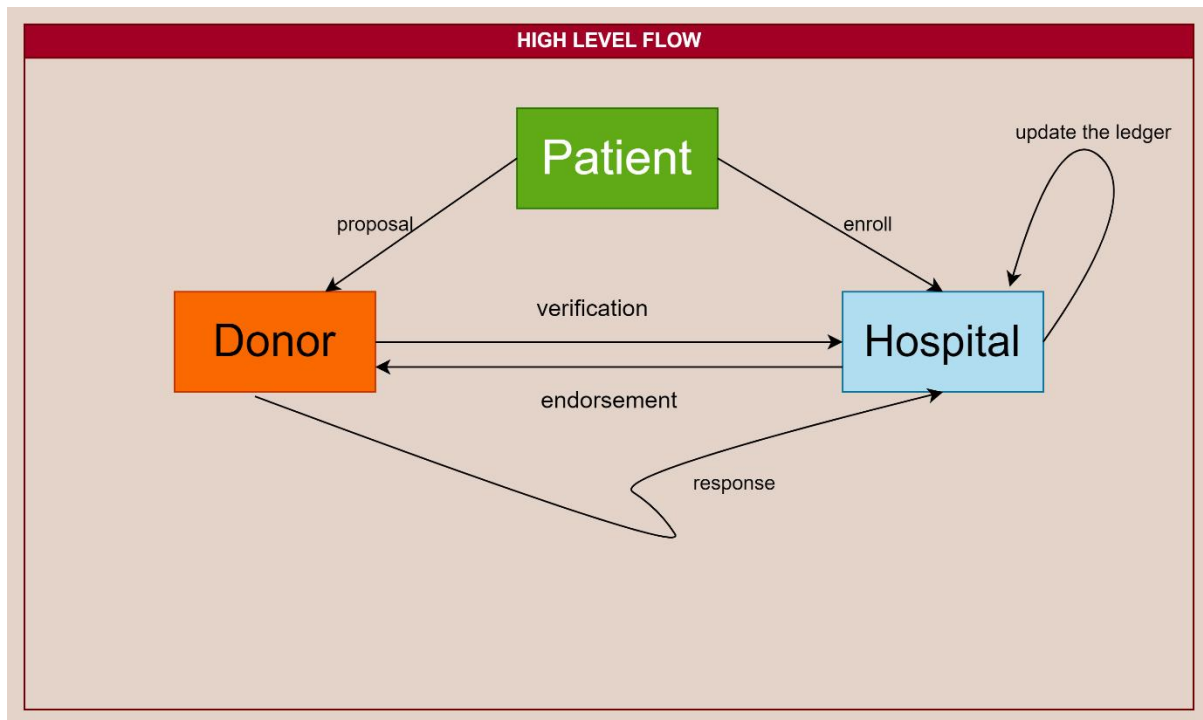
Wallet: Securely manages to store user certificates.

Membership Service Provider: It authenticates, authorizes and manages the identities on permissioned blockchain network.



How a transaction moves and gets approved on a blockchain?





PATIENT - the patient enrolls in the hospital records.

the patient can send the request for help in any social media.

DONOR - the donor checks the message and sends the patient id to the hospital ledger.

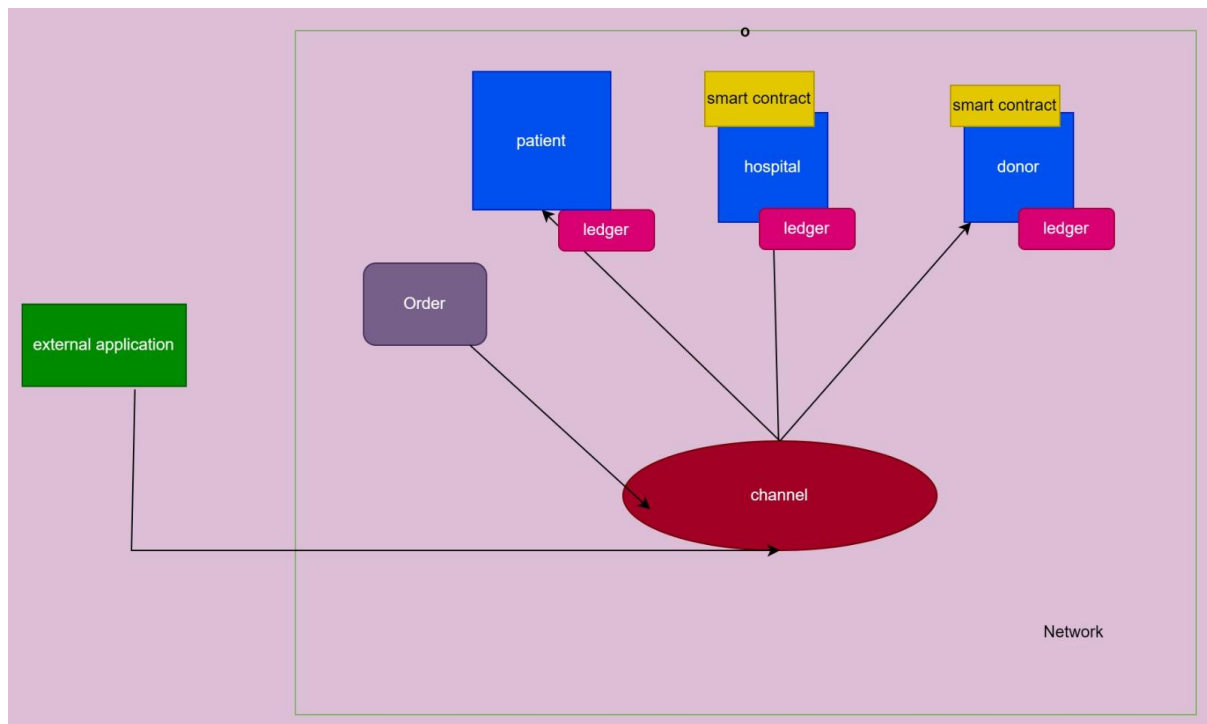
If the patient id is present in the hospital record, then he can proceed with the payment by using `send amount()` method.

Else he can ignore the message.

HOSPITAL - the hospital ledger verifies the patient id in its records, if found then the

Directs to the `send amount()` function.

FABRIC NETWORK :-



SMART CONTRACT:-

Patient

hospital

donor

Create patient(patient_id ,report_id ,hospital_id ,UPI ,
verification ,amt req)

Insert into patient(patient_id , report_id ,hospital
_id ,n ,n , amt)

Data is inserted

Verification()//done at hospital peer(org)

Record=patient_id;

Found=false;

For i=0 to record_count

```

        If record==patient .patient _id
            found=true;
end for;
if found=true
{
    Send _amount();
}
Else
{
    Message "invalid patient";
}
Update(patient _id ,report _id ,hospital _id ,UPIpin ,v ,amt)
            (or)

No change if invalid patient
Data is updated
//donor can see the appended record in blockchain
Send _amount()
{
    Transfer the amount to hospital UPI;
}
Update(patient _id, report _id , hospital _id , UPIpin , v ,amt-
transferred amt)
Send a msg to patient if amt is credited.

```

