

MedRec

1. Do you need to share data?

MedRec: Yes. The system is designed to efficiently share EMRs across different providers and treatment sites.

2. Can you share using trusted third parties?

MedRec: No. To ensure decentralization and trustlessness, no trusted third party can be used.

3. Is data integrity and immutability crucial?

MedRec: Yes. Sharing and managing EMRs require high data integrity and immutability.

4. Is transparency towards the actors important?

MedRec: Yes. An audit trail of medical data access and permissions requires transparency towards the actors.

5. Are the identities of all actors known?

MedRec: Yes. All participants should be verified and authenticated.

6. Are all actors trusted?

MedRec: No. No need to trust individual actors directly.

7. Do you need to involve patients?

MedRec: Yes. Patient involvement is central to empowering patients to manage and control access to their medical data.

8. Is cost a limiting factor?

MedRec: Yes. The initial setup could be costly, and the incentives for miners using the system could aggravate the cost.

Final Outcome: Public permissioned blockchain

Drugledger

1. Do you need to share data?

Drugledger: Yes. Drugledger facilitates the sharing of traceability data across the drug supply chain, improving drug security and business operations for

pharmaceutical companies.

2. Can you share using trusted third parties?

Drugledger: No. The reliance on trusted third parties is eliminated to ensure data authenticity and privacy.

3. Is data integrity and immutability crucial?

Drugledger: Yes. The control, authenticity, and privacy of shared traceability data should be ensured.

4. Is transparency towards the actors important?

Drugledger: Yes. Transparency should be maintained to allow stakeholders to verify the authenticity and traceability of drugs.

5. Are the identities of all actors known?

Drugledger: Yes. Only verified stakeholders participating in the network should be ensured.

6. Are all actors trusted?

Drugledger: trusted actors are unnecessary.

7. Do you need to involve patients?

Drugledger: Yes, Drug traceability is essentially important for patients' health.

8. Is cost a limiting factor?

Drugledger: Yes. Prioritize operational efficiency and long-term sustainability over initial cost concerns.

Final Outcome: Public permissioned blockchain

iWellChain

1. Do you need to share data?

iWellChain: Yes. Sharing referral and medical records data between providers and patients is crucial.

2. Can you share using trusted third parties?

iWellChain: No. Eliminate the need for trusted third parties to ensure direct and secure data exchanges.

3. Is data integrity and immutability crucial?

iWellChain: Yes. Data integrity and immutability are crucial to control data access and permissions.

4. Is transparency towards the actors important?

iWellChain: Yes. Transparency must be maintained to allow stakeholders to verify data authenticity.

5. Are the identities of all actors known?

iWellChain: Yes. Identities of all actors need to be verified to ensure that only authenticated users can access or transact on the network.

6. Are all actors trusted?

iWellChain: No. The system does not rely on trust among individual actors.

7. Do you need to involve patients?

iWellChain: Yes. Patients should be involved to give them control over their medical records and the ability to grant permissions for data access.

8. Is cost a limiting factor?

iWellChain: No. Transaction costs are paid by the users initiating transactions, allowing to operate without incurring the full burden of the network costs, distributing it among users.

Final outcome: public permissionless blockchain

DACIL

1. Do you need to share data?

DACIL phase 1: Yes. DACIL requires trials to collect user data and to have them interact in the platform.

DACIL phase 2: Yes. DACIL requires trials to collect user data and to have them interact in the platform.

2. Can you share using trusted third parties?

DACIL phase 1: Yes. User's data and some previously collected cohorts will be stored on a trusted platform. Few data analysts will have access to the data.

DACIL phase 2: No. No trusted third party can be used.

3. Is data integrity and immutability crucial?

DACIL phase 2: Yes. Data integrity and immutability are important for developing a digital coach to track COPD in the home environment.

4. Is transparency towards the actors important?

DACIL phase 2: Yes. Transparency should be maintained to allow stakeholders to verify the authenticity and traceability of data.

5. Are the identities of all actors known?

DACIL phase 2: No. DACIL will share data later with the broader research community, where the actors' identities might be unknown.

Final outcome: No blockchain is needed for DACIL phase 1; a public permissionless blockchain is needed for DACIL phase 2.

REALM

1. Do you need to share data?

REALM: Yes. Particular data needs to be shared and used to test health AI software.

2. Can you share using trusted third parties?

REALM: No. No trusted third party can be used.

3. Is data integrity and immutability crucial?

REALM: Yes. Data integrity and immutability are critical to testing AI software.

4. Is transparency towards the actors important?

REALM: Yes. The outcomes of the tests on the AI models should be seen and trusted by all the members of the REALM network.

5. Are the identities of all actors known?

REALM: Yes. The outcomes of the tests on the AI models should be seen and trusted by all the members of the REALM network.

6. Are all actors trusted?

REALM: No. It is not necessary to trust all actors in this case.

7. Do you need to involve patients?

REALM: No. Healthcare data is not shared, so it is not necessary to involve

patients.

9. Is public verifiability required?

REALM: Yes. The results should be able seen and verified by all the members in the network.

Final outcome: public permissioned blockchain

ChainSure

1. Do you need to share healthcare data?

ChainSure: Yes. ChainSure facilitates the sharing of insurance data between patients, providers, and insurers.

2. Can you share via trusted third parties?

ChainSure: No. The need for trusted third parties is eliminated due to single point of failure and the frequent requirement of human intervention in intermediaries.

3. Is data integrity and immutability crucial?

ChainSure: Yes. Data integrity and immutability is crucial within healthcare insurance domain.

4. Is transparency towards actors important?

ChainSure: Yes. Transparency is fundamental to ChainSure's operations, ensuring all transactions and data changes are visible and verifiable.

5. Are the identities of all health actors known?

ChainSure: Yes. All participants in the ChainSure ecosystem have verified identities.

6. Are all actors trusted?

ChainSure: Not. ChainSure operates on a trustless model inherent to blockchain, where trust is distributed across the system rather than placed in any single entity.

7. Do you need to involve patients?

ChainSure: Yes. Patient involvement is central to ChainSure, empowering them with decision-making capabilities regarding their insurance policies.

8. Is cost a limiting factor?

ChainSure: No. Compared to legacy health insurance systems managed by third parties, transaction costs are borne by the users initiating transactions, allowing ChainSure to operate without incurring the full burden of the network costs, distributing it among users.

Final Outcome: public permissionless blockchain.

LUCE

1. Do you need to share data?

LUCE: Yes. LUCE supports the sharing and reusing of data under clearly defined licensing terms, ensuring that data used in research is managed appropriately.

2. Can you share using trusted third parties?

LUCE: No. Remove the need for trusted third parties to reduce potential points of failure or misuse.

3. Is data integrity and immutability crucial?

LUCE: Yes. Data integrity and immutability are crucial to ensuring compliance with licensing terms and the GDPR.

4. Is transparency towards the actors important?

LUCE: Yes. Transparency is necessary to allow data subjects and other stakeholders to verify how data is used and to ensure compliance with the established rules.

5. Are the identities of all actors known?

LUCE: Yes. Knowing actors' identities is necessary for enforcing licensing terms and GDPR compliance.

6. Are all actors trusted?

LUCE: No. It is not necessary and impossible to trust all actors in this case.

7. Do you need to involve patients?

LUCE: Yes. Patients are the data subjects, and they should be involved in giving them control over their medical records and the ability to grant

permissions for data access.

8. Is cost a limiting factor?

LUCE: No. Transaction costs are paid by the users initiating transactions, allowing to operate without incurring the full burden of the network costs, distributing it among users.

Final outcome: public permissionless blockchain.