Value-based healthcare & Blockchain
Topics

- Value based healthcare and blockchain
- DIGIPHARM’s solution
- UN/CEFACT – Blockchain in healthcare WP
Problems facing healthcare

- Aging Populations
- Rise in chronic disease
- Rising cost of treatments
- Inefficiency & wastage
- Incentives misplaced

Barriers to patient access
Barriers to market access
Unsustainable Expenditure
Discentive for innovation
### The world is moving forward

<table>
<thead>
<tr>
<th>Payer</th>
<th>Manufacturer / provider</th>
<th>Therapy</th>
<th>Metrics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cigna &amp; Aetna</td>
<td>Merck &amp; Co.</td>
<td>Januvia &amp; Janumet Diabetes</td>
<td>Blood Glucose levels</td>
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<tr>
<td>Express Scripts</td>
<td>AbbVie</td>
<td>Viekira Pak (Hep. C)</td>
<td>Adherence</td>
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<tr>
<td>Cigna &amp; Aetna</td>
<td>Novartis</td>
<td>Entresto</td>
<td>Hospitalisation</td>
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<tr>
<td>Harvard Pilgrim &amp; Cigna</td>
<td>Amgen</td>
<td>Repatha (Cholesterol)</td>
<td>Cholesterol levels</td>
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</tbody>
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**Outcomes + experiences that matter to patients**

\[ \text{Cost to achieve outcomes} = \text{Value} \]

Accelerated approval  
CGP  
Gene therapy  
Competition  
Multi-indication

75% of payments for healthcare to be **value-based** by 2020  
(Deloitte)
Utilising blockchain

- Trust & Transparency of data: Data integrity, immutability and auditability
- Privacy & Security: Private permissioned blockchain
- Administrative burden: Automation via ‘smart contracts’
- Patient tracking & fragmented data: Digital identities & bespoke integration
- Time delays & tied up funds: Real-time reimbursement and settlement mechanisms
- Many platforms and systems: One platform for all stakeholders
The Reimburse platform will allow automated dynamic pricing models to be implemented across different indications, patient subgroups, therapy lines and localities while providing consistent and comparable outputs. In the future, Digipharm will be exploring the feasibility of integrating automated payment mechanisms between healthcare stakeholders. The dynamic nature of Reimburse will allow healthcare systems and manufacturers to manage and monitor their budgets and utilisation more effectively than is possible today via in-built key performance indicators on the user dashboard. Providing completely automated trust-based reimbursement solutions on a cryptographically encrypted platform for optimal security. Reimburse will accelerate a paradigm shift in pharmaceutical market access and innovative pricing whilst providing unmatchable benefits to all stakeholders.
Complex Agreements

Compliance (HIPAA & GDPR)

Medical devices, social care, wider tx provision

Patent pending

swisscom | Blockchain
Improving outcomes & reducing costs

- Innovative pricing made easy
- Risk-sharing
- Commission vs decommission
- Re-invest in care
- Remote patient monitoring
- Stakeholder collaboration & follow up
- Invisible benefits
- Reward engagement
UN/CEFACT blockchain in healthcare whitepaper

Develop standards and recommendations

Transfer of goods, data and funds

Supply chain

Prior authorization, trial data, EMR data, AE

Payment, audit, VBHC

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