

FICCI

Health Insurance in Digital India

The Next Steps...

QuintilesIMS

FICCI 9th Annual Health Insurance Conference

Making Health Insurance Universal and Sustainable

DECEMBER 2016


CARE



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Foreword by FICCI



Mr Antony Jacob
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Chair, FICCI Health Insurance Committee &
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Co-Chair, FICCI Health Insurance Committee &
CMD, Vidal Healthcare Services

Technology has been transforming healthcare in several innovative ways. The relevance of technology and hence digitization is imperative as we look at newer ways to make healthcare affordable and accessible in India. The Health Insurance industry in India has been impacted by digitization - but most of the impact has restricted to the sales process.

The most successful example of digitization has been the online purchase of health insurance policies. In addition, health insurers are using technology, primarily for policy administration, customer service and claims management.

From the consumer's perspective, this is not enough. Health insurance is a promise to pay at the point of need and the point of care - digitization can reduce friction and deliver on this promise. This is the main area for health insurers and healthcare providers to focus. Here, problem areas are about inter-connectivity, interoperability between systems, and data standardization.

For example - health insurers can push the cause of digitization by ensuring that they adopt the Electronic Health Record Standards which have been released by the Ministry of Health - these are also an important lever in the product roadmap to outpatient insurance.

The FICCI task force on digitization have worked together to develop a comprehensive roadmap for digitization in the health insurance industry. The roadmap covers the following aspects:

- What are the key areas which can be benefitted from digitization?
- Which are the low hanging opportunities and associated initiatives that can be achieved in medium or long term?
- Who are the key stakeholders in this digitization journey, their expectations and roles?

We would like to take this opportunity to thank the FICCI task force, led by Ms Malti Jaswal, Chief Operating Officer, Health Insurance TPA of India, and other industry leaders, who after several brainstorming meetings, and reviews, came up with this knowledge paper.

We believe that this report charts out an appropriate and pragmatic roadmap for digitization of healthcare insurance in India, and hope that it acts as a catalyst for the insurance industry and other stakeholders to embark upon digitization journey for integrated view of patient's health and better outcomes while avoiding unnecessary effort and costs for all concerned.

Message from FICCI task force on Health Insurance in Digital India



Malti Jaswal
Chief Operating Officer, Health Insurance TPA of India Ltd
FICCI Task force leader-Health Insurance in a Digital India

Health insurance plays a significant role in enabling access to healthcare in India for a sizeable population – be it through private purchased health plans by individuals and families, or health insurance covers organized by corporates for their employees and dependents or schemes rolled out by government for specific sections of population. On the other hand, IT and digitization are changing the landscape of all industries including healthcare and insurance, making transactions and services more seamless and user friendly.

The present times thus demand that health insurance industry delves deeper into digitization initiatives beyond what exists today in fragmented form. True digitization which has the potential to make a huge impact for all stakeholders would also mean a holistic approach for generation, availability and consumption of health data in most efficient and meaningful manner. With this aim in mind, FICCI Taskforce came up with the idea of developing a detailed Paper/Report on 'Health Insurance in Digital India'.

While there is a strong case to usher change at rapid/disruptive speed, however in the context of health insurance, it is to be noted that multiple stakeholders are involved with different levels /stages of IT enablement. The Report thus lays down the journey from hereon, in a structured and feasible manner and keeping focus on operationalization, next steps are explained in detail.

The report is a result of extensive deliberations amongst the task force and FICCI health insurance committee members and elaborate research and content development by IMS team. Whilst there is always scope for improvement and incorporation of more ideas, we hope that the Report shall act as a catalyst for the insurance industry and other stakeholders to embark upon digitization journey for integrated view of patient's health and better outcomes while avoiding unnecessary effort and costs for all concerned.

Message from QuintilesIMS



Amit Mookim
General Manager - South Asia
QuintilesIMS

Over the last few years digital revolution has penetrated across many industries in India and has aided in disruption of business models. Notably amongst the industries are e-retailing, financial services which have befitted from digital revolution. The adoption of technology by the healthcare industry has rather been slow in comparison with other industries. However, the healthcare industry has witnessed a surge with the recent adoption of technology and digitisation.

Health insurance is an important component of the healthcare delivery ecosystem wherein digitisation becomes mandatory for enhancing the overall patient care and experience. At present only one-fifth of the population is covered with some form of health insurance. This suggests that huge potential for growth is available for the healthcare insurance industry. Digitization presents many opportunities for health insurers for e.g. to expand reach, improve market share, provide additional value to customers etc. Insurers have taken steps to incorporate digitization into their business models, but adoption has been sluggish due to many challenges in the path.

With this vision of having an innovative digital healthcare ecosystem, we have prepared this report in conjunction with leading industry stakeholders. The report details out the challenges, opportunities and a realistic step by step roadmap for all stakeholders enabling them to take the country towards a truly digital world. We hope that this report helps to highlight the key challenges facing the digital revolution and way forward for greater adoption across the stakeholders in the health insurance value chain.

Executive Summary

The Indian health insurance industry has started on the path of digitization; but still has a long way to go before the full potential is realized. Majority of digital initiatives across health insurance market are being undertaken across sales & marketing and policy administration as it requires low degree of support from stakeholders across the value chain. For example, in online sale of policies, other stakeholders like providers, TPAs have minimal involvement. However, cross stakeholder collaboration would be critical in most of the other initiatives to drive digitization across health insurance.

There are several initiatives which can help to drive the agenda for digitization across health insurance industry. Over twenty such initiatives have been identified in this document that follows. However, implementing all these initiatives in one go across the country of the size of India may not be feasible. Hence, in the following report a more practical and stepwise approach to be taken to drive the digitization has been suggested.

A list of prioritized initiatives based on impact and challenges to implementation have been identified. These include:

- *Standardize data format for capturing patient details for easy exchange*
- *Use of unique patient identifier (UID using Aadhaar) for policy holders*
- *Unique identification for providers*
- *Smart cards for policy holders with policy benefits, utilization and health details*
- *Digital storage of pre-policy heath check up data*
- *Digital policies linked to UID and data storage with anytime access*

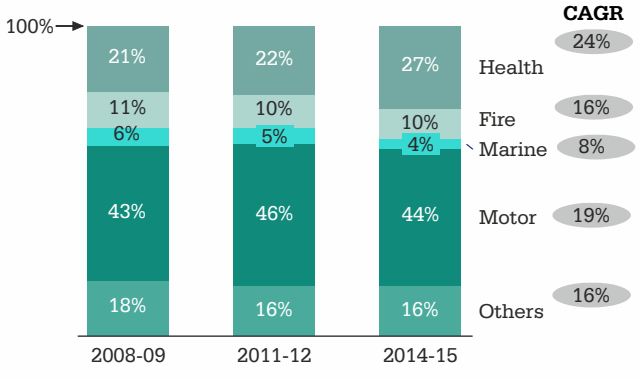
At present Ministry of health and family welfare (MoHFW) and IRDAI have taken several initiatives to drive digitization across health insurance sector in India. These initiatives have been used as groundwork for preparing a phase wise implementation plan for each of the prioritized initiatives.

1 Introduction

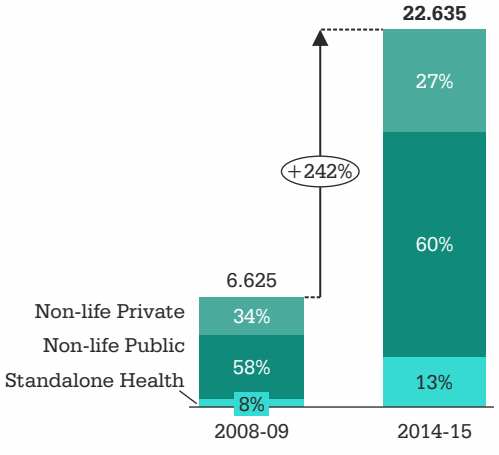
Overview of the health insurance industry in India

Health insurance is fastest growing segment in non-life insurance industry

Share of health insurance in non-life insurance segment (Premium)[1]

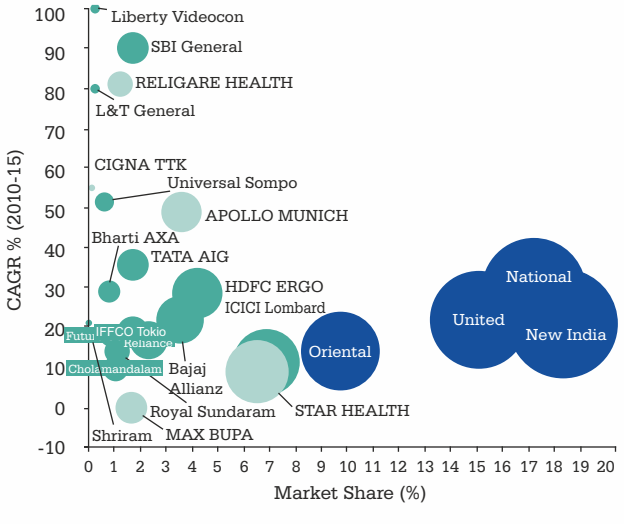


Share of health insurance, by type of insurer (Premium, INR Cr)[1]



- Health insurance segment has grown at CAGR of 24%; highest amongst all non-life segments
- Share of health insurance in non-life insurance segment has grown from 20% in 2008-09 to 27% in 2014-15
- The public sector insurers account for the largest share in the premiums collected

Health insurance players, growth vs. market share[1]



Source: IRDAI Annual reports

PSU Insurers

- Market leaders with 60% market share
- Greater focus on 'Group health' segment, middle and lower middle income groups, government mass schemes
- Traditionally dependent on TPAs, have also set up joint venture TPA owned by all PSUs

Private Multi-line Insurers

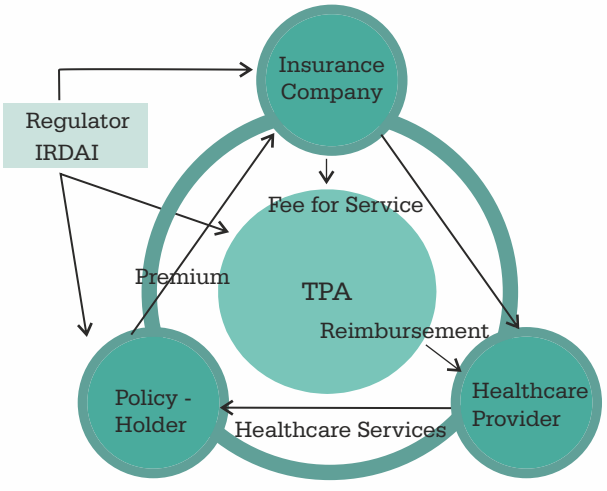
- Focused on traditional products like hospitalization cover with add-ons such as free health check ups, etc.
- Most large players like ICICI Lombard, Apollo Munich have started in-house claim settlement

Mono-line Insurers

- Relatively new entrants in the market, currently in high growth phase
- High focus on product innovation, e.g., chronic disease coverage, wellness programs, etc.

IRDAI regulates the health insurance industry in India; Online sales estimated to grow 15-20X by 2020

Health insurance industry stakeholders



Regulator (IRDAI)

- To protect the interests of policyholder(s)
- To regulate, promote and ensure orderly growth of the insurance sector

Insurance Company

- Product Development
- Distribution through mix of channels
- Underwrite risk
- Pay claims

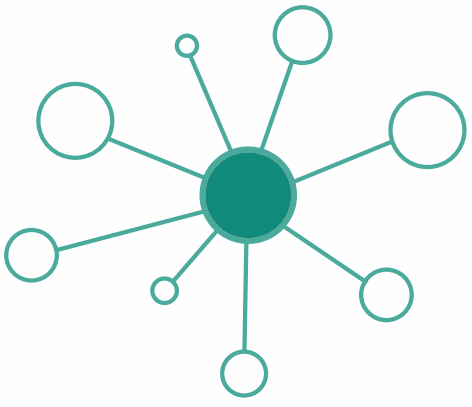
TPA

- Intermediary between the insurer and the insured to facilitate cash-less service
- Develops systems and management structures to process claims, control leakage, customer service 24*7 basis

Healthcare Provider

- Provide healthcare services to patients
- Tie-up with Insurers/TPAs to offer negotiated rates of treatment to insurers & cashless settlements for patients

Health insurance distribution channels



Conventional channels form backbone of insurance distribution network



Agents	Insurer Branches (Direct sales)	Brokers	Corporate agents
Approx. 35%	Approx. 30%	Approx. 25%	Approx. 10%



Direct online sales

Approx. 1%

Rising impact of online channel

At present sales of INR 100-150 Cr. can be attributed to **online sales which is estimated to grow ~ 15-20 times by 2020**

Share of health insurance premium

Source: IRDAI Annual reports, BCG report 'Insurance Digital- 20X by 2020'

The health insurance industry in India is poised for strong growth, however, several challenges may impede the pace

Drivers for growth

- Demographic factors such as growing middle class, young insurable population with rising spends on healthcare
- Rapidly increasing healthcare costs- Health insurance serves as a measure to mitigate financial impact of
- Growing awareness of the need for healthcare protection
- Government initiatives:
- Changes in regulatory framework with automatic foreign investment up to 49% in insurance companies
- Government schemes to provide coverage to poor population (e.g., RSBY and schemes by state governments)



Challenges to growth

- Poor data management across the healthcare ecosystem
  Compartmentalized approach due to legacy systems and multiple incompatible standards
- High claims ratios for insurance organizations
- Low transparency of healthcare delivery network
  Varying treatment costs across providers and lack of standardization & accreditation
- Frauds and leakages in health insurance claims
- Resistance from stakeholders to adopt technology
- Delay in claims payment (to providers)

2 Digitization and health insurance

Understand the current state of digitization for health insurance industry in India

Digital technologies are impacting us in multiple ways, and their effect is expected to rise further significantly

- **High speed internet connectivity, wireless mobility,** cloud computing, social media are transforming the world as we know it. It has **impacted how we work, play, consume, interact, stay in touch.**
- **This is DIGITIZATION**, the pervasive adoption of a wide variety of digital, real-time, and networked technologies, products, and services that will enable people, organizations, governments, and even machines to stay connected and in communicating with one another, gathering, analyzing, and exchanging massive amounts of information on all kinds of activities.
- Government of India is also taking the digital route by launch of **'Digital India'** campaign. This would ensure that government services are provided to citizens electronically. It will encompass the delivery of healthcare service also through **e-health** as one of the initiatives.

Rising usage of few digital technologies[1]

	Metric	Current Estimates	Realistic aspiration for 2025
 **Mobile Internet**	Mobile internet penetration in India	~25-27%	50-60%
	Mobile internet users in India	300-340 million	700-900 million
 **Cloud Technology**	Extent of cloud-based government services to citizens	Nascent	Virtually Universal
 **Smart phones**	Number of smartphone users	~200 million	700-900 million
 **Digital Payments**	Number of retail electronic and card transactions per year	1.5 billion	12 billion
	Number of retail establishments accepting digital payments (% of total)	0.6 million (6%)	>6 million (>60%)

Given the increasing digital penetration and focus on digitization going forward, the health insurance industry needs to imbibe elements of technology to drive excellence

Source: 1) India's technology opportunity: Transforming work, empowering people, McKinsey Global Institute, December 2014, CIOL.com, RBI

The Indian health insurance industry has started on the path of digitization; but still has a long way to go before the full potential is realized

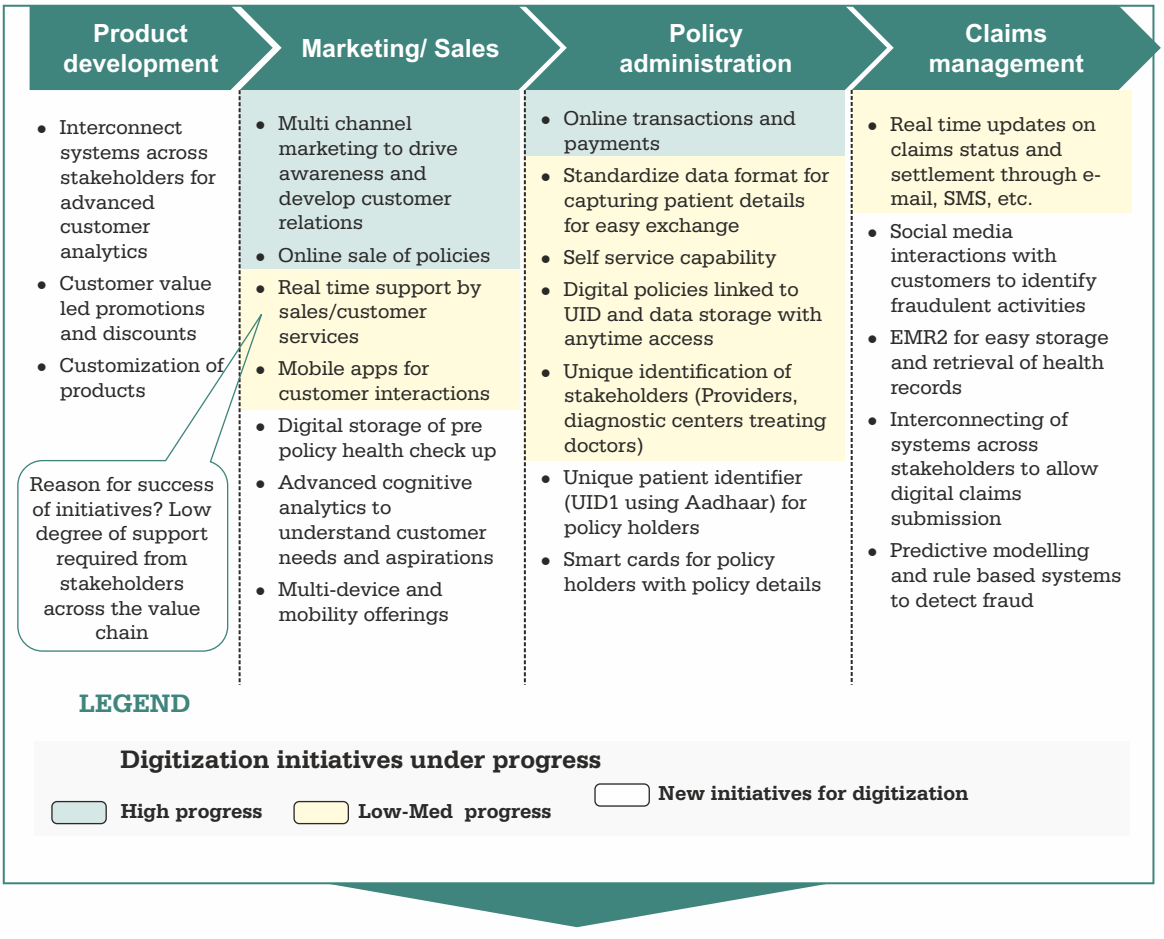
- Insurers themselves have taken steps to reap benefit of digitization e.g., online sale of insurance, electronic settling of claims, analytics on customer data captured, etc.
- Several other initiatives are under progress but need for investment and lack of co-ordination amongst different stakeholders have slowed down the pace of adoption for digitization

Digitization in health insurance: Realizing the full potential…



- **Data captured in standardized formats**
- Data generated only at point of origin once and consumed/used/enhanced **across the value chain** (seamless and secure exchange of data across all stakeholders)
- Data accessible **as and when required** using internet, over cloud or any other digital format
- **Multiple touch points** to reach out and service customers (agents, online, apps, social media, etc.)
- **Use of analytics** to provide better products and services and also for fraud prevention

Majority of digital initiatives across health insurance value chain are being undertaken across marketing/sales and policy administration



Initiatives would drive improved health outcomes and health management for patients

- Availability of patient data across value chain would help in taking better clinical decisions and also drive accountability for outcomes
- Insurance data analytics can also help to prioritize the investment areas for insurers, providers and government
- Further, they will play an important role in reducing healthcare expenditure

1) Unique Health Identification 2) Electronic medical records

Digitization has certainly delivered value to customers, but adoption has been slow till date due to several inhibiting factors



Benefits for customers, insurers and intermediaries

Enriching customer experience

Digital technology can enable companies to improve and personalize communications, and thus enhance customer experience, without a disproportionate increase in costs

Developing better customer insights

Customer data captured through digital channels can help to understand their needs and hence customize offerings accordingly

Increasing internal efficiencies

Transaction turn-around-time and cost can be lowered as data can be readily transferred and analyzed across the stakeholders

Stronger competitive positioning

Digital technologies can help insurance players to create differential positioning by providing customized services and solutions to customers through better analytics

Expanding revenue streams

Insurers can expand their reach in the market with minimal investment by using digital channels

Improving management of risks

Real time analytics and data availability can ensure management of fraud, help maintain health, produce better health outcomes

Inhibitors



Lack of stakeholder alignment

Implementation of digital initiatives requires agreement on protocols, standards and investment by stakeholders in the value chain, e.g. to drive standardization of data, providers would need to invest to upgrade/change their systems

Technology constraints

Stakeholders across the insurance value chain are using different systems. Interconnecting these would require upgradation, creation of middleware which may require investment

Lack of compelling business case (cost vis-à-vis benefit)

Some initiatives have long gestation periods before realizing the actual returns

Lack of mandate from regulatory authorities for implementation

Global experience to drive e-health initiatives suggests that regulator's mandate is required to drive initiatives at national level

Perceived customer/data securities

Sharing of data across stakeholders also comes with challenge of data theft and cybersecurity challenges

Moreover, many myths are associated with digitization of health insurance, due to inadequate knowledge shared across stakeholders

Myth #1: Digitization of health insurance is too complicated\



Digitization can be simplified using the right approach. Timely and step wise approach can help to drive digitization in simple and effective manner. Learnings can be used from other countries and also sectors to preempt challenges.

Myth #2: Digitization is too expensive



It does not have to be expensive. It might incur upfront investment across the healthcare ecosystem, but leads to tangible and intangible returns which results in improved performance.

In survey of 1,442 respondents from Asia pacific and Japan, India and China led in terms of achieving digital effectiveness[1].

Digital Disrupters have **two times higher revenue growth** and report **two times higher profit growth** than the mainstream organizations

Myth #3: Only young would use digital health insurance services



People from old age categories are more than willing to leverage digital medium as it provides convenience. This is illustrated by rising use of internet and smartphones across the old age categories.

Sharp surge in the usage of mobile internet has been witnessed in proportion of **41+ population** between 2013 and 2015 from **11% to 16%**[2]. The proportion of people aged **over 50 who use smartphones quadrupled** between 2013 and 2015

Source: 1) CXO.com 2) Ericsson Mobility Report

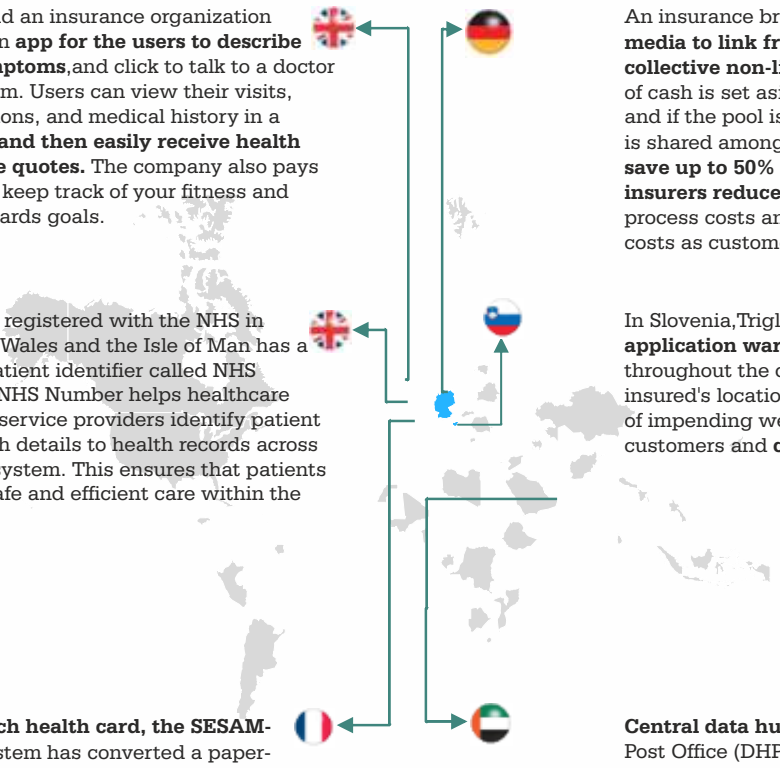
If we look at various countries across the globe, it seems that they have realized that benefits of digitization outweigh the challenges

In England an insurance organization created an **app for the users to describe their symptoms**,and click to talk to a doctor about them. Users can view their visits, prescriptions, and medical history in a timeline, **and then easily receive health insurance quotes.** The company also pays money to keep track of your fitness and work towards goals.

An insurance broker in Germany uses **social media to link friends together to buy collective non-life policies.** A small amount of cash is set aside to cover small claims and if the pool is untouched at year-end, it is shared among the group. **Policyholders save up to 50%** on premiums, while **insurers reduce their claims ratios,** process costs and customer acquisition costs as customers numbers grow.*

Everyone registered with the NHS in England, Wales and the Isle of Man has a unique patient identifier called NHS Number. NHS Number helps healthcare staff and service providers identify patient and match details to health records across the care system. This ensures that patients receive safe and efficient care within the NHS.

In Slovenia,Triglav Toca is a mobile **application warning against hail** throughout the country, detecting the insured's location through GPS. App warns of impending weather events engage customers and **cut the cost of claims.**



The **French health card, the SESAM-Vitale** system has converted a paper-based claims mechanism into an electronic version that **improved the time for payment reimbursement** from several weeks to days.All claims are submitted by a healthcare professional using the card to identify the individual and **assure that the electronic claim is genuine.**

Central data hub called the Dubai Health Post Office (DHPO) created to manage health transactions.
Data format for capturing patient details at each step of the health insurance has been standardized.
Health insurance policies and data storage has been digitized using cloud with anytime access through mobile/computer.

**Example is to highlight the use of digitization across globe. At present, in India, it is against the extant regulatory provisions.*

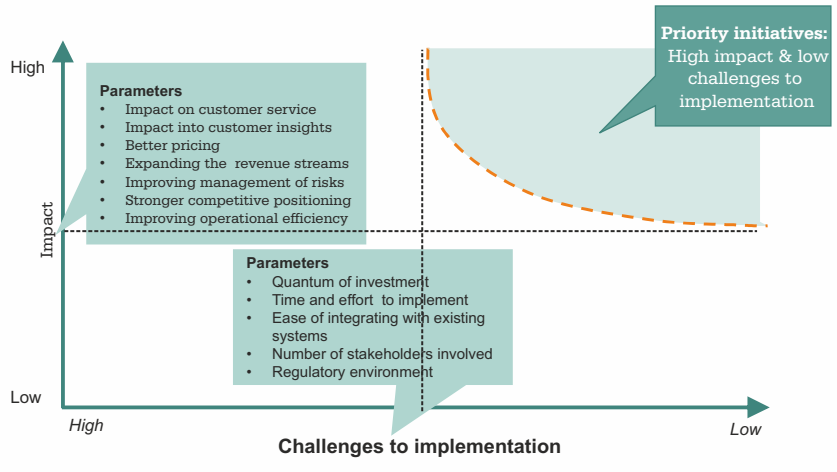
3 Identifying initiatives

Key initiatives to drive digitization in the health insurance industry in India

A framework has been used to identify digital initiatives with higher impact and ease of implementation

- It is imperative that a practical and stepwise approach be taken to drive digitization for health insurance in India.
- For success it is critical to prioritize initiatives, as implementing all in one go across country of the size of India may neither be feasible nor pragmatic.
- A framework has been created to prioritize all the potential initiatives under which each initiative is mapped on potential **impact** they can create and likely **challenges to implementation** for each

Framework for prioritization of initiatives



For example: Unique patient identifier (UID using Aadhaar) for policyholders

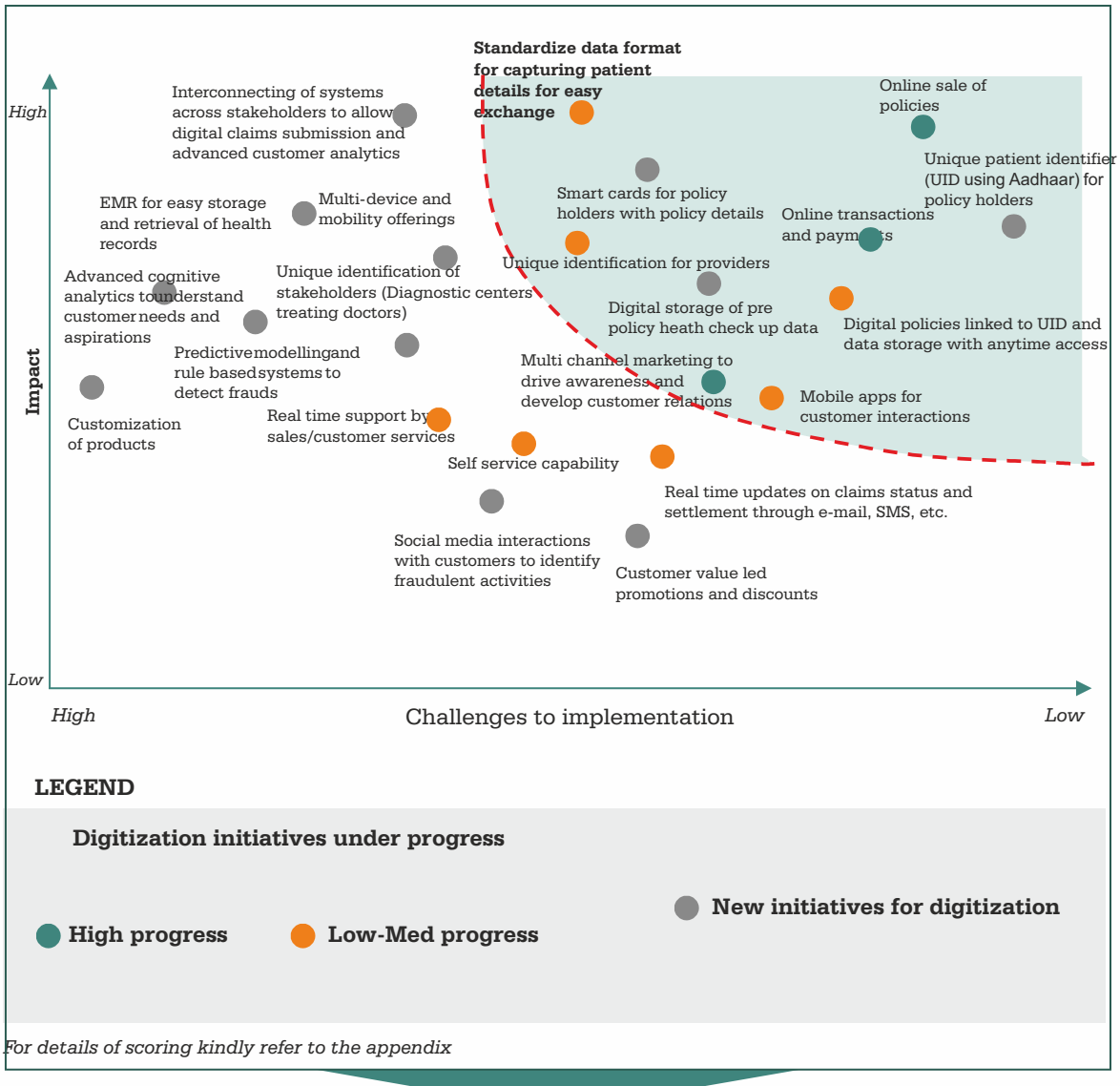
Impact: High

It will help to identify each patient uniquely which would enable insurer to provide better customer service and help to gain better insights into individual needs. It would also enhance fraud control and enable usage of customer data across different stakeholders.

Challenges implementation: Low

Aadhaar can readily be used as unique ID for patients. No need to create separate ID across India as it would take time and effort.

Initiatives have thus been shortlisted based on the framework



For details of scoring kindly refer to the appendix

- Overall ten initiatives have been shortlisted to drive digitization of health insurance in India

The shortlisted initiatives could be implemented in phased manner; few of the initiatives are already underway

1. Standardize data format for capturing patient details for easy exchange
2. Use of unique patient identifier (UID using Aadhaar) for policy holders
3. Unique identification for providers
4. Smart cards for policy holders with policy benefits, utilization and health details
5. Digital storage of pre-policy heath check up data
6. Digital policies linked to UID and data storage with anytime access
7. Online sale of policies
8. Mobile apps for customer interactions
9. Multi channel marketing to drive awareness and develop customer relations
10. Online transactions and payments

For each of the initiatives a phase wise implementation plan has been proposed in the following chapter

To be dealt in detail by FICCI sub group on distribution

- Other key initiatives already being implemented successfully in Indian market
- Do not need specific steps from stakeholders to drive implementation

Other initiatives – To be taken up in later phases

- Interconnecting of systems across stakeholders to allow digital claims submission and advanced customer analytics
- EMR for easy storage and retrieval of health records
- Multi-device and mobility offerings
- Unique identification of stakeholders (Diagnostic centers treating doctors)
- Advanced cognitive analytics to understand customer needs and aspirations
- Customization of products
- Real time support by sales/customer services
- Multi channel marketing to drive awareness and develop customer relations
- Self service capability
- Social media interactions with customers to identify fraudulent activities
- Real time updates on claims status and settlement through e-mail, SMS, etc.
- Predictive modelling and rule based systems to detect frauds

4 Implementation plan

Implementation plan for shortlisted initiatives to drive digitization of health insurance in India

An implementation plan for each of the shortlisted initiatives has been developed based on discussions with stakeholders

IMPLEMENTATION PLAN

The implementation plan has been divided into 3 phases

- Phase 1 — *Steps to be taken over next 2-3 years from today*
- Phase 2 — *Steps to be taken after the successful implementation of Phase 1*
- Phase 3 — *Long term initiatives to be focused upon after 5 years*

Key elements of implementation plan

- Actions — *What needs to be done?*
- Timeline — *By when it can be done?*
- Ownership — *Who will own the actions?*
- Dependency — *Any event or previous action that would drive the current action?*

Discussions with stakeholders across health insurance industry

Shortlisted initiatives for implementation plan

1. Standardize data format for capturing patient details for easy exchange
2. Use of unique patient identifier (UID using Aadhaar) for policy holders
3. Unique identification for providers
4. Smart cards for policy holders with policy benefits, utilization and health details
5. Digital storage of pre-policy heath check up data
6. Digital policies linked to UID and data storage with anytime access

Ministry of Health and Family Welfare (MoHFW) and IRDAI have taken several initiatives to drive digitization

Current state

- At present data is captured using different systems/software across stakeholders which leads to lack of standardization in captured data
- Realizing the importance of data standardization across healthcare ecosystem, several initiatives have been taken by the authorities

Key initiatives by MOHFW and IRDAI

MoHFW

In charge of health policy in India

- National eHealth Authority (NeHA) has been conceptualized in Mar 2015. As nodal authority that will be responsible for development of an Integrated Health Information System in India, while collaborating with all the stakeholders
- Approved and recommended protocols/guidelines for driving standardization of data across stakeholders as follows:
  - Electronic Health Record Standards for India, August 2013
  - Electronic Medical Records Standards in India by EMR Standards Committee, April 2013

IRDAI

Regulator for insurance sector in India

- IRDAI has issued guidelines on Standardization in Health Insurance (July 2016):
  - Provides guidance on standard definitions, nomenclatures and standard formats billing, discharge, claims etc.
  - Mandates registration of service providers in ROHINI by 31st Dec 2016
- Tariff advisory committee (TAC) of IRDAI has developed Health Insurance Data Reporting standards in a Manual as reference guide for the reporting of Health Insurance Data

Current Challenges

- NeHA is still in conceptual stage and will be setup through an appropriate legislation (Act of Parliament) which will take time
- Investment required to upgrade the existing systems has prevented stakeholders from upgrading their existing systems to comply with recommended standards by MoHFW

1

Drive standardization of data across the health insurance ecosystem; simultaneous focus on customer data security and privacy during data storage and exchange

PHASE 1

Action	Timeline	Ownership	Dependency
• Launch pilot project with key hospitals to capture data in standard formats: • Select hospitals across Delhi and Mumbai - *Hospitals contributing to 50% of the insurance claims from region, 2-3 corporate chains and 2-3 leading standalone hospitals*	Over next 6 m – 1 yr	Insurance Council	Hospital on-boarding
• Suggest IT system upgrade for providers, TPAs and insurers using middle ware or create e-healthcare portal to submit data in standard formats	Over next 6 m – 1 yr	Providers Insurers TPAs	Middleware or e-healthcare portal creation
• Launch training initiatives for effective use of middleware (Middleware vendor may create online training modules, Insurers can organize workshop, if required)	Over next 1 – 2 yrs	Insurers Providers	
• Track benefits achieved by stakeholders for e.g. faster claims payment for hospital etc.	Over next 1 – 3 yrs	Insurers Providers TPAs	
• Demonstrate benefits achieved by providers, insurers and TPA in pilot phase in select forums	Over next 2 – 3 yrs	IRDAI Insurers	

PHASE 2

- Mandate implementation across top cities across India
  - *Next top 15 cities in terms of population; Leading hospitals contributing to 50% of the insurance claims*
- To increase penetration across Delhi and Mumbai mandate standardization of data across all providers

PHASE 3

- Extend implementation across India based on learnings from earlier phases
- NeHA to create central data repository for data exchange across all stakeholders
  - Repositories can be created state wise or zone wise

Customer data security and privacy

A secure IT infrastructure for handling customer data security and privacy issues is an important consideration for all the suggested digital health systems and implementations. The security standards work together with the privacy standards to establish appropriate controls and protections. Any health record system requires safeguards to ensure the data is available when needed and that information is not used, disclosed, accessed, altered or deleted inappropriately while being stored or transmitted.

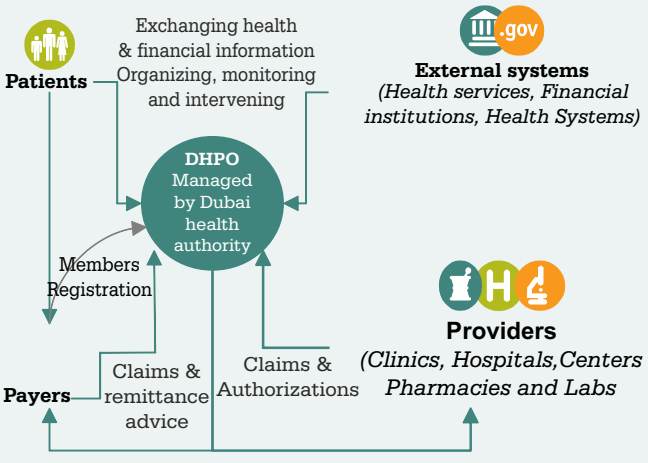
As with any online digital format, concerns of breach exist, however, the benefits of digitization outweigh potential risks. Below are a couple of measures that can be taken initially in this direction:

1. *Outline privacy and security policies and procedures to secure patient's information which includes administrative controls, monitoring access, etc.*
2. *Identify and implement process for masking all data through cryptography (encryption for data integrity, etc.)*

Case study: DHA* deployed a central data hub called the Dubai Health Post Office (DHPO) to establish a standard health language communicated across the country

Dubai Health Authority (DHA) has deployed a central data hub called the Dubai Health Post Office (DHPO) as part of EclaimsLink project to manage health transactions

DHPO structure

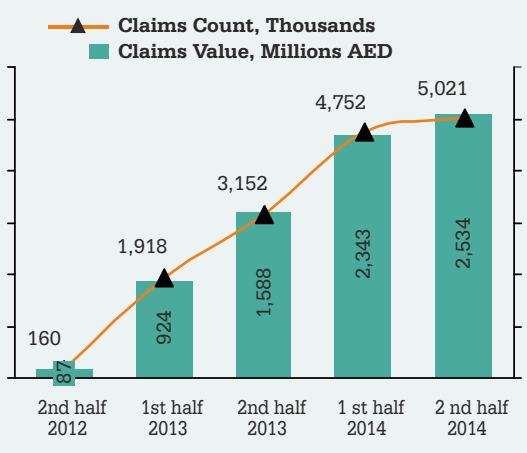


Steps followed

1. Dubai healthcare authority **initiated EclaimLink project** to establish a unified health language communicated across the country
2. To provide centralized health data tracking system, **DHPO was created**
3. **Manuals, trainings and guidelines were set** to standardize and explain each step of the process
4. **List of electronic transactions were mandated** to implement a unified structured communication schema
   - *DHA oversees all operations relating to the eClaimLink system, and ensures that rules and regulations are adhered to for full compliance and that all health insurance transactions are reported through the system.*

Since inception in 2012, EClaimLink has shown successful uptake by stakeholders across the insurance value chain

Claims submitted in Dubai via EClaimLink



- The exponential increase in claims submitted through EClaimLink indicates **successful uptake by all stakeholders** in health insurance ecosystem
- High level of compliance can be attributed to **supporting regulations by DHA**

* *Dubai Health Authority*

Case Study: EclaimLink has led to standardization of data format for capturing patient details and easy exchange of data and collaboration across stakeholders

eClaimLink benefits

- Established a **unified health language** communicated **across the country**
- Provided the **DHA with the needed information** to organize, strategize and optimize the healthcare setting
  - The DHA mandates that all transactions be sent electronically, validated and stored in the DHPO
  - Full access to the healthcare data on the DHPO empowers the DHA with the needed information
- Easy **exchange of financial and clinical information** between providers, payers and regulators
  - Providers, Payers and Third Party Administrators (TPAs) have user protected access to the DHPO, to view a history of their previously submitted and received transactions and submit new ones
  - Payers also have access to a marketplace platform including a management system that gives them the ability to build, import, and customize their products, policies as well as payer's network data
  - Clients can then view the uploaded product details and select their desired insurance product for purchase
- Enabled **digitization of health insurance policies and data storage** using cloud with anytime secure access through mobile/computer
- Raised the quality of care, enhanced efficiency, reduced mistakes, fraud and abuse

At present unique ID for patients and providers are available but their adoption faces several challenges

Current state

- At present insurers provide enrollment number or policy number to consumer as an identifier.
- Aadhaar has been established as credible method to identify consumers across some government programs. While mandatory usage has been questioned legally, it may be ideally suited for current purpose.
- In the latest guidelines on standardization in health insurance by IRDAI, providers have been guided to register in Hospital Registry ROHINI maintained by Insurance Information Bureau (IIB). Insurers and TPAs have been given responsibility to ensure compliance.

Current Challenges

- IRDAI can provide guidance for registration of providers under ROHINI but it lacks any regulatory oversight on them. Hence compliance might be a challenge.
- Changes required to hospital IT system and claims form to include patient unique ID.
- Restrictions on mandatory usage of Aadhaar as unique identifier.



Case study: NHS number in Great Britain ensures that patients receive safe and efficient care

- Everyone registered with the NHS in England, Wales and the Isle of Man has a unique patient identifier called NHS Number
- NHS Number helps healthcare staff and service providers identify patient and match details to health records across the care system. This ensures that patients receive safe and efficient care within the NHS
- Each NHS Number is made up of 10 digits shown in a 3-3-4 format:

9	4	3		4	7	6		5	9	1	9

- The modern style of NHS number was generally introduced in 1996 and was made mandatory in 1997
- A person gets an NHS number at birth, or when they first make contact with the NHS by registering with a GP

2 & 3

Drive use of unique patient identifier for insurance policy holders and providers

PHASE 1

Action	Timeline	Ownership	Dependency
Ladopt Aadhaar card as unique patient identifier: • Edit form for buying new insurance, to include UID • Provide option to existing customers to update Aadhaar number by filling up a manual or online form	Over next 6 m – 1 yr	Insurers	
• Unregistered hospitals to be provided guidance to register in ROHINI (Notification already issued by IRDAI)	Over next 6 m – 1 yr	RDAI Insurers	
• Drive utilization of UID for both patients and providers across metros (Delhi, Mumbai, Kolkata and Chennai) • Target 100% compliance for provider UID	Over next 1 – 2 yrs	Insurers TPAs	Hon'ble court's decision around mandatory nature of Aadhaar may need to be considered
• Insurance cards to be issued to existing or new customers should show Aadhaar number	Over next 1 – 2 yrs	Insurers	Unique ID to be updated first for customers

PHASE 2

- Based on success of implementation across top metros mandate implementation across top cities across India (50% compliance for use of unique provider ID)
  - *Next top 15 cities in terms of population to be considered*

PHASE 3

- Post successful roll out across top metros and 15 top cities, mandate use of UID for providers across India

At present insurers provide plastic cards with basic details; Smart cards haven't gained popularity given limited utility

Current state

- Cards issued by retail and group insurers capture basic details which are printed on the card surface. Details include: Name, age and gender of policy holder; Photograph (not always); Policy number; Validity

Current Challenges

- Presence of multiple insurers and each follows a separate format to issue card to insurance consumer
- Lack of utility for smart cards: No clarity and alignment on data that should be captured on smart cards for benefit of all the stakeholders
- Lack of infrastructure to capture, store read data from smart card



Case study: Use of smart card under Rashtriya Swasthya Bima Yojana (RSBY)

- Government-run health insurance scheme for the Indian poor to provide health insurance coverage to the unrecognized sector workers belonging to the BPL category
- Initiated in 2008, it provides for cashless insurance for hospitalization in public as well as private hospitals with coverage of up to .30,000
- Insurance consumers get a **biometric-enabled smart card containing their fingerprints and photographs**
- Each card can handle up to 5 beneficiaries from each family



RSBY smart card

- Till date, ~**41 million smart cards have been issued** which manage ~**110-120 million beneficiaries**
- **Smart cards helps to verify the usage by intended beneficiary** only whenever he/she visits hospital. This feature enables **lowering leakages** in the insurance scheme
- The scheme has won plaudits from the World Bank, the UN and the ILO as one of the world's best health insurance schemes

4 & 5

Promote use of smart ID cards for policy holders with ability to capture data about policy benefits, utilization and user details

PHASE 1

Action	Timeline	Ownership	Dependency
• Align on data to be captured and stored on smart card - Pre policy health check up data can be a starting point - Other medical data as a patient visits provider (s) for treatment	Over next 6 m – 1 yr	IRDAI Insurers Providers	-
• Empaneled hospitals across top 4 metros to be provided guidance to update infrastructure for using smart cards - Incentives like tax rebates on investment for upgrade to be provided	Over next 1 – 2 yrs	IRDAI Providers	
• Suggest issue of smart ID card to new insurance consumers with storage of pre policy health check up for top four metros* *(IRDAI has suggested use of smart cards in health insurance regulations 2016)*	Over next 1 – 2 yr	Insurers	
• Existing insurance consumers to be provided smart cards on renewal cycle	Over next 2 – 3 yrs	Insurers	
• Target 80% penetration for smart card across top metros	Over next 2 – 3 yrs	IRDAI	Upgradation of supporting infrastructure for effective usage

PHASE 2

- Based on success of implementation across top metros mandate implementation across top cities across India (50% penetration for smart card)
  - Next top 15 cities in terms of population to be considered

PHASE 3

- Post successful roll out across top metros and 15 top cities, mandate utilization across India

IRDAI has taken the necessary steps to drive storage and use of insurance policies in digital format (e-insurance)

Current state

- IRDAI has issued licenses to five insurance repositories to digitize physical insurance policy to e-insurance and store electronically in digital format
- These companies, will be linked to all insurance companies, will maintain data of policies electronically for insurers and will open e-insurance accounts for policyholders.
- Customers can use this facility free of cost
- IRDAI has already prepared a grid for compulsory issuance of insurance policies in the electronic form from Oct 2016 (Health insurance policies with sum assured >=INR 5 lakhs)

Current Challenges

- Lack of awareness among customers regarding availability and benefits of the facility



India : Telangana become first state to accept e-motor insurance policies to improve compliance

- **Electronic motor insurance policies** are legally accepted by the police and transport authorities in Telangana
- The initiative was a joint effort by the Insurance Regulatory and Development Authority of India (IRDAI), Department of Information Technology, police and transport departments of the state
- The policy is called **e-Vahan Bima, an electronic motor insurance policy** issued in digital form with Quick Response (QR) code
- These policies can be stored and accessed on smart phones, the process of verification has become easier for commuters as well as the police
- This initiative can help in easy **verification of policy through QR code and also through SMS-based verification**
- This would help to **increase compliance as currently of the** 84 lakh vehicles in the state, **50 per cent do not have insurance**

6

Drive use of digital policies linked to unique patient ID and anytime secure access

PHASE 1

Action	Timeline	Ownership	Dependency
• Create awareness in customers for digital storage of insurance policy and facilitate creation of e-insurance account	Over next 6 m – 1 yr	Insurers IRDAI	To ensure fully functional digital repositories
• IRDAI has prepared a grid for compulsory issuance of insurance policies in the electronic form from October 2016, which should be tracked and implemented effectively	Over next 1 – 2 yrs	IRDAI Insurers	
• Mandate convert existing insurance policies to e-insurance across top 20 cities in India	Over next 2 – 3 yrs	IRDAI	
• Track conversion to e-insurance policy with a target of 50% conversion	Over next 2 – 3 yrs	IRDAI	

PHASE 2

- Based on success of implementation across top cities, mandate e-insurance pan India (50% penetration to be targeted initially) post 2018

PHASE 3

- In long term e-insurance to be mandated for all insurance consumers

5 Key recommendations and conclusion

Key recommendations for stakeholders to drive digitization in health insurance

Suggestions for the government and regulator



- Understand challenges faced by industry to implement data standards and protocols
- Resolve the challenges or apprehensions of the industry in joint discussions with stakeholders and prepare time bound implementation roadmap for each initiative for digitization
- Mandate the implementation of initiatives where voluntary uptake is lacking
- Promote the use of digital initiatives by highlighting successes achieved by different stakeholders in industry

Suggestions for industry



- Proactive implementation for digital data standards and protocols recommended by MoHFW and IRDAI without waiting for a mandate
- Recommend not to start alone on the path towards digitization. Collaborate with partners in value chain wherever possible, to share investment and benefits.
- Leverage learnings from successful examples of use of digital technology from within India and across the globe
- Incorporate digital technologies like advanced cognitive analytics, social media and cloud in business strategy as they would become indispensable in future

Conclusion

- **Digitization is imperative** as it is affecting the way people work, play, consume, interact, stay in touch. The **insurance industry will be required to adopt** new technologies in the future.
- As compared to developed markets, **India has a wider gap to be covered.** With the rising population and changing demography, insurers and intermediaries will have to **innovate continuously** to be relevant in the market.
- A lot of **good work is already being done by MoHFW and IRDAI** by recognizing the need thereby proposing creation of NeHA and creating digital standards/protocols which can be used by the industry. These **initiatives provide a solid base to drive implementation** across industry.
- The best way to move forward is to **break the problem into parts** and choose the doable initiatives. It is critical to focus on initiatives which have low challenges to implementation and provide high impact.
- **Leveraging the available assets like aadhaar number, mobile number** to drive some of the initiatives would help to expedite spread of digitization.
- **A lot of impact can be created through few doable initiatives**. This would help establish benefits of digitization and remove any myths that are prevalent in the industry today.
- The impact will help in letting all **stakeholders appreciate the benefits of digitization** and in turn will help drive its next phases.

The impact of digitization has been aptly summed up by management guru Ram Charan[1]

Every industry will soon be driven by digitization and every winning company will be using algorithms or mathematical rules for processing information, to shape the end-to-end customer experience. Any advantages you have now will pale in comparison with a great set of algorithms that differentiates the customer experience. It is the algorithms that will create value for the business.

This is not guesswork. Sensors, the cloud, mobile and broadband wireless, and other such technologies are increasing the flow of digitized information exponentially. Algorithms, run on ever faster computers, can do amazing things with that information, from detecting patterns and making predictions to solving complex problems. They can even modify themselves as new information comes to light. In the hands of a "catalyst", such as the late Steve Jobs, Jeff Bezos, Larry Page, Sergey Brin, Mark Zuckerberg, or Mark Andreessen, algorithms can radically alter the consumer experience.

Source: 1) How to Transform a Traditional Giant into a Digital One, Rama Charan, Harvard business review

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- Mr. Eswaranatarajan N - Chief Operating Officer, Kotak Mahindra General Insurance
- Mr. Syed Quasim Ali - Assistant Director, FICCI

About Federation of Indian Chambers of Commerce and Industry (FICCI)

Established in 1927, FICCI is the largest and oldest apex business organisation in India. Its history is closely interwoven with India's struggle for independence, its industrialization, and its emergence as one of the most rapidly growing global economies.

A non-government, not-for-profit organisation, FICCI is the voice of India's business and industry. From influencing policy to encouraging debate, engaging with policy makers and civil society, FICCI articulates the views and concerns of industry. It serves its members from the Indian private and public corporate sectors and multinational companies, drawing its strength from diverse regional chambers of commerce and industry across states, reaching out to over 2,50,000 companies.

FICCI provides a platform for networking and consensus building within and across sectors and is the first port of call for Indian industry, policy makers and the international business community.

Additional information is available at: www.ficci.in

About QuintilesIMS

QuintilesIMS delivers integrated information and technology solutions to drive healthcare forward. Around the world healthcare stakeholders are working to improve real-world patient outcomes through treatment innovations, care provision and access to healthcare. For the information, technology and service solutions they need to drive new insights and approaches, they count on QuintilesIMS. With a global team of 50,000, we harness insights, commercial and scientific depth, and executional expertise to empower clients to achieve some of their most important goals: Improving clinical, scientific and commercial results. Realizing the full potential of innovations. And, ultimately, driving healthcare forward.

Additional information is available at: www.quintilesms.com

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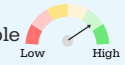
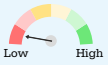
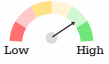
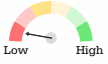
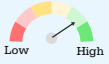
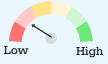
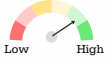
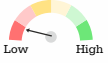
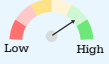
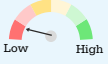
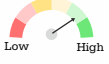
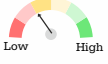
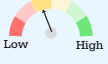
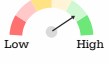
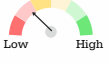
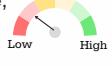
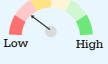
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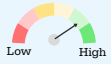
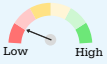
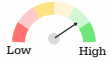
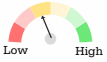
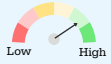
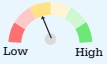
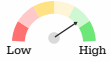
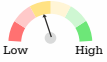
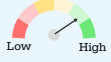
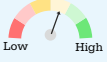
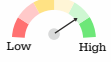
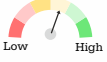
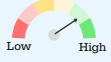
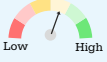
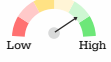
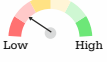
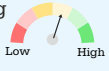
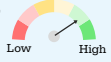
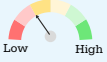
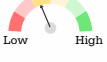
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Appendix

Impact vs. Challenges to implementation for key digital initiatives (1/2)

Initiative	Impact	Challenges to implementation
Unique patient identifier (UID using Aadhaar) for policy holders	Critical to aggregate data generated and stored at multiple points Aadhaar can serve as readily available UID (~75% penetration) 	Aadhaar can serve as readily available UID (~75% penetration) 
Online sale of policies	Has already witnessed phenomenal level of growth, utilizing social media would further add to the growth of online sales 	Already being implemented with successfully by insurers 
Digital policies linked to UID and data storage with anytime access	Would enable insurers to control cost by replacing need for physical infrastructure. Repositories for digital storage already created by IRDAI 	IRDAI has enabled creation of desired infrastructure Adoption by insurers to be driven thorough mandate which would take time 
Online transactions and payments	It has helped to enhance efficiencies in insurance value chain 	Already being implemented with successfully by insurers 
Mobile apps for customer interactions	It will enable better customer service at lower cost, customers can utilize self service options also through apps 	Leading insurers are already providing Would require minimal investment by insurers to create and manage 
Standardize data format for capturing patient details for easy exchange	Improve efficiencies across the value chain, allow easy data exchange and analytics for insurers 	Need to build consensus across stakeholders would take time Cost of implementing systems would slow implementation 
Multi-device and mobility offerings	It will enable better customer service 	Providing services across multiple devices and enhanced mobility would need higher expenses 
Digital storage of pre policy health check up data	It will enable better customer service and management of risks 	Infrastructure to be created for storage of data which would require cost and time 
Smart cards for policy holders with policy details	Improve efficiencies and help to provide better customer service. It will also help to manage risks 	Standards regarding minimum data to be stored on card available only stakeholder alignment required 
Multi channel marketing to drive awareness and develop customer relations	Enable cost effective customer reach out 	Insurers have started using online, social media, calling etc.Use of multiple channels requires higher costs to manage 
Real time support by sales/customer services	Would enable better customer service and enhance competitive positioning It can increase up-selling and cross-selling 	Would require investment to create and manage systems 

Impact vs. Challenges to implementation for key digital initiatives (2/2)

Initiative	Impact	Challenges to implementation
Customer value led promotions and discounts	Enhanced value for customer and will enable to target large customer base It can enhance customer retention 	Analytics to be done on customer data which would require platforms/systems to be set up Higher expenses on customer support team 
Self service capability	Enhance efficiencies as insurers would require lower staff to serve customers It will ensure easy claims management/ settlement 	Limited options can be provided to customers Support systems to enable would require high costs 
Unique identification for Providers	Critical to enhance efficiencies across value chain. Would allow easier analytics and lower errors in data 	Resistance from stakeholders in value chain for implementation ROHINI data base with IIB provides ready reference UID for providers Would require mandate form regulator 
Interconnect systems across stakeholders for advanced customer analytics	Critical for customer analytics, provide better products and managing risks but huge investment required for interconnecting systems 	Resistance from stakeholders in value chain for implementation Need to create UID for all stakeholders 
Unique identification of stakeholders (Diagnostic centers treating doctors)	Critical to enhance efficiencies across value chain Would allow easier analytics and lower errors in data 	This would involve developing of middleware leading to enhanced cost and consume more time 
Interconnecting of systems across stakeholders to allow digital claims submission		
EMR for easy storage and retrieval of health records	Enhancing transparency across value chain Enable data capture and transfer across stakeholders 	Resistance from stakeholders in value chain for implementation as it involves high cost 
Real time updates on claims status and settlement through e-mail, SMS etc.	Enhanced value for customer and manage risks It will create more transparency in the system 	Cost of setting up and managing the system would be high 
Customization of products	Enhanced value for customer but regulatory challenges 	Regulatory challenges in providing customized products Customer analytics would be required, setting up which would take time 
Advanced cognitive analytics to understand customer needs and aspirations	Enhance customer value by meeting the need gap 	Creating system for standardized data collection system to enable analytics would take time 
Social media interactions with customers to identify fraudulent activities	Provide better customer service, target new segments but need investment to tap social media channel 	Specific capabilities in manpower would be required for implementation which would take time and cost 
Predictive modelling and rule based systems to detect frauds	Enable management of risks and higher operational efficiencies 	Higher investment required to create and operate the desired infrastructure. 



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