

# INTELLIGENT HEALTH

The way to smart  
customer communication

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**HWZ**



The Power of Possibility

# MANAGEMENT SUMMARY

## FIRST-HAND INSIGHTS

**Customers of Swiss health insurance companies have already begun to approach the health insurance providers with a wide range of concerns via new communication channels such as email, social media or chatbot. If concerns are not satisfactorily resolved within a few hours, customer satisfaction drops and companies run the risk of losing the customer to a competitor.**

The number of requests sent to Swiss insurance companies increases year on year. So how can an insurance company keep up with this flood of incoming and outgoing data from various communication channels?

The content of this white paper by SPS Switzerland Ltd is based on a study by an SPS expert for health insurance providers that was developed at the Zurich University of Applied Sciences in Business Administration (HWZ). This study presents customer and expert views, pain points, trends and innovations. Options for action were developed for targeted customer communication on this basis.

### The key findings of this study are:

- Experts consider the management processes for existing policyholders to be highly fragmented.
- Clients like having the option of being able to submit requests using their preferred communication channel.
- According to experts, the hybrid input process (physical and digital processing of documents) often has numerous media disruptions and is operated with various IT systems, making it expensive.

The features of optimised hybrid input management include omnichannelcapability and automated end-to-end invoice processing. These features facilitate short lead times and low processing costs.

### The following is specifically recommended:

1. Before implementing short-term ad-hoc measures, Swiss health insurance companies should first create transparency over the end-to-end process.
2. Incorporating an outside perspective is recommended to identify all-encompassing optimisation potential, preferably from an experienced partner in transformation and operations. This ensures that legacy processes are fundamentally rethought.
3. Implementation of a periodic process review of quality and costs,

# ABOUT THIS STUDY

## APPROACH

Policyholders and insurance experts were interviewed and their experiences and future requirements surveyed.



### Establishment of target customer groups

First, target customer groups were established along the same lines as a recent PwC study (The digital opportunity in the Swiss healthcare system, 2019). The following were defined:

1. 'Health enthusiast': young, fit person without relevant medical history.
2. 'Best ager': employed person aged over 50 with relevant medical history.
3. 'Healthy family': young parents with a healthy family and heterogeneous medical histories.
4. 'Chronic': aged over 30 with a medical history of chronic illness.
5. '65plus': healthy and in retirement.



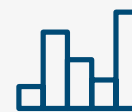
### Qualitative survey of policyholders

Six people, one from each target group, were interviewed in person about customer interactions over the last two years. This captured, in particular, their pains and gains, gain creators and pain relievers. The representatives interviewed were also asked about channels, wishes, trends and recommended actions.



### Qualitative survey of insurance experts

For the inside-out perspective, nine insurance experts from health insurance companies, advisory firms, telecommunications companies and software providers were surveyed. The subjects covered included existing processes, quantity structures, strengths/weaknesses, trends and potential courses of action.



### Discussion of trends and innovations

Trends and innovations were identified using the methodology in the 'UBS Innovation Map' (Martin Meyer, 2019).



### Conclusions and recommendations for Swiss health insurance companies

The results of both surveys were reviewed in parallel and compared with the identified trends and innovations. Based on this, recommendations were formulated for Swiss health insurance providers.

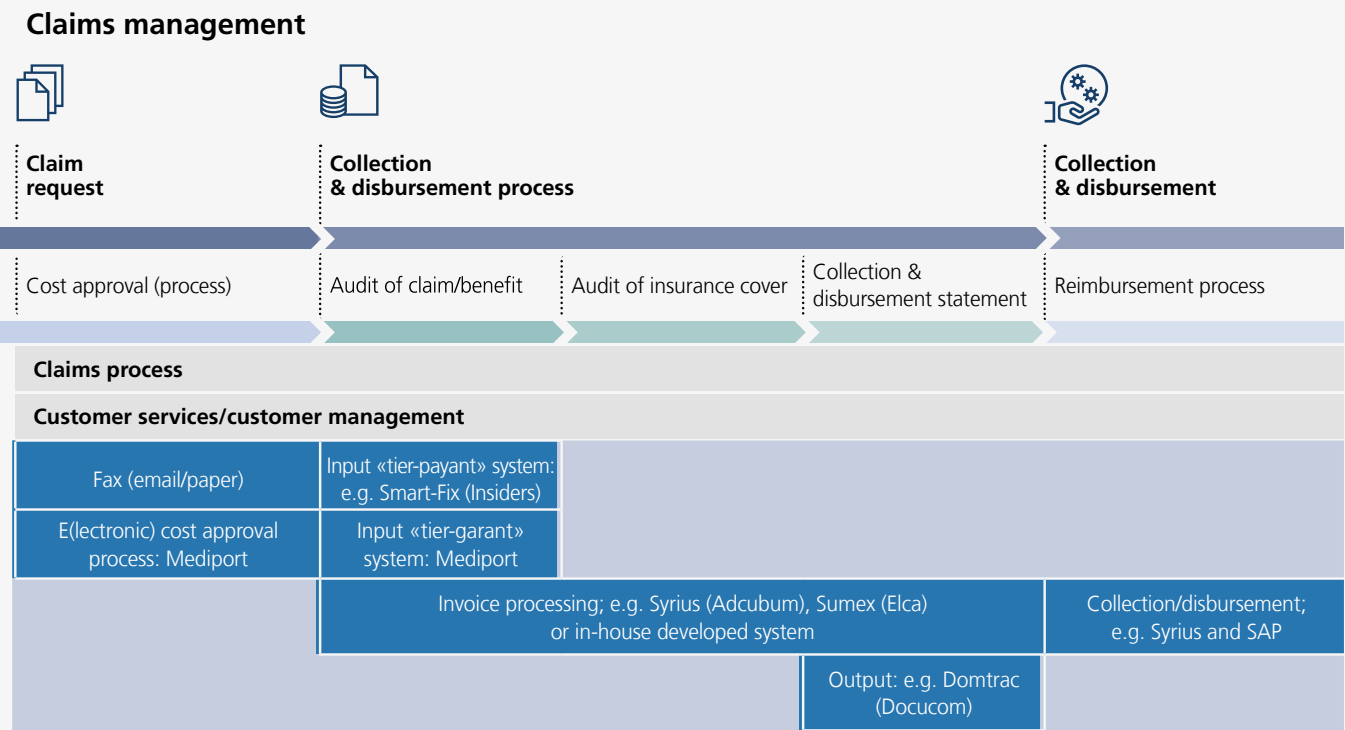
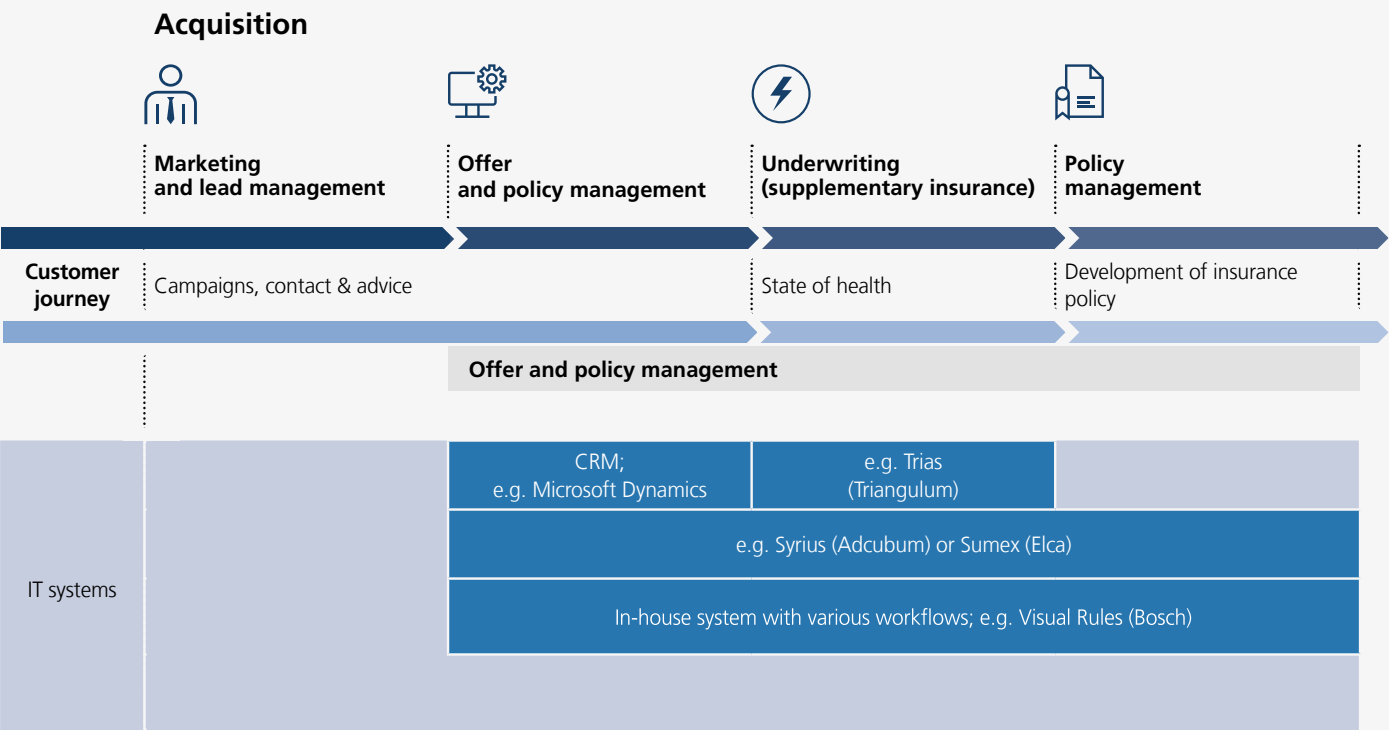
# PROCESS MAP OF A SWISS HEALTH INSURANCE PROVIDER

Experts agree that the process landscape of Swiss health insurance companies is highly fragmented. Analysing this process landscape gives the following picture: The flow of information between end customer and insurer is very complex for typical health insurance.

Most interactions or information exchanges with customers occur during the acquisition and claims process. Depending on the health insurance provider, the customer services department forms part of either the sales or the claims management department.

In marketing and lead management, measures are carried out with the aim of winning new customers, including telephone marketing, mailings and search engine marketing. After a customer has decided to take out an insurance policy, the offer, application and policy management processes begin. Customer service is not a process itself but rather a service that exists primarily for existing customers. Customer service is offered mostly by telephone, as well as in person at branches or also via digital channels. It comprises all activities in relation to existing customers, including insurance advice, amendment of personal details, questions on invoices, cover or and payments, services in relation to insurance cards and policies, and complaints.

The claim request (cost approval process) is the process used for planned, primarily in-patient treatment (e.g. in hospitals or clinics), or also in the case of claims from supplementary health insurance. The collection & disbursement process starts with the receipt of an invoice (through the customer or doctor/therapist) at the insurance company. In accordance with the Swiss Health Insurance Act, healthcare providers (hospital, doctor, therapist, etc.) can be reimbursed in two ways: the third-party guarantor (tier-garant) system or third-party payer (tier-payant) system. With tier-garant, the invoice is settled by the insured person, who then in turn has the costs reimbursed by their insurer after deduction of their cost share. With tier-payant, the invoice is settled by the insurer, if it has agreed with the service provider that the latter's services will be compensated directly.



# PAIN POINTS

## FROM A CUSTOMER AND EXPERT PERSPECTIVE

Comparison of the main policyholder feedback to comments from experts results in the following main findings:



Customers value the freedom to choose to submit invoices using their preferred channel (physical or digital). However, the offer and operation of this service presents a major challenge to insurance providers.

Swiss health insurance companies operate stable but very complex information systems, with inadequate data quality and complex data exchange.

According to experts, the hybrid input process is often fragmented, with numerous media disruptions and various IT systems, making it expensive. Frequently, no established end-to-end process owner exists to enable transparency over quality and total costs.

Automation is advancing slowly as there is still only minimal cost pressure at health insurance companies, and staff reductions often come with political challenges.

The images sent by customers using ScanApp for the collection & disbursement process present insurance companies with increasingly complex processing requirements as the images often don't meet quality requirements.

The tier-payant system tends to be viewed positively by both customers and insurance providers: by customers because they are not involved, and by insurers because the processing is largely automated.

The tier-garant invoicing process is seen by customers as complicated. Experts view the processing costs (in hybrid input management) at insurance providers as extremely high.

> The demand to be able to contact health insurance companies via various communication channels professionally and quickly has increased.

# HYBRID INPUT MANAGEMENT

## POSES CHALLENGE TO HEALTH INSURANCE PROVIDERS

Today, there is often no automated process for handling incoming documents via all potential channels and the technical system landscape is very complex with respect to maintenance. For Swiss health insurers to be able to communicate with their end customers in an omni-channel way, they have to start with input management.





Physical documents are typically received by a team, sorted manually, scanned and delivered to another team to be read and then transferred to the 'core system'.

If the document is submitted digitally by the sender (e.g. via Portal, ScanApp), it is in turn reviewed by another team. After it has been read, all relevant information is transferred to the core system (e.g. Syrius or Sumex) and processed further.



According to a study by SPS, the top nine Swiss health insurance companies processed about 115 million invoices a year in 2018. Of these, approximately 65%, i.e. 75 million, were processed primarily in a digital, automated manner using the tier-payant system. The remaining 35% – or 40 million of the total volume – were processed using the tiergarant system, mostly in paper form. According to the insurance experts surveyed, between 0% and 20% of invoices are submitted digitally, i.e. via Portal or ScanApp, depending on the insurer.






Typical health insurance company input management comprises the following activities:

Team A	Physical invoices			Digital invoices
	receive	sort manually	scan	Receive (e.g. via healthcare provider, ScanApp or other sources)
Team B				Review
Team C	Reading of all relevant information and transfer to the core system (e.g. Syrius or Sumex)			
Team D	Procedures partially automated, partially manual in core system:			
	 <b>Invoice verification</b> (technical review, review of invoice items for tariffs and data of healthcare providers, healthcare provider contracts, service mandates, etc.)			
	 <b>Audit of insurance cover</b> (formal and substantive prerequisites for the insurance cover, existence of insurance policy for the risk concerned, timely payment of premiums, occurrence of insured event during the period of cover, insurance cover for specific claim)			
	 <b>Settlement of collection amount</b> (Deduction of franchise/deductibles, information for collection & disbursement statement)			
Team E	 <b>Collection &amp; disbursement process</b> (transmission to the insurance provider with information on derivation and cost sharing, such as franchise and deductible and information on which insurance product pays for the treatment)			



# POTENTIAL APPROACHES IN THE NEW WORLD TRENDS AND INNOVATION

The following trends and innovations were identified in Swiss health insurance company input management:

Megatrend	Catalysts (new technology)	Implication (changes in behaviour)	Areas of activity
<b>Individualisation &amp; mobility:</b> Health insurance providers will offer services through all channels at any time and reduce their own effort to a minimum.	 Robotic process automation (RPA) enables all data from new and legacy systems to be processed end to end in an automated manner.	From 'physical' to 'digital' documents: the proportion of digital (compared to physical) information will increase; input and output communication will be carried out digitally.	Insurance providers will offer end-to-end customer interaction, including fully automated back-end processes (100% digital processes).
	 Omni-channel – physical and digital channels give the customer a choice on submission of information and the form of information output (paper, app, portal, etc.).	From 'fix' to 'flex(ibility)': Purchase and receipt of services must be possible over all channels with the ability to change them at any time.	Health insurance providers will increasingly focus on customer interaction and their core processes, and obtain source services and technology from external partners.
	 Distributed ledger technologies (DLT) and smart contracts allow all claims documents (invoices) to be exchanged digitally by all involved parties.	From 'ego' to 'eco-system': the growing complexity in healthcare requires close networking and collaboration between everyone.	Insurance information and medical information are exchanged omni-channel between all parties in a direct, fast and digital manner that complies with data protection requirements.
	 Big data enables better interpretation of insurance data and allows extrapolation to establish the collective implications (fact-based trends).	From 'opinion' to 'data': reliable data helps to prevent future claims and enables better handling.	New analysis possibilities help in detection of fraud cases, allow control of claim costs and offer market-based premiums.
	 5G IoT allows real-time insurance data to be collected for the purposes of optimisation (mobile health).	From 'opinion' to 'data': wearables and mobile health (mHealth) simply help to promote healthy behaviour anywhere and at any time.	Health insurance providers will more actively shape health promotion and early detection to save on claim costs.

# WHAT HAS TO BE DONE TODAY? AND HOW SHOULD THIS BE APPROACHED?

Based on the objectives and trends in the area of input management, a health insurance provider will need to meet the following requirements in future:

- A company must have a strategic framework in place so that innovations relating to digitalisation and automation are supported and promoted.
- Insurance must be available around the clock via all possible communication channels (omni-channel, e.g. paper, chatbot, Whats- App, email).
- The health insurance provider has the ability to exchange information and invoices, e.g. with patients and service providers, in a direct, fast and digital manner that complies with data protection requirements.
- The insurance provider should carry out fast processing in a costoptimised manner and, as a result, be able to offer competitive premiums with a low cost rate (Insurance Policies Act).

In order for these requirements to be met, the following recommendations are made to Swiss health insurance providers:

1. Focus on the health insurance company's core business and optimisation of expenses for support processes, for example medical bill processing.
2. Determine a process owner (digital expert) who is responsible for end-to-end processes, e.g. in the area of claims management, knows them well and ensures existing processes are assessed.
3. Incorporate an external service provider, including consideration of future business requirements for hybrid input management.
4. Target operating models definition: service levels, technology capability (omni-channel, automation, data protection and security), costs.
5. Plan and implement transformation measures.

These conditions and recommendations lead to the question of which business model health insurance companies should use in future.

The following table compares the advantages and opportunities, as well as the disadvantages and risks of each option. It also shows which solution has the biggest potential for Swiss health insurance companies.



# CLEAR OPTIONS AND RECOMMENDATION

Solution option	Description	Advantages & opportunities	Disadvantages & risks
Internal operation of input management (often the same as today)	Internal operation of input management without automated end-to-end process (see chapter 'Hybrid Input Management')	<ul style="list-style-type: none"> <li>– Internal expertise</li> <li>– Flexible change management</li> <li>– Company-specific solution</li> </ul>	<ul style="list-style-type: none"> <li>– High costs for skill and IT management</li> <li>– No scale effects</li> <li>– Low level of transparency over quality &amp; costs</li> </ul>
Internal operation of input management with technology upgrade	Internal operation of input management with standard technology (market solution)	<ul style="list-style-type: none"> <li>– Internal expertise</li> <li>– Flexible change and release management</li> <li>– Company-specific solution</li> </ul>	<ul style="list-style-type: none"> <li>– High costs for skill and IT management</li> <li>– Dependence on technology provider</li> <li>– Change and release management through the market</li> </ul>
Collaborative operation of input management (eco system)	Collaborative operation of input management together with other health insurance companies	<ul style="list-style-type: none"> <li>– Sharing of expertise</li> <li>– Cost sharing for technology &amp; skill management</li> <li>– Solution scaling (basis for other collaborative partners)</li> </ul>	<ul style="list-style-type: none"> <li>– New business model</li> <li>– Multi-lateral collaboration (more coordination)</li> <li>– Uncertain dynamic in development</li> </ul>
Outsourcing hybrid input management	Internal end-to-end process owner and service manager for externalised input management	<ul style="list-style-type: none"> <li>– Flexible peak and volume management</li> <li>– Predictable costs</li> <li>– Outsourced skill/compliance and technology management</li> </ul>	<ul style="list-style-type: none"> <li>– Partner must ensure data security and compliance at all times</li> <li>– Partner needs sound experience in the running of services</li> <li>– Partner must be prepared to take on employees in a socially responsible manner</li> </ul>
API model/procurement of data	All data from the current support processes are procured (call/subscription model), for example, from Google or social media platforms	<ul style="list-style-type: none"> <li>– Focus on core processes</li> <li>– Minimal expense for support process</li> <li>– Flexibility with respect to choosing partners</li> </ul>	<ul style="list-style-type: none"> <li>– New business model</li> <li>– Dependence on provider</li> <li>– Outsourced compliance &amp; data protection</li> </ul>











# SERVICES FOR HEALTH INSURANCE COMPANIES INTELLIGENT END-TO-END AUTOMATION

SPS’s health insurance services specialise in the receipt of your physical (letters, fax) and digital (SMS, email, web portal, app, EDI, IOT) incoming mail across all communication channels.

SPS sorts, classifies and captures health insurance documents (e.g. cost reimbursement and TARMED invoices) and makes the data available directly in the insurance company’s target system. The services help health insurance providers with data preparation that is not yet included in the companies’ core application. An advantage for the core business is that SPS customers no longer have to spend time on repetitive and administrative tasks.

All output management can also be handled on request, which means all outgoing information across all communication channels is professionally processed and dispatched.

## You benefit in many ways:

 <b>Tailored processing</b> Based on industry standards, using state-of-the-art technology.	 <b>Same day &amp; omni-channel</b> Customer information can be processed on the same day across all communication channels.
 <b>Experience</b> Extensive experience in information management with expertise in the health insurance industry.	 <b>High degree of automation</b> at over 60% in the physical and digital reading of customer correspondence, incl. email/portal/app.
 <b>Location</b> Central processing at our Swiss service centre.	 <b>High security</b> thanks to compliance with regulatory requirements (DSC, ISO/IEC, ISAE, GDPR) as well as data encryption, record keeping and transparency.
 <b>Higher customer satisfaction</b> Through reduction of throughput times and improved service quality.	 <b>Quick roll-out</b> with a tested standard process in an introductory project.
 <b>Predictable costs</b> Thanks to standardised, automated and centralised services.	 <b>Transfer of employees</b> If required, SPS can take on the employees who are currently involved in the processing activities.



### Sources:

1. Igor Garcia, Zertifikatsarbeit, HWZ CAS Digital Insurance (2019), *Always On! Krankenversicherungskunden erwarten proaktivere Leistungsinformationen von ihrem Versicherer.*
2. PwC (2019), *The digital opportunity in the Swiss healthcare system* |
3. Martin Meyer (2019), *UBS Innovation Map*



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