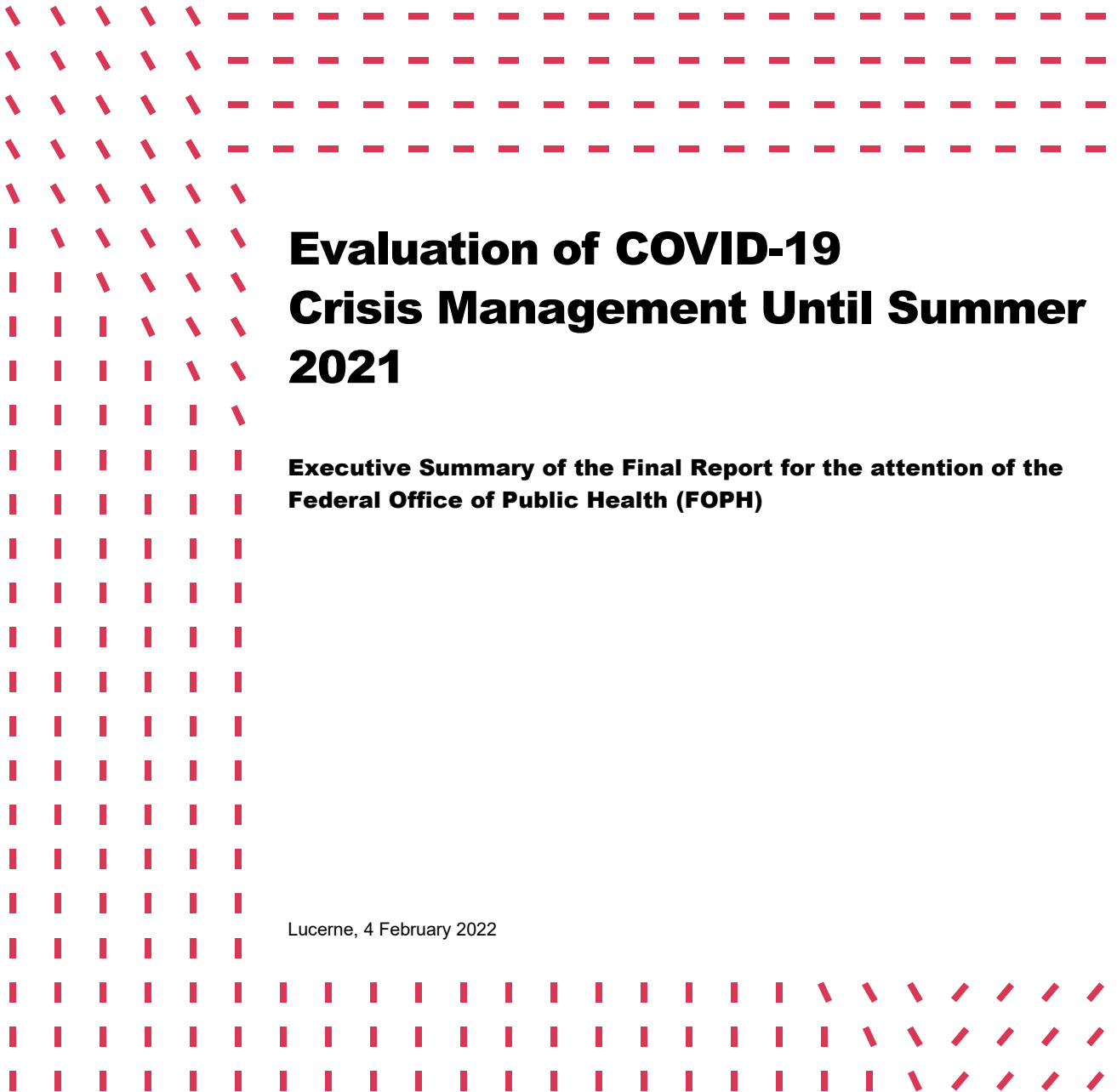




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Evaluation of COVID-19 Crisis Management Until Summer 2021

**Executive Summary of the Final Report for the attention of the
Federal Office of Public Health (FOPH)**

Lucerne, 4 February 2022

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I Contract period

From October 2020 – to March 2022

I Data collection period

From December 2020 – to end of June 2021

I Meta-evaluation

The FOPH commissioned an external entity to carry out this evaluation study with a view to obtaining an independent and scientifically based response to essential questions. The interpretation of the findings, the conclusions and possible recommendations provided to the FOPH and other stakeholders may therefore differ from the FOPH's opinion or position.

The FOPH's Evaluation and Research Service conducted a meta-evaluation (scientific and ethical quality control of an evaluation) of the draft report, based on the quality standards of the Swiss Evaluation Society (SEVAL Evaluation Standards). The results of the meta-evaluation were passed on to the evaluation team and have been taken into account in this final version of the report.

I Order a copy

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I Translation:

Translated into English by the Language Service of the FOPH

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I Project reference

Project number: 20-77

Background and Questions

Managing the COVID-19 pandemic has been a great challenge for the Federal Office of Public Health (FOPH). In spring 2020, the FOPH therefore decided to commission a working group to evaluate pandemic planning and the expedience and effectiveness of health measures to mitigate the spread of the COVID-19. The working group consisted of representatives from Interface Politikstudien Forschung Beratung Luzern, Infrass Zürich, Zenger Advokatur und Beratung, the Universities of Lausanne and Lucerne, the Stockholm School of Economics in Sweden and the Medical University of Innsbruck in Austria. The evaluation primarily serves to optimise crisis preparedness and crisis management. The evaluation focuses on the areas of crisis preparedness, the organisation and leadership of crisis management, and effectiveness of health measures and their effects on society with specific focus on economy and social welfare as well as contextual influences. In addition, the evaluation considers the expediency and coherence of the health measures implemented. The overarching questions are:

1. Have the federal government (in particular the FOPH) and the cantons responded in a timely and appropriate manner to the COVID-19 threat situation?
2. What potential for improvement exists in crisis preparedness, crisis management and its follow-up processes?

Method

The evaluation uses the “backward mapping” approach. This means that, drawing from their effects, relevant influencing factors of crisis preparedness and of the organisation and processes of crisis management were being identified “backwards”, along the effect model.

The *first stage* of the evaluation was a sound analysis of the effects of the crisis and of its management on healthcare provision and on the population and the economy. For this purpose, the following tasks were carried out between December 2020 and March 2021:

- *Population survey*: In January 2021, an online survey was launched among the Swiss resident population aged fifteen years and older. 15,390 persons participated. Finding out which effects of the pandemic and of its management particularly concerned and affected the population was a key objective of the survey. The survey allows for representative statements to be made for the three language regions, five age groups and by sex.
- *Online surveys of stakeholder groups*: In January 2021, an online survey was carried out among the managers and employees of retirement and care institutions, employees of outpatient nursing care and among relatives of residents and people with assistance requirements at home. These interviews were carried out in order to include the views of people who are in close contact with older people with care and/or assistance requirements in the collection of important pandemic-related topics.¹
- *Personal interviews with experts*: Between January and March 2021, interviews were conducted with stakeholders from society, economy and from health and social services in all parts of the country to find out which effects of the pandemic and its management most concerned and affected them.
- *Literature review*: Documents, secondary surveys and analyses of primary data were searched and analysed using relevant key words relating to the effects of the crisis management.
- *Involvement of the advisory and steering committees*: Between December 2020 and January 2021, the members of the advisory and the steering committees contributed their view of the pertinent issues around the effects of the pandemic and its management in online surveys and interviews.

Based on these investigations and with the support of the groups’ international experts, the evaluation team identified eleven thematic areas whose health, economic and social significance and associated need for action warranted urgent evaluation. Each of the thematic areas was described in a fact sheet. In a rating conference, the advisory committee ranked the thematic areas in terms of priority. The steering committee then selected five of the themes for in-depth analysis. A further analysis of the remaining six thematic areas was not pursued in the framework of this evaluation. The findings on these six thematic areas—which are listed in chapter 3 of the Final Report—therefore only reflect the state of knowledge until March 2021. Moreover, the findings were drawn from a comparatively small set of data. The deliberations on the thematic areas that were *not analysed in depth* therefore do not conclusively, nor comprehensively, reflect the situation. However, in terms of optimisation potential, they do identify important aspects that warrant action in the respective thematic area.

¹ A complementary survey of care home residents is the subject of an ongoing study. The study is entitled “COVID-19: Protection of Life versus Quality of Life During the COVID-19 Pandemic—the Point of View of the Persons Concerned.” Its release is expected in mid-2023 (cf.).

The *second stage* of the evaluation process contains an in-depth analysis of the five thematic areas that were prioritised. The results can be found in chapter 4 of the Final Report. The investigation of these thematic areas attaches great importance to a differentiated discussion of legal and conceptual principles and organisational frameworks, of the implementation of crisis management by different bodies, and of the health measures implemented. In addition to the findings gathered in the preceding stages, the in-depth analyses are also based on the study of public and internal documents and on approximately ten expert interviews with persons involved or affected per thematic area.

In the *third stage*, the evaluation questions contained in the specifications document drafted by the FOPH are answered. They concern the organisational and structural conditions underlying the crisis management and decision-making processes inside the FOPH, the health protection measures and their communication, the effects of the measures on healthcare provision, the economy and the population, as well as the appropriateness of the federal government's and the cantons' response to the COVID-19 threat situation. The answers are predominantly based on the surveys conducted in stage 2. However, stage 3 is somewhat self-contained since, due to the surveys being themed, not all evaluation questions could be answered with the information gathered in stage 2 of the investigation. That is why, in some cases, supplementary documents such as reports, scientific publications and not previously analysed suggestions from expert interviews were added to the material to answer certain evaluation questions.

Given the complexity and diversity of the measures, structures and processes associated with COVID-19 crisis management, it was impossible to address every possible aspect. In consultation with the advisory and the steering committee, the project work focused on selected topics. This might limit the evaluation's validity to an extent. Furthermore, it must be taken into account that the crisis was ongoing while the empirical work was carried out, which continually brought new challenges both for society and the public authorities. It was therefore important to limit the temporal scope of the evaluation. The thematic areas were identified and prioritised from December 2020 to March 2021. As a result, the analysis of the thematic areas not selected for in-depth analysis ended in March 2021. The population survey took place in January 2021. The in-depth analysis of the five thematic areas concluded at the end of June 2021. However, the pandemic was not over at that point.

Finally, it must be pointed out that the results listed in this document and the recommendations in the evaluation relate to the entire evaluation period, as requested. This might have the effect that key weaknesses are highlighted in areas for which improvements were registered over the course of the crisis.

Results and Interpretation

The analysis of the effects of the crisis and of crisis management on healthcare provision as well as on the population and on the economy has revealed a need for analysis and action in eleven thematic areas of primary importance.

The following five thematic areas were *analysed in depth*:²

- Thematic area “Allocation of responsibilities between federal government and cantons as shown primarily by the example of their vaccination strategy and implementation”
- Thematic area “Availability and use of digital data”
- Thematic area “Roles and responsibilities in public communications”
- Thematic area “Using the expert skills of stakeholders”
- Thematic area “Securing of medical treatment capacity during the pandemic”

The following six thematic areas were *not analysed in depth*:³

- Thematic area “Availability, use of and requirement to wear masks”
- Thematic area “Testing and contact tracing strategy”
- Thematic area “Balancing the protection of people in retirement, care and day care institutions with the visiting rights of their relatives”
- Thematic area “Societal consequences of health protection measures”
- Thematic area “Mental health consequences of health protection measures”
- Thematic area “Economic consequences of health protection measures”

Based on the investigations conducted, the overarching question of whether the response of the federal government (specifically, the FOPH) and the cantons to the COVID-19 threat situation was appropriate and timely can be answered as follows: The response of the federal government and the cantons to the COVID-19 threat situation was mostly appropriate and, with some exceptions, timely. The FOPH took its mandate to protect the population very seriously. Equally, the cantons, the cities and municipalities as well as the institutions tasked with healthcare provision accomplished a great deal in their efforts to protect the population and to address the threat posed by the virus. In the core area of medical provision, Switzerland was successful. The system did not break down and—as far as is known to date—no triage was required in Intensive care units in response to the great number of COVID-19 patients.

The continuation of healthcare provision that met existing quality standards throughout the crisis is not the only aspect illustrating the appropriateness of the federal government’s response. The relatively high degree of acceptance of the measures among the population is another indicator. Moreover, sixty per cent of the Swiss electorate approved of the new COVID-19 legislation on 13 June 2021. The appropriateness of a range of measures, some of which were controversial, was also confirmed by the Federal Supreme Court.

On three points, the federal government’s response is deemed less appropriate:

Firstly, the measures imposed to protect the particularly vulnerable population group, that is, older people and residents of retirement and care homes and users of day care facilities, at the beginning of the pandemic. The strict protective measures in the form of lockdowns and bans on visitors caused great distress among the residents and their relatives, and in certain cases they resulted in negative health outcomes. The main cause of this problem appears to be insufficient crisis preparedness on the part of the federal government, the cantons and the institutions affected.

Secondly, reservations are in order concerning the appropriateness of school closures during the first lockdown in spring 2020. They constituted a great burden on parents, children and young people and might yet have drastic consequences for the overall educational development of many children and young people. However, compared to other nations, school closures in Switzerland were relatively short.

Thirdly, the appropriateness of the ban of non-urgent (elective) surgeries must be challenged. Healthcare provision being the responsibility of the cantons, they were already obligated to mandate, if necessary, the deferment of such procedures in favour of emergency surgeries.

² The situation was analysed until the end of June 2021.

³ The situation was analysed until the end of March 2021.

The timeliness of the federal government's and of the cantons' response must be assessed in line with the different stages of the crisis:

- *Crisis preparedness previous to the national lockdown:* The Epidemics Act (EpidA) as well as a pandemic plan were in place. However, the only pandemic plan available was for influenza, which presumes a different risk situation. Moreover, the FOPH's crisis management suffered from pre-existing problems including the lack of a digital strategy and the failure to stockpile protective materials, none of which could be solved at short notice in the context of pandemic management. In addition, The FOPH had not previously defined clear internal processes, and its existing preparedness handbooks were not widely known about. Therefore, the commissioning of the crisis mode took a long time for the FOPH. Furthermore, it must be taken into account that the Federal Council assigned the Task Force FOPH with the central tasks of crisis management rather than the bodies designated in the ordinances relating to the federal government's crisis management. The FOPH's insufficient crisis preparedness impeded the timely adoption of measures and, in part, also diminished their appropriateness.
- *National lockdown during the first wave:* More or less at the same time as the neighbouring states, the federal government responded to the threat when very little was known about the spread and the danger of the virus. The lockdown appears to have been a timely measure since it allowed transmission to be curbed promptly.
- *Easing of measures after the first wave:* The analyses suggest that the cantons were somewhat surprised by the transition to the "special situation" according to the EpidA on 19 June 2020, despite their having urgently called for it. The fact that they were insufficiently prepared (e.g., where contact tracing is concerned) for the second wave that built up in autumn 2020 is indicative of this problem. At the same time, the Federal Council renounced its leadership role, despite the EpidA stipulating that the Federal Council can assume that role in the special situation. This is evidenced by the late introduction (by international comparison) of the requirement to wear masks.
- *Measures during the second wave:* In the second wave, many cantons waited before they imposed measures. The cantons became increasingly aware of the dilemma that imposing measures might be associated with their having to cover costs. Delays also occurred due to the cantons' inability to agree on necessary measures. In addition, the FOPH was not remotely in a position to provide data that would have allowed for the measures to be based on real-time data. It was therefore a range of factors that were responsible for the federal government's and the cantons' failure to respond in a timely manner to the threat in the late summer of 2020, which led to an excess mortality rate in Switzerland that was high by international comparison. The government administered vaccines to the first population groups in December 2020, at approximately the same time as our European neighbours did. As before in the autumn, coordination problems occurred between federal government and cantons in the winter of 2020/21. These problems were related to the fact that the Federal Council demanded a vaccination pace of the cantons for which it did not supply a sufficient number of doses.
- *Measures during the third wave:* In this phase of the pandemic, the demand for vaccines could increasingly be met, despite initial waiting times for appointments of up to several weeks. For many aspects of the pandemic, crisis management was a well-functioning process by this point. The fact that the epidemiological situation had improved thanks to the growing immunisation rate and the broadening scope of testing initiatives probably also played a part in this.
- *Easing of measures after the third wave:* By the time the data collection concluded at the end of June 2021, the majority of those wishing to get a vaccine had received one. In parallel, the federal government developed a uniform and internationally recognised COVID certificate. No other time-sensitive measures were taken during this phase.

While the evaluation concludes that the response of federal government and cantons to the COVID-19 threat situation was, with some exceptions, mostly appropriate and timely, the problems identified suggest that inadequate crisis preparedness and, in part, inadequate crisis management hampered the effectiveness and efficiency of the actions taken—considerably so in some instances.

Required actions identified for the thematic areas examined

The evaluation examines eleven thematic areas associated with the FOPH's crisis management. The following table shows the actions required for the thematic areas that were *not* analysed in depth (cf. Evaluation of COVID-19 Crisis Management Until Summer 2021. Final Report, chapter 3).

Required actions identified for the six thematic areas that were not analysed in depth (analysed until end of March 2021)		
Thematic area	Need for action in the priority area	Recommendation*
Availability, use of and requirement to wear masks	<ul style="list-style-type: none"> – Raising awareness and increase use of the pandemic plan and the associated handbook – Strengthening of the stockpiling and production capabilities and increase awareness of their existence – Adjustment of public communication strategy and communications around mask-wearing 	2
Testing and contact tracing strategy	<ul style="list-style-type: none"> – Initiating measures to secure a sufficient number of high-quality testing kits – Preparation of a coordinated course of action for the cantons – Review of the legal framework for the funding of testing and contact tracing 	1, 2
Balancing the protection of people in retirement, care and day care institutions with the visiting rights of their relatives	<ul style="list-style-type: none"> – Development of strategies and recommendations that detail how residents of institutions might be protected successfully without excessively limiting their contacts – Place institutions under obligation to implement suitable concepts and measures and to conduct checks – Examination and regulation of financial consequences 	2, 4, 5
Societal consequences of health protection measures	<ul style="list-style-type: none"> – Shifting of attention to the indirect effects of health measures – Stronger involvement of expert skills from the field of community 	4, 5
Mental health consequences of health protection measures	<ul style="list-style-type: none"> – Ensuring that psychological risk and protective factors such as loneliness, autonomy and social support are included in the deliberations from the start – Implementation of economic and social political measures for the reduction of mental health risks, specifically for at-risk groups – Creation of a legal framework for the federal government to grant subsidies for organisations that address the health and societal effects on vulnerable populations during a crisis 	4, 5
Economic consequences of health protection measures	<ul style="list-style-type: none"> – Introduction of legislation for the compensation of financial losses resulting from protective health measures and preparation of enforcement by the cantons – Conducting comprehensive economic and political science-based ex-post evaluations – Ensuring the FOPH adequately takes into account the potential impact on the population's economic situation when considering public health measures in future 	2, 5

Legend: Recommendation* = required action has been incorporated in superordinate recommendation no.

Source: Interface/Infras, cf. Evaluation of COVID-19 Crisis Management Until Summer 2021. Final Report, chapter 3.

The following table shows the actions required in the thematic areas that *were* analysed *in depth* (cf. Evaluation of COVID-19 Crisis Management Until Summer 2021. Final Report, chapter 4).

Required actions identified in the five thematic areas that were analysed in depth (analysed until end of June 2021)		
Thematic area	Need for action in the priority area	Recommendation*
Allocation of responsibilities between federal government and cantons as shown primarily by the example of their vaccination strategy and implementation	<ul style="list-style-type: none"> – Review and refinement of the division of tasks between federal government and cantons during crises in terms of organisation, expertise and finances (P) – Entering into and enforcement of agreements between the federal government and the cantons concerning the standardisation of digital tools for the capture, transmission and monitoring of data and activities (S) – Transfer of power to the FOPH so as to strengthen its ability to exert and enforce technical leadership vis-à-vis the cantons and other stakeholders (S) – Definition of the FOPH's leadership and organisational structure in times of crisis (O) 	1, 3, 4
Availability and use of digital data	<ul style="list-style-type: none"> – Pursuit of legal regulation to define a minimal data set to be collected across Switzerland and to determine a method to secure access to this data (centralised or decentralised solution) (P) – Development of an architecture for the secure exchange of data between different systems (P) – Implementation of the once-only principle for data collection (S) – Ensuring the retention of existing knowledge about data management (S) – Conducting regular drills with the existing systems or systems (O) 	1, 2, 3
Roles and responsibilities public communications	<ul style="list-style-type: none"> – Clarification of the competences and responsibilities of the federal government and the cantons in communicating with the public during the special situation. If necessary, refinement of the legislative basis (P) – Optimisation of the coordination between cantons in the area of communication (P) – Clarification of the roles of scientists in communication efforts (S) – Optimisation of the coordination between the federal government and the cantons to ensure effective communication with the public (O) 	1, 4, 5
Using the expert skills of stakeholders	<ul style="list-style-type: none"> – Review, based on the Consultation Procedure Act (CPA), of the legal framework for the involvement of stakeholders in times of crisis (P) – Identification of the stakeholders and competencies relevant to the FOPH in a crisis (S) – Establishment of processes for their involvement in crisis management (S) – Definition of stakeholder management structures and processes, their incorporation in pandemic planning and enforcement in a pandemic (O) 	1, 4

<i>Thematic area</i>	<i>Need for action in the priority area</i>	<i>Recommendation*</i>
Securing of medical treatment capacity during the pandemic	<ul style="list-style-type: none"> - Better coordination of the issue of stockpiling between the different legislations (P) - Strengthening of the federal government's powers to pass ordinances to guarantee the security of supply (P) - Definition of a legal minimum availability of selected active ingredients (P) - Incorporation of experiences from the pandemic in activities to address skill shortages, including the strengthening of flexible deployment of staff (S) - Development of alternative scenarios to prevent the deferment of non-urgent surgeries (S) - Discussion of minimum availability of beds, practices and personnel in the event of a pandemic while taking standard care into consideration (S) - Expansion of the information and deployment system of the Coordinated Medical Services (S) - Review and, if necessary, adjustment of regulations concerning the funding of public healthcare provision in the event of a pandemic (S) - Involvement of practitioners from various professions within hospital and outpatient care in crisis management (O) 	1, 2, 4

Legend: P = Political level, S = Strategic level, O = Operational level; Recommendation* = required action has been incorporated in superordinate recommendation no.

Source: Interface/Infras, cf. Evaluation of COVID-19 Crisis Management Until Summer 2021. Final Report, chapter 4.

Overarching recommendations

The results of the evaluation are summarised in the following overarching recommendations:

I Recommendation 1: We recommend the FOPH and the federal government improve their organisational preparedness for the next crisis.

In terms of its organisation, the FOPH was insufficiently prepared for the COVID-19 pandemic. Although crisis handbooks exist, staff and management had little knowledge of them. The office did not have all the crucial skills required for crisis management, which is why some people were forced to take on tasks for which they were not, or were insufficiently, prepared. Against this backdrop, it is unsurprising that the designation of responsibilities within the FOPH was perceived to lack transparency by outsiders and to an extent also by the employees themselves. It also explains key personnel facing work overload, the neglect of important points of contact, the emergence of ad-hoc structures and a workforce struggling to fulfil their obligations. We therefore recommend that the FOPH

- develops new basic principles for its crisis management,
- strengthens the crisis management skills among its workforce and secures the resources necessary to ensure proactive planning in crisis situations, and
- carries out regular crisis management drills.

However, the development and implementation of effective crisis management structures and processes within the FOPH can only succeed if the organisation of crisis management at a level superior to the FOPH is reliably implemented in the event of a crisis. This was not the case in the COVID-19 pandemic. To a certain extent, the FOPH's problems were the result of the ad-hoc nature of its superior bodies crisis management strategy. To ensure that the FOPH can play an effective and efficient role in addressing the next crisis, it is therefore also necessary to review the federal crisis management.

We therefore recommend that the Federal Department of Home Affairs (FDHA) works towards clarifying swiftly, at federal level, whether a crisis response should be based on the established structures within the federal administration or if it is expedient to activate the crisis management bodies as prescribed by current legislation (e.g., ad-hoc Federal Council Crisis Unit, Federal Civil Protection Crisis Management Board, EpidA Coordination body). Based on this clarification, basic principles for crisis management should be developed and implemented at federal level. Depending on the crisis management organisation, legislative adjustments might become necessary.

I Recommendation 2: We recommend that the federal government and the cantons regulate healthcare provision in the event of a pandemic within a more binding framework and plan it more holistically.

Universal availability of protective materials and of crucial medication was not guaranteed at the beginning of the crisis. The federal government's pandemic plan and the associated preparedness handbook were little-known, notably within retirement, care and day care institutions, but also in hospitals and medical practices. Orders by the federal legislator were not enforced or only insufficiently.

We recommend that the federal government and the cantons regulate healthcare provision in the event of a pandemic within a more binding framework and plan it more holistically:

- The Federal Department of Home Affairs (FDHA) should work towards a stringent regulation of pandemic preparedness at federal level. The cantons must ensure that these regulations are enforced and that their enforcement is monitored. Concerning this matter, there is a need for action from a legal perspective. While the current epidemics legislation offers various starting points for the Federal Council from which to strengthen its pandemic preparedness, the enforcement of these provisions is being hampered and, in part, made impossible, by the complex interplay of different legislations at federal level. This is compounded by the fact that supply assurance for sufficient health personnel, building facilities and funding options fall into the purview of the cantons, which means that overlapping remits between federal government and cantons affect their enforcement. It must therefore be examined how a systematic, singular regulation for epidemic and pandemic preparedness in the EpidA might help to prevent redundancies and overlapping remits at enforcement level.
- The FOPH should incorporate its experiences from the pandemic in its deliberations for the future development of health professionals and its discussions about the issue of skills shortage. In future, it must be taken into account that crises can be long-lasting and that crisis management both in hospital and outpatient care requires a sufficient number of qualified health professionals at all times. In addition to making healthcare professions more attractive overall, specific preparations must be made to allow for a flexible deployment of qualified healthcare staff in various fields of activity (e.g., wards, hospitals, day care, medical practices, outpatient care, retirement, care and day care facilities) in the event of a crisis. This warrants a review of the organisation of work and of the content of continuing training (e.g., generalist vs. specialist content).
- In addition to ensuring security of supply in the event of a crisis, the FDHA and the Swiss Conference of the Cantonal Ministers of Public Health (GDK) should work towards providing full access to primary health care at all times. Non-hospital primary healthcare providers, notably general practitioners, outpatient care providers and pharmacies, should be more involved in crisis preparedness. Nuanced measures should target the preservation of access to key outpatient services during a lockdown, in compliance with protective measures.

I Recommendation 3: We recommend the FOPH collaborates with the cantons and other actors in healthcare provision in advancing the digitalisation of, and data management in, the health sector and in regulating these aspects.

The need for action relating to the digitalisation of the health sector has been widely acknowledged even before the crisis. However, political-strategic commitment—and, with it, the necessary financial and personnel resources—is required to ensure this task is being addressed in a timely manner. Technical challenges are not the main threat to maintaining the current momentum; it is the cantons' and the providers' reservations against national standards on data collection and exchange. Against this background, we recommend the following:

- The FOPH, the cantons and other actors within the health sector should collaborate and swiftly develop, and agree on, a stringent national strategy concerning the collection, digital exchange and analysis of health relevant data.
- The actors mentioned should ensure that the strategy includes a minimum data set as well as provisions concerning the standardisation of digital tools for the collection, transmission and monitoring of data and activities. Fortunately, these strategic goals are now part of the Federal Council's medium-term plan of June 2021. However, political decisions concerning funding and nationwide implementation are required in addition to a strategy.
- The FDHA should promote changes to the Epidemics Act that would allow for the implementation of the agreed-upon strategy. Based on current law, the federal government in theory already has the power to advance the digitalisation of the epidemiological reporting system up to and including the entry of information by service providers. However, digitalisation not being named implicitly or explicitly as a statutory obligation, there is a need to make changes to the Epidemics Act, that is, at the level of a formal piece of legislation that is subject to a referendum. Regulating this issue at ordinance level would not be commensurate with its significance concerning the protection of personal information and would not do justice to the fact that such changes will entail infringements on the freedom to conduct a business (e.g., by stipulating a specific data management system be used).

I Recommendation 4: We recommend the FOPH, the federal government and the cantons arrange for the systematic involvement of actors that are also of key importance in the event of a pandemic in the decision-making process and in the enforcement of measures.

Key actors in healthcare provision have been insufficiently involved in the management of the COVID-19 pandemic. This was mainly the case because of the FOPH's lack of stakeholder management tools. To address this issue, we recommend the following:

- The FOPH should develop a clear notion of which actors must be included in what kind of decision in the event of a crisis.
- The FOPH should cultivate an ongoing dialogue with these actors and define their role in pandemic planning. Both things are designed to increase the effectiveness and acceptance of the decisions to be made—specifically those in the purview of the Federal Council and the cantonal governments.
- Moreover, the FOPH should also engage in systematic stakeholder management outside times of crisis.
- Other federal offices as well as the cantons should identify unique points of contact for the stakeholders in times of crisis.
- Finally, the federal government should reassess and regulate its collaboration with the science community in the event of a crisis based on the investigations of the Federal Chancellery, the Science Council and the Parliamentary Control of the Administration.

I Recommendation 5: We recommend the FOPH considers and addresses health as a holistic challenge even in the event of a pandemic, during both the planning and the enforcement of measures.

The World Health Organisation (WHO) considers health to be a state of complete physical, mental and social well-being. The representative population survey revealed that the health measures were a significant burden for a great part of the population. Liberties were limited, social contacts, movement and sport were lacking, the economic outlook was precarious for some, work and instruction took place at home. The situation was a strain on the mental health of many. What is more, the fundamental rights of residents of retirement and care homes and of their relatives were strongly limited over months by the measures restricting visits and the right to leave the premises. The school closures during the first lockdown in the spring of 2020 were another significant infringement of basic rights with potentially drastic effects for the educational development of many children and young people. While the Federal Council did pay attention to the societal consequences of the pandemic early on in the crisis, the evaluation leaves no doubt that this issue was not considered to the extent that it should have been in its crisis preparedness efforts. Against this background, we recommend the following:

- Analogous to its strategy in the area of non-transmissible diseases, the FOPH should formulate its strategy in accordance with the WHO's definition of health (state of complete physical, mental and social well-being) in its pandemic planning and management efforts.
- Where possible, the FOPH should anticipate indirect effects of health measures early on and consider them to a greater extent in its pandemic planning.
- The FOPH should involve more specialists from the fields of psychology, pedagogy, political sciences, ethics, economy, social work, etc. in its pandemic preparedness efforts and in the planning of its measures. The stakeholder management involving multiple parties suggested in recommendation 4 will support this objective.