

**IMPROVING THE QUALITY AND SAFETY OF HEALTHCARE IN SWITZERLAND:
RECOMMENDATIONS AND PROPOSALS FOR THE FEDERAL STRATEGY
Second Report of the Scientific Advisory Board**

Membership of the Scientific Advisory Board

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This report reflects the discussions of the Scientific Advisory Board in meetings over the last three years. The report was drafted by Charles Vincent with further contributions made by members of the board. The final report and recommendations were reviewed and approved by all members of the Advisory Board.

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Purpose of the paper

The scientific advisory board was created in 2013 to advise the Federal Government and Office of Public Health on the implementation of the national safety and quality strategy. Members of the board draw both on scientific expertise and practical experience of large scale organisational change to reflect on the national strategy and its implementation over time. The board supports the setting of priorities, draws attention to difficulties that may emerge and assists in formulating an emergent strategy over time.

The purpose of this second report is to reflect on national initiatives to improve the safety and quality of care in Switzerland over the last 15 years and to make recommendations and proposals for the period 2018 to 2020 in anticipation of the passing and implementation of the new Federal Law.

The Swiss Strategy for Safety and Quality Improvement

The Federal Government has established many important initiatives over the last 15 years to stimulate safety and quality improvement in Swiss healthcare. Goals set out in 1999 included the collection of quality data, continuous improvement, reduction of waste and care centred on the patient. The establishment of the Foundation of Patient Safety in 2003, following the recommendations of the Federal Government's Patient Safety Task Force (2001), was a major milestone. This was followed in 2006 by a series of initiatives including the establishment of error reporting, surveys of staff and patients and the development of safety and quality indicators.

The 2009 Quality Strategy identified a number of areas where there was a need for action to improve quality and patient safety. These included the promotion of a quality and safety culture, measures to embed quality assurance and patient safety more firmly in training curricula, projects to improve the integration of in-patient and out-patient services, and initiatives to inform and empower patients. The strategy also proposed the establishment of a National Centre to implement the safety and quality strategy. A number of national programmes addressing priority clinical issues were also established.

The Federal Office has placed a new law before the Swiss Parliament to address the quality and efficiency of healthcare in Switzerland. The Federal government transferred the law to the parliament in December 2015; on 16th June 2016 the first chamber of the parliament (Council of States) decided not to enter into discussion of the law as presented. On 13th October 2016 the commission of the second chamber of the parliament (National Council) agreed to enter into discussion on a modified version of the proposed law. The Federal Office anticipates that the National Council will put the adapted proposal on its agenda for the session of September 2017.

The principal themes of the new law are as follows:

- The coordination of quality and patient safety implementation will be given to a new extra-parliamentary committee.
- Quality and Patient Safety Strategy remains the responsibility of the Federal Government. It defines the strategic goals for 4 years, which give the framework for implementation and coordination by the extra-parliamentary committee.
- The Federal Government will define the topics for National Programs on Quality and Patient Safety as part of its strategy. The contents of the programmes will be defined by the commission and implementation will be the responsibility of existing quality organisations.

- The tariff partners are mandated to establish quality contracts which have to be approved by the federal administration.

National safety and quality initiatives

Switzerland has initiated a number of important national safety programmes initially modelled on the Breakthrough Collaboratives implemented successfully by the Institute for Healthcare Improvement in the USA. The Federal Government defined priority areas in 2011. All four national programs are already included in the financial plan 2015-2017 and the Federal Council has now approved financial resources for the years 2018-2020.

Two national programmes have been successfully completed:

- Safe Surgery - embedding the use of the WHO checklist in the operating theatre.
- Safe Medication in Hospitals – implementing medication reconciliation at the entry point of the patient.

A third programme is currently being implemented:

- Safety with Urinary Catheters. This programme aims to reduce nosocomial infections associated with urinary catheters, mainly through reducing catheter days.

A fourth national program is in preparation:

- Safe Medication in Nursing Homes

The first two programmes were coordinated and managed by the National Patient Safety Foundation. They have made important contributions to specific clinical objectives and in terms of raising awareness of safety and quality improvement in Switzerland. However, there have been many challenges which are highly relevant for future collaboratives and for other safety and quality initiatives.

- Hospital boards did not fully appreciate their leadership role in the collaboratives and for patient safety and quality more generally.
- Many hospitals found the programme very challenging and consistently underestimated the resources and skills required.
- Physicians were often not fully engaged and felt that they had insufficient resources for programmes, particularly medication reconciliation.
- The project management and administrative workload was considerable.
- The monitoring of key process and outcome measures was quite limited. Improvements programmes need to be data driven and the participating hospitals did not appreciate the extent of this responsibility.
- Very few clinical staff have had any training in safety and quality improvement and many have little understanding of basic issues. There is little safety and quality content in clinical training programmes in Switzerland. Programmes were delayed because awareness of safety is low and basic training had to be provided before a programme could be implemented.

Despite successful national programmes and the efforts of the Patient Safety Foundation, Swissnoso and others, safety and quality initiatives remain fragmented. The programmes mounted so far have not been large enough to achieve the critical mass necessary to spread the intervention and set a new standard. The fragmentation of the Swiss systems poses additional challenges. Dissemination across the wider Swiss system has therefore been slow compared to other countries.

We suggest that unless these challenges are addressed future programmes will not achieve the success they should. Taking international experiences into account and networking with programs in Scotland, Scandinavia and other countries with positive experiences would be worthwhile. A methodology building on the lessons of the early Swiss collaborative programmes needs to be more explicitly defined. We need to build the foundations of safety and quality improvement as well as establish national programmes.

Foundations of safety and quality improvement

Studies of national collaboratives and organisational change in healthcare have suggested that if improvement programmes are to succeed organisations have to be ‘ready’ in the sense of having the necessary conditions and capability to implement and sustain the programme. Funding and guidance from a national organisation is important but often insufficient to effect change. The experiences and challenges of the Swiss programmes are mirrored in the wider international experience. The principal requirements for a successful national programme are as follows:

- ***Awareness of patient safety and understanding that the intended standard of care is frequently not delivered to patients.*** In Switzerland there is comparatively little awareness of the problems in patient safety. A recent study has established that one in ten Swiss patients sustains an adverse event during their hospital stay, a similar rate to other advanced healthcare systems. However, during executive seminars on patient safety in Switzerland it has emerged that some board members believe that the rate of adverse events is 1 in 1 million patients rather than 1 in 10. Swiss citizens, unless they are personally affected, are not aware of safety and quality problems.
- ***Appreciation of the time and commitment needed to sustain a large scale improvement programme.*** Those engaged in the collaborative programmes have frequently observed that the participating organisations did not appreciate the scale and impact of the target clinical safety issues and underestimated the resource needed to effect sustained improvement.
- ***Capacity for safety and quality measurement and monitoring.*** Measurement, both nationally and locally, is often the Achilles heel of improvement initiatives. Measurement is frequently given insufficient attention, initiated too late and usually presents a much greater challenge than leaders anticipate. Improvement initiatives are often overly reliant on temporary process measures. There is a need to identify reliable outcome measures, including patient-reported outcome measures.
- ***Leadership and commitment from senior clinicians and managers within participating organisations.*** This includes visible commitment and participation of boards as well as defined clinical leadership and engagement.

- **Teamwork and a supportive culture.** Successful programmes place great emphasis on the necessity for broad organisational support and engagement. Improvement programmes frequently fail because they are simply delegated either to external consultants or to a small number of people who then struggle to achieve the wider engagement needed to make the programme work.
- **Trained and experienced programme managers and project leads.** Organisations and the wider programme need a critical mass of people who are trained in improvement science, change management, measurement for improvement and related skills.
- **Financial and organisational stability within participating organisations.** It is difficult for any organisation facing significant financial or other challenges, such as a merger, to engage successfully in a long term collaborative programme.

Finally, we should note that improvement initiatives are necessarily constrained by the resource available and clinicians and managers in all countries may refuse to engage on the grounds that they do not have sufficient time or resource. These objections are often justified but it is surprising that this objection is given such credence in Switzerland which has an exceptionally well-funded healthcare system. Denmark for instance has funded many successful national collaboratives and Ireland is implementing 9 improvement collaboratives in parallel; in one Danish national collaboratives the hospitals with least resources were most successful in implementation of medication reconciliation.

Proposals for the national strategy 2018-2020

The Federal Office and the Cantons have many statutory responsibilities for the safety and quality of care. However, the Federal office provides the vision and strategic direction for the future. We believe that the Federal Office could take a number of steps in the next three years which would be valuable in themselves and also lay the foundations for the likely increased funding and attention to safety and quality improvement from 2020 onwards.

An authoritative report on the safety and quality of care in Switzerland

A national report summarising the current state of understanding of the safety and quality of care in Switzerland would provide an extremely valuable foundation for both local and national action.

This report should gather and review studies that have already been conducted and possibly commission some further targeted studies. The international literature should be considered with particular attention to the implications for Switzerland. The report should include patient stories and the perspectives of patients and families as well as the experiences of staff who have been involved in adverse incidents. The overuse of diagnosis and treatment should be included as both potentially harmful for patients and wasteful of resources. Greater attention to the appropriate purchase and use of technologies and care to tackle simultaneous over- and underuse of care in Switzerland may contribute to savings that could be redirected towards quality and safety initiatives. The report should also describe potential solutions and set out future directions for Switzerland. The principal target audience would be politicians, civil servants, boards, senior clinicians and managers of healthcare organisations. However the report should be made available to all healthcare staff and to the public. A summary version should be disseminated as widely as possible.

Recommendation: the Federal Office should commission a report on current knowledge of safety and quality of Swiss Healthcare and actions needed to establish solid foundations for future programmes. A wide range of stakeholders need to be consulted and involved and the report should be disseminated as widely as possible to patient and family organisations and all healthcare stakeholders across Switzerland.

Board development and organisational change

Training and supporting leaders in healthcare in the essentials of capacity building, change management and designing high reliability healthcare institutions is critical. The strategy should address the training of Boards of Trustees of Swiss Healthcare Institutions and the leaders of professional organisations, on their role in supporting and leading quality and safety improvement and related responsibilities. The Federal Office could help promote this training and possibly provide some resources for the National Patient Safety Foundation (or another institution) to run it. Training Chief Executives is essential but probably best achieved as part of wider board engagement and training.

Recommendation: the Federal Office should commission, implement and evaluate a pilot programme of training for Board members and other healthcare leaders with a view to a wider programme across Switzerland.

Education and training for clinicians and managers

Current and future national programmes need to train a critical mass of people in improvement science to sustain and drive the programmes. The training has to be team oriented and multi-professional. The Scottish and Scandinavian fellowship programmes provide excellent examples of building capacity and capability at the national level.

In the short term Switzerland should invest in 'training the trainers' and develop a core faculty knowledgeable in patient safety and quality improvement. This faculty can then assist in curriculum development and provide training to those involved in national programmes in preparation for the period when a higher sustainable financing of quality and patient safety will be at hand.

Online training programs such as the IHI open school could also be promoted. The IHI open school has been translated into French. The Federal Office could help make such resources available and sponsor translations in German. Further online training could be sponsored and promoted by the Federal Office. In addition substantial efforts should be made to further embed an understanding of safety and quality improvement into national clinical curricula. Quality and safety issues should be introduced in licensing examination for all medical specialties, nursing and allied health professionals.

Recommendation: the Federal Office should commission a mapping exercise to review the nature and extent of education and training in safety and quality in Switzerland. A national steering group on Education and Training should be formed to provide recommendations for curriculum development and implementation.

Safety and quality indicators

Switzerland lacks a nationally agreed set of quality and safety indicators especially in the field of long-term care, ambulatory care, home care. An integrative national database of indicators across all sectors of healthcare would be a major advance. Such a database should allow participating organisations to carry out their own local analyses as well as contributing to the national dataset. Data is often available but not integrated in a coherent format. This is in sharp contrast to other countries such as Denmark which have well developed national safety and quality databases.

Most measures have not been validated in the Swiss context or in only very limited ways. Furthermore, it may well take many years until the current initiatives (such as the MARS project of the federal office of statistics, electronic medical records) bring additional information. The development of e-health and the development of the electronic medical record have commenced but with comparatively little harmonisation of different programmes or a wider vision about the requirements for a unified system for Switzerland as a whole.

The use of Patient Reported Outcome Measures is underdeveloped in Switzerland. These could be incentivised and encouraged by the Federal Office, possibly including some pilot implementation projects. Clinical registries should be encouraged to include PROMS.

Finally, many Swiss healthcare organisations have very little capacity for anticipation of hazards or for analysing or learning from safety and quality information. A review and development of these capacities may be valuable.

Recommendation: The Federal Office should convene a small team to produce a report and forward vision for the development and use of national safety and quality indicators. We should note however that this is potentially a major undertaking and that even large-scale European Union programmes have found it challenging to define appropriate indicators. Liaison and collaboration with international groups would be critical.

Public awareness and support for safety and quality improvement

Swiss citizens are the ultimate beneficiaries of programmes to improve the safety and quality of care and healthcare organisations are ultimately responsible to the people who pay for healthcare. Wider engagement and understanding of Swiss citizens would support both the wider programmes and specific initiatives in which patients were engaged. Direct information to public and patients is critical but patient associations are not yet strongly established in Switzerland. Patients and families need to be much more involved in designing improvement, in Boards, in Patient Safety Committees, and in shared clinical decisions.

Recommendation: the Federal Office should commission a short paper reviewing the patient engagement strategies in Switzerland and other countries and provide recommendations on successful strategies that could plausibly be implemented and tested in Switzerland. Making care patient centred is a challenge in every healthcare system so this must be regarded as a long term aspiration rather than a short term problem to be resolved.

A national conference and the creation of a safety and quality network

Previous national conferences on safety and quality, occurring sporadically over the last 15 years, have been very successful events and fostered a sense of community in those seeking to improve the safety and quality of care. However, the effects have tended to be short lived as there have been long intervals between conferences and no networks have been established to sustain the community in the longer term.

A national conference on quality and safety in healthcare needs to become a regular and reliable annual event. Such a conference would increase awareness about the problems in quality of care and patient safety in Switzerland, among healthcare professionals, the public and decision makers. Such a conference would also support and develop a community of improvement professionals and foster networking and cooperation. The conference could also include a scientific symposium on Swiss research and mini-courses to develop quality and safety skills in the workforce.

Recommendation: the Federal Office should provide the Patient Safety Federation, in partnership with other organisations, with pump priming funding to ensure that a national conference is run at least every two years and ideally annually. A pre-conference day is needed to make plans for the creation and sustaining of a national network of safety and quality organisations and individuals. We should also seek to introduce relevant safety and quality topics into other clinical conferences to widen participation and access.

Deciding on priorities for future national programmes

Although we have emphasised the need to address the foundations of safety and quality improvement, we believe that national programmes on specific clinical topics remain important both in addressing critical safety issues and in developing capacity and capability in safety and quality improvement. Current national programs do not have sufficient critical mass to establish the promoted best practice as a standard. We believe that the current programmes are sufficient for the years 2017 and 2018 but future programmes should be initiated from 2019 onwards with a view to a substantial increase in 2020.

Patient safety initiatives should be targeted at priority clinical issues and ensure that all sectors are included in at least one major programme (hospitals of various sizes, ambulatory care, nursing homes, care at home). Programmes must include all healthcare professionals; physicians, nurses, pharmacists, allied health professionals and managers all need to be involved. We will need to review the evidence on the prioritisation of safety and quality topics and on the effectiveness and cost of implementation strategies. Potential clinical topics for future programmes include: hand hygiene compliance, critical care bundles (for ventilator acquired pneumonia), sepsis, central line infections, antibiotic stewardship and prophylaxis for deep vein thrombosis.

In addition to clinically focussed programmes we should consider programmes which are designed to produce wider improvements in the healthcare system across multiple clinical contexts. National programmes could be established, for instance, to provide systematic training in teamwork and handovers; such programmes have already been shown in other countries to have had substantial impact on surgical complications and other outcomes. Continuity of care between hospital, rehabilitation services, ambulatory and home healthcare is another potential target, highly relevant to an aging population and increasing rates of chronic conditions.

Recommendation: Members of the advisory board should support the Federal Office in prioritising and planning for a series of national collaborative programmes in anticipation of the increased funding from 2020. However, no new programmes should be established until there is greater capacity for implementation and evaluation in the system.

Scientific Advisory Board on Safety & Quality

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