

project is currently underway in a proactive, selective and continuous way.

**Results** Activities were analysed during 2020, weeks 12–19 (16 March to 10 May 2020) and compared with theoretical activity during the same period in 2019, with an increase in activity (+21%). The difference between the sum of in-person and telematic consultations and the theoretical consultations for the period was named after omitted consultations.

Overall activity in weeks 12–19 was 5550 consultations, of which 4414 (79.5%) were in-person and 1136 (20.5%) telematic. The estimated activity would have been 7030 consultations, and 1480 (21% of the theoretical ones) have been omitted. In-person activity decreased from 5973 patients between weeks 12 and 19 in 2019 to 4414 in 2020 (–23.3%).

Distribution of the 1136 MHD: week 12 (30), week 13 (131), week 14 (232), week 15 (190), week 16 (168), week 17 (155), week 18 (115) and week 19 (115). Waiting times for in-person consultation were reduced from an average of 5.2 min/patient in the pre-alarm period to 3 min during the alarm (–42.3%).

**Conclusion and relevance** Our data may be used to detect areas for improvement; consultations should be made proactively and tools are needed to qualitatively analyse omitted activity. A system is needed to account for tele-assistance that has not resulted in dispensing medication or MHD.

## REFERENCES AND/OR ACKNOWLEDGEMENTS

**Conflict of interest** No conflict of interest

### 2SPD-048 POLITICAL REPORT—OPTIONS TO BREAK THROUGH MEDICINE SHORTAGES

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**Background and importance** Medicines shortages are recognised by the World Health Organization as a challenge threatening health outcomes. Shortages have tripled since 2017.

**Aim and objectives** To propose options for action to health policy decision makers.

**Material and methods** Stakeholder interviews, two Delphi rounds and system dynamics simulation with Vensim.

**Results** Most promising recommendations are:

Governance

- Determination of system leverage points
- Designation of an integrating leader
- Allocation and demarcation of responsibilities and duties
- Expansion of stockpiling by the federal office for national economic supply
- Reframing the primacy of constitutionally guaranteed freedom of trade: ensuring the availability of medicines even in less profitable business domains
- Subsidies for allocation of higher capacities over the entire supply chain

API synthesis and trade

- Ensuring the synthesis of active ingredients in Switzerland and/or Europe
- Admittance of non-Ph Eur qualities for non-parenteral products
- Obligations to licence holders:
  - Registration of  $\geq 2$  API suppliers/manufacturers
  - Stockpiling of both API and medicinal product

Production

- Subsidies for products threatened by economic reasons
- Financial incentive systems (price, taxes, subsidies)
- Resizing of production scales (large, intermediate and small scale) and/or licensing to SMEs in economically weak regions
- Merger requirements: to keep products on the market or to sell them to SMEs
- Reinsurance for liability risks of SMEs
- Backup supply of formula products from hospital pharmacies, universities, army

(Pre-)wholesalers/trade

- Risk based differentiation of pharmaceutical supply chains
  - direct-to-hospital line
  - retail pharmacy line
- Fewer serial stocks, but higher buffer capacity per stock
- Backup supply by medicinal products with English documentation (for medical use, not for dispensing)
- GPS monitoring of international medicines transportation

Healthcare providers

- Definition of formularies considering supply security
- Limiting tendering
- DCI prescription (instead of brands)
- Investment in higher capacities, technical equipment for production, personalised medicine
- Revision of outdated therapy paradigms
- Expanding diagnostics to differentiate responders/non-responders
- Outcomes
- Pharmacoeconomic evaluation of added values (cost benefit, cost effectiveness, cost minimisation, cost of QALYs)
- Keeping cost neutral (costs=unit price×quantity)
- Reinsurance financial risks of stock bound capital
- System financing
- Revision of the pricing system
- Charging employers for added health values and regained productivity of their employees
- Acquisition of patents and intellectual properties by states

**Conclusion and relevance** Coping with medicine shortages by quota and rationing will not delete the root causes of shortages. Supply from additional sources (eg, SMEs, hospital pharmacies, army, universities) will replenish empty shelves.

## REFERENCES AND/OR ACKNOWLEDGEMENTS

1. SNF\_database (download: <http://p3.snf.ch/project-174566>)

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