INVENTING COLLABORATION IN URGENCY

by Olivier Berthod

Context

This case study reports on the large-scale outbreak of a back-then unknown strain of enterohemorrhagic Escherichia coli (EHEC) in Germany in the summer of 2011. It illustrates how previously unconnected actors introduced an inter-organizational structure in order to face the situation. Leading actors at the national level were the Federal Ministries of Health and of Food, Agriculture and Consumer Protection, and related federal public agencies. Similarly, the regional public agencies of the German states (Länder) were involved with operative tasks. In addition, local human and veterinary health authorities, hospitals, medical practitioners and national reference laboratories further dealt with human health issues. EHEC is a bacterium present in the intestines of warm-blooded animals that may cause severe food poisoning to the human body, provoking, in rare cases, HUS syndrome (anemia and kidney failure). Standard EHEC infections are frequent in Germany, with about 800 cases reported annually. Between May and July 2011, a novel strain of EHEC suddenly infected a total of 3,842 patients in the north of Germany (2,987 infected with EHEC and 855 with HUS), causing 53 fatalities. From May 8 on, the number of patients with both EHEC and HUS increased dramatically and reached its apex on May 21 and 22. The usual treatments failed to function. . The number of patients kept on escalating and the hospitals quickly ran out of resources. Meanwhile, public authorities were working on ways to track and isolate the disease.

Failure

Prior to the outbreak the institutions involved were divided along two main thematic streams: health on the one hand, and food safety/consumer protection on the other. The two ministries collaborated from time to time, but remained distinct organizations with specific hierarchies, data formats and streams of information diffusion from national to local level. Formal and informal ties had emerged during past outbreaks, but never to the extent of the EEC incident in 2011. Hence, the lack of ties between the organizations, their bureaucratic heritage and the large uncertainty concerning the epidemics contributed to the general feeling of confusion, and also stressed the necessity to invent new ways of working together.

Innovation

The state and federal agencies decided to bundle resources in the form of a transversal taskforce dedicated to identifying the carrier of

Domain
Public □
Private □

Non-profit □
Commercial □

Business: food safety

Start up (0-1yr) □
Growth (1-5 yrs) □
Mature (5yrs +) □

Micro (Staff <10) □
SME (10 – 250 Staff) □
Large (250+) □

Regional □
National □
Multinational □

Methods
Longitudinal □
Cross-sectional □

Access □
Exemplar □
Random □

Innovation
Top Down □
Bottom-up □

Product □
Process □
Organizational □

Radical □
Incremental □

EHEC. The taskforce built on experts from all federal and European agencies. This new organizational device allowed centralization of communication, data, hypotheses and analytical efforts, and shed light on the need for adjustments in data formats, software and investigative methods. After the epidemic, the taskforce became institutionalized as standard procedure.

Transformation

Activities were divided among members of the taskforce, along a mind map. Two main tasks emerged: investigating clusters of food consumption on the one hand, and clusters of food distribution on the other. While IT staff started programming new software infrastructures, members of the federal health agency RKI suggested a field-method inspired by police investigations on poison-based crimes. Researchers took pictures of numerous dishes served by one restaurant where a high number of patients had gotten infected. They showed the pictures to the patients and compared their answers with a full list of the ingredients included in the dishes. Soy sprouts seemed to be the key. The taskforce inspected the data on food distribution clusters and put them in relation to the outbreak clusters using the new infrastructures. Reducing the analysis to the clusters with the cleanest datasets, they determined the source spanning all clusters: the sprouts had been delivered by an organic farm in Germany, which itself had imported the seeds from Egypt.

Role of Leadership

As the necessity to bundle different sources of expertise, knowledge and capabilities arose, the discussions attracted people with experience in task forces and crisis management groups in different fields, who then became instrumental in operationalizing this new organizational device. Eventually, the task force was recognized as an adequate way to decentralize and better distribute leadership in crisis situations and cross organizational boundaries without the relational depth that conventional project-based structures imply. The professionals involved in the taskforce further worked in favor of its institutionalization by applying it again, successfully, in the context of subsequent outbreaks.

Data

This case study relies on an in-depth qualitative investigation based on over 40 interviews with professionals involved in the outbreak.

Further Reading

Robert Koch-Institute (2011). *Final presentation and evaluation of epidemiological findings in the EHEC O104:H4 Outbreak, Germany 2011*.

Failure

Caused externally □
Caused internally □

Step1 Invent □
Step2 Select □
Step3 Implement □
Step4 Capture □

Transformation

Internal to Organisation □
External to Organisation □
Delivered by Organisation □
Delivered by Others □

Role of Leadership

Strategic Recovery □
Employee-led Recovery □

New Leader Engaged to lead transformation □
Existing Leader-led transformation □

Recovery Strategy Published □
Recovery Led by Operational Activity □

Strategy Announced □
Recovery Evolved □

Learning outcomes

- Urgency makes it necessary to distribute leadership along domains of expertise
- Loose forms of coordination enable the organic development of inter-organizational capacities.