Building a Bridge Between Distant Agencies With Leadership Skills

Old-fashioned institutions in Argentina's food safety system impede the flow of data between public health institutions that monitor human health and those that track animal health. Two young professionals on opposite sides of the divide set out to improve cooperation between the distant departments by focusing on one bacterial pathogen, Salmonella, which can infect both humans and animals.

Two food safety experts in Argentina, Mariana Pichel, Ph.D. and Nicolas Winter, D.V.M., teamed up to achieve a goal that seemed straightforward: link the surveillance of foodborne illness caused by *Salmonella* between the departments responsible for public health (INEI, ANLIS)¹, where Pichel works as the national laboratory network coordinator for *Salmonella*; and the poultry program within the animal health division of SENASA², where Winter worked as a veterinarian in the international affairs unit. Pichel and Winter quickly realized that their project would be anything but straightforward. In order to make progress, they needed to rely on the leadership skills they were acquiring at an intensive One Health development course, called the Executive Leadership Program in Food Safety (ELFS).

Decades-old challenges

For years, public health institutions in Argentina complained that they could not trace back the origins of outbreak strains of foodborne pathogens, such as *Salmonella*, to a specific animal production facility or food processor; and therefore, were hindered in preventing future outbreaks.

SENASA's laboratory technicians countered that they lacked capacity to test samples and manage ever-increasing piles of paperwork. Worse, some at SENASA feared that public health or hospital workers would focus on farm production as the cause of an outbreak—not considering other possible sources of contamination, such as improper food preparation or handwashing—potentially harming one of Argentina's most cherished national industries; agriculture.

Data reporting of foodborne illness remains a challenge in Argentina. The hospital notification system requires clinicians to report diarrhea cases (gastroenteritis) to the country's public health institutions. However, many people do not seek treatment when they experience symptoms associated with *Salmonella* infection—such as nausea, vomiting, diarrhea, headache and fatigue. Additionally, what health data the government does collect is not widely shared with animal and agriculture sectors, and public health institutions miss opportunities to take joint corrective action. By comparison, governments that use a comprehensive, system-wide one health approach are able to identify and solve problems quickly from farm to table.

¹ INEI is The National Institute of Infectious Diseases, which is part of ANLIS, The National Administration of Laboratories and Institutes of Health

² SENASA is The National Agrifood Health and Quality Service

One research-based estimate suggests that *Salmonella* Enteriditis caused at least 35 outbreaks affecting 3,500 people between 1986 and 1990 in Argentina³. *Salmonella* Typhimurium and *Salmonella* Enteriditis are the most common serovars identified in human infections in Central and South America, according the U.S. Centers for Disease Control (CDC)⁴ and as notified regionally in the frame of WHO Global Foodborne Infections Network South America. Mild cases of salmonellosis can cause people to miss days of work and school, while severe cases can cause long-term disability or death.

Existing governmental practices in Argentina fail to detect and prevent hazards at the farm level from moving up through the food system and becoming health risks. Further, workers throughout the food system generally do not know their counterparts well enough to develop positive working relationships, thus, they express reluctance to ask for help, share information or cooperate, according to Winter.

"Employees at INEI-ANLIS and SENASA have been working the same way for years, and they think that things should remain the same. It is very challenging to get people to work together and see food safety as a shared responsibility," explains Winter.

Despite the challenges, there is cause for optimism, according to Winter. People and ideas at SENASA are starting to change.

Two steps forward, one step back

Pichel has been working on issues related to *Salmonella* since graduate school at the University of Buenos Aires. In 2009 she asked Winter to join her to help INEI develop a strategy to improve *Salmonella* monitoring that would connect public health to farm animal data. Even though Winter worked outside the animal health division, he saw the collaboration with Pichel as a way to facilitate stronger working relationships between INEI-ANLIS and SENASA, and thereby, improve food safety in Argentina.

Pichel and Winter set two goals they hoped to achieve within two years: (1) hold a joint conference between the departments led by international food safety experts, who would speak to the need and value of increased cooperation using a broad multidisciplinary or "one health" approach; and (2) reach and sign a formal agreement to collaborate and share information between INEI-ANLIS and SENASA.

Winter's first challenge was to motivate people within SENASA to become involved in the project, and he was starting from scratch. He had little knowledge about which people could help him, so he decided to survey SENASA employees. He and Pichel developed a survey to measure attitudes and practices around information sharing and food safety issues. The survey helped

³ Eiguer et al. (1990)

⁴ Galanis et al. (2006) Web-based Surveillance and Global Salmonella Distribution, 2000-2002. *Emerging Infectious Diseases: 12 (3)*. http://wwwnc.cdc.gov/eid/article/12/3/05-0854-f2.htm

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Winter meet many new people within SENASA; at first on the pretext of asking them to take the survey, and then later, to ask for commitment to collaborate with INEI-ANLIS. The survey was also helpful at INEI-ANLIS to raise awareness about the importance of working in collaboration with SENASA and to identify people that should be included in the project.

"Nicolas and Mariana are two extraordinarily talented individuals who chose a difficult project," explains Linda Valeri, director of operations for the Center for Animal Health and Food Safety at the University of Minnesota. At the time, Valeri was serving as project mentor in the ELFS program with Bertrand Gagnon, manager of codex and food safety coordination at the Canadian Food Safety and Inspection Agency. Valeri and Gagnon met with Winter and Pichel in person every six months from 2010 to 2012 at various ELFS workshops. The mentors also checked in periodically to offer support through email, phone and Skype. Their role was to listen carefully, ask questions that provoked thinking about key obstacles, and brainstorm incremental solutions.

"The teachers and mentors [of ELFS] challenged and pushed me outside of my comfort zone. For example, at one of the ELFS workshops, there was a contest to see how many contacts the participants could make with people in the room that we didn't know. This was really difficult for me as I had no experience walking up to a stranger in a professional context, making eye contact and starting a real conversation," explains Winter. Through this exercise Winter recognized the importance of building relationships as the first step in getting people to talk to each other, and ultimately, to work together to share important data between their departments.

Without the training provided by ELFS and mentoring support from Valeri and Gagnon, Winter and Pichel have no doubt their project would have been more complicated or even impossible to achieve.

"Our mentors' support, advice and encouragement were very important in the design and implementation of our project, and in our own professional development," explains Pichel.

However, mentoring over distance proved to be difficult for Valeri. Even with years of experience she explains, "I'm the kind of person who likes to sit in a room and talk face-to-face. Language and cultural differences were also somewhat of a challenge for me. Nicolas and Mariana have good English skills, but there was still a cultural difference in work environments. It was challenging for me to understand their institutional structures and many bureaucratic barriers separating their departments."

Leadership skills break cultural barriers

"Overall, I would give our ELFS project a B as a final grade," says Winter. "While we were unable to achieve our top goal of organizing a joint meeting in food safety, we were able to achieve our second goal of obtaining a written agreement for joint work and information sharing, which was signed by all groups."

Winter and Pichel also were able to achieve other surprising results. They started the groups working together informally one year before the written agreement was signed. About 800 samples of *Salmonella* have been shared so far, and through this project, INEI-ANLIS strengthened SENASA's Central Laboratory capacities to analyze *Salmonella*. Further, both departments approved a key agreement about how to share information by specifically not making any public announcements without the written agreement of the other partner. This has changed the way microbiological information is used; instead of extrapolating and casting blame without evidence, shared epidemiological data now helps both institutions plan and formulate policy. Winter credits the success to all of the leadership skills and mentoring he and Pichel acquired through ELFS.

Winter has continued to develop his leadership skills. He routinely invites colleagues and superiors out to lunch, something he would have never thought of before Valeri suggested it. He also reads at least one business book in English per month on his subway commute to work; topics range from communication to group management to philosophy. He has taken a new job within SENASA, a promotion that came from chatting with the person, who is now his boss, about using holistic approaches and innovative ideas to address challenging food safety issues. Meanwhile, Pichel remains at her post in INEI-ANLIS, leading the continuity and expansion of the joint work between the two public health institutions.

Valeri sums it up when she explains that there are dozens of complex factors that affect the safety of food—production and processing practices, regulations, distribution and trade barriers, economics, politics, culture and more. Because food systems are so complex, societies need well-trained young professionals like Pichel and Winter to understand and coordinate the roles of government, academia, industry and consumers, and ultimately, to create a safer food supply for everyone.

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