

Supplementary Table 1: Elements of collaboration with supporting quotes

Positive elements	Challenging elements
<p>“Real collaboration” –dependence on one another, modifying and using each other’s work</p> <p><i>I enjoyed the fact that we were really collaborating with the people from a [sub-department] on a project together. And we did that before, but I think [this] was a different way because we depended on them. And in the end, they really, really collaborated quite intense[ly] with us to interpret the results and to think about how to put it in the right perspective, and that was really nice. (Researcher3, 8 years)</i></p> <p><i>It helped a lot, the collaboration between Blood Bank and Research because we really needed each other. And I think from both sides, we could see that there was a lot of benefit from the interaction between the two. (Management2, 17 years)</i></p>	<p>Some organizational barriers were relaxed, but not gone, so difficulties remained</p> <p><i>Interviewer: You mentioned the organisational barriers you've encountered. Could you reflect on if Sanquin as a whole changed in terms of its flexibility or its decisiveness?</i></p> <p><i>Respondent: No. I don't think it changed. And I think this was an exercise in showing that that flexibility could be organised a little bit better, but I also realise it's very difficult, especially with all the fail-safes that are in place... You need to ensure that the correct rules and procedures are followed. And often, that was a very-- and it's still often a big problem to actually do something meaningful. You stumble across those hurdles. (Researcher1, 16 years)</i></p>
<p>Greater awareness of each other’s situations</p> <p><i>During these projects there has been increasing understanding for each other's difficulties and possibilities. (Coronary Steering Committee summary report of lessons learned, p. 3)</i></p>	<p>Could have joined forces earlier and/or harmonize efforts better</p> <p><i>So we were kind of working in different corners. We have the Blood Bank and we have Research. We were working not completely as a synchronous team, but we could have... But I think we could have started earlier, had we just joined forces and decided...So we did it on an individual level instead of hierarchical level. (Researcher1, 16 years)</i></p>

<p>New project management style</p> <p><i>I don't say often that things were hard, but this was. Because I was really used to work Agile, Scrum. But Sanquin isn't Lean at all. So I tried to bring in some Agile mindset and way of working. And, actually, I am glad that I tried to because well, most of them succeeded. Some of them didn't work at all, especially in some departments, but we needed to-- at that time, we really needed to speed up in such a small timeframe that we needed to be pragmatic, change things quickly, not doing the bureaucratic decision-making things, but we needed to decide on the spot. And that was not how Sanquin was used to work. But, it was one of the reasons why we had success from the beginning, actually. (Blood Bank9, 1 year)</i></p>	<p>Overcoming siloed communication and behavior</p> <p><i>The problems that I was facing - and that was also getting more clear to me in these first weeks - is that these parts of the supply chain, these departments are not really speaking to each other that well. So they're not collaborating efficiently. Some does, some others not at all. So I really asked them to work together as a team and communicate things with each other, not via me...And in these first weeks, it was kind of hard for people to, yeah, well, speak not within their silo, but with others, right? So that was sometimes a bit confrontational. And yeah, but we needed to do that, so they were forced to do it. (Blood Bank9, 1 year)</i></p>
<p>Learning to communicate well in multi-disciplinary groups</p> <p><i>Researchers, the first thing what they are doing is organise meetings with other researchers and going into the technical details, which is very good. But they forget to [include] us, also, [in the conversations] a financial person, a commercial person, a business developer. And that's what we have learned [regarding communication], that they have to do that a little bit more. And put eight different researchers together and you have discussions for hours because there is no focus. (Management3, 28 years)</i></p>	<p>Lack of coordination and governance at times</p> <p><i>During a pandemic, an overarching project structure with clear shared objectives and responsibilities is required. Align governance structure to assignment and clarity about who will manage the team(s) and where the decision-making authority lies. It is also useful to inventory in advance which people are needed and whether they are also available. (Corona Steering Committee summary of lessons learned, pp. 4-5)</i></p>

<p>Strong collaborations with external partners</p> <p><i>Of external partners [such as the hospitals, municipal government, Ministry of Health] Sanquin has developed particularly good collaborations... There was a global collaboration with colleagues in many joint projects. The international collaboration with colleagues was particularly valuable, especially in the start-up phase of the collection of convalescent plasma project... We also collaborated with several pharmaceutical companies to supply materials from convalescent donors for research and development of vaccines and other therapies. (Summary from Corona Steering Committee lessons learned, p. 3)</i></p>	<p>Issues with external partners that caused delays for projects</p> <p><i>There were months and months of delay due to a lot of discussions of its use. Discussions with [an external partner] went wrong and they disagreed and disapproved of it. (Blood bank1, 5 years)</i></p>
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