| **#** | **Time period** | **Implication order** | **Implication description** | **Cause** | **Effect** | **Source** |
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| 3 | Present | First-order | No advancement in better care for people | Prolonged implementation | The organization is stuck with the legacy system that takes longer to get things done | PY1\_DI, Pos. 71 |
| 6 | Present | First-order | Degradation of patient care | * Lack of data about a certain patient (CDE1\_A1\_DI, Pos. 52) * The hospital is prevented from performing its core tasks (CS2\_A2\_DI, Pos. 42) * People, i.e., citizens lose their programs if the program fail that they were depending on and are now no longer available (FA1\_DI, Pos. 52) | Higher mortality (CDE1\_A1\_DI, Pos. 52), worse population health (M2\_DI, Pos. 55) etc. | CDE1\_A1\_DI, Pos. 52  M2\_DI, Pos. 55  PV1\_DI, Pos. 44  HITV1\_DI, Pos. 34  CS2\_A2\_DI, Pos. 42  FA1\_DI, Pos. 52 |
| 11 | Present | Second-order | Contraction in competent physician care | There is a shortage of doctors, the doctors that the system has are leaving and quitting and dying by suicide, there are not enough people to care for the patients, and an enormous amount of the physicians’ emotional and mental energy is being taken towards often uncompensated administrative tasks, i.e., called pajama time | Patients will be dying more frequently, there’s going to be more death, more permanent disability, less access to physician talent | PV3\_ETC2\_DI, Pos. 49 |
| 1 | Present | Second-order | Lack of employee satisfaction | Customers falling back on non-electronic mediums |  | PY1\_DI, Pos. 49 |
| 2 | Present | Second-order | Lack of customer satisfaction | Repetition of mundane manual tasks |  | PY1\_DI, Pos. 49 |
| 5 | Past | Second-order | [Managerial implication]: CEO had to get involved | Non-usage of a system that is at an organization's disposal |  | PY1\_DI, Pos. 27 |
| 7 | Present | Second-order | Financial implications:   * Loss in profit (CDE1\_A1\_DI, Pos. 52) * Waste of money (PV2\_CDE3\_DI, Pos. 65) * Delay in billings, i.e., receivables are pushed out for months (PY1\_DI, Pos. 75; CS2\_A2\_DI, Pos. 42) * One cannot get additional financial commitment to advance the work | Lack of data about revenue, i.e., how much health plans reimburse providers for vs. how much they spend on care | It will take much longer to get the work done (FA1\_DI, Pos. 52) | CDE1\_A1\_DI, Pos. 52  PV2\_CDE3\_DI, Pos. 65  PY1\_DI, Pos. 75  CS2\_A2\_DI, Pos. 42  FA1\_DI, Pos. 52 |
| 12 | Present | Second-order | Burnout |  |  | M1\_DI, Pos. 48 |
| 13 | Present | Second-order | Mistrust e.g., Patients trusting providers to keep their data safe, providers trusting payers to not use the collected data against them, payers trusting each other to share data, public health trusting patients to be able to access the data that they maintain about them | “(…) trust builds slowly, and it’s lost in an instant [quote].” |  | M1\_DI, Pos. 48  PV2\_HINE3\_DI, Pos. 65-67 |
| 14 | Present | Second-order | Uncertainty |  |  | M1\_DI, Pos. 48 |
| 15 | Present | Second-order | Unsuccessful implementation is very subjective: Did you run out of money, but the idea was still good, did you run out of time/are you off schedule, was the scope off, did the project die |  | Just because any of the first three are unsuccessful, does not necessarily mean that the implementation is unsuccessful | M1\_DI, Pos. 48 |
| 16 | Present | Second-order | Discredit the leader who was pushing for the project [contradiction] |  | Negative impact on their career | M1\_DI, Pos. 48 |
| 21 | Present | Second-order | Snowball effect on downstream processes | Physician skips a step or does not want to use the system | Billing process is screwed up | HITV1\_DI, Pos. 34 |
| 24 | Present | Second-order | Loss in momentum and the window of opportunity | “If you don’t get things done quickly, you know, if you don’t strike while the iron is hot, you might not have another chance [quote].” | It may set back things several years (FA1\_DI, Pos. 52) | PV2\_CDE3\_DI, Pos. 65  FA1\_DI, Pos. 52 |
| 26 | Present | Second-order | Loss in faith and commitment to the initiative | “And then you’re kind of left with this orphan project because it was a great idea, you hit failure, and now everybody kind of went their separate ways, right? Like the band broke up. And it’s really hard to get the band back together at that point afterwards [quote]”. | People move on to do other things, going separate ways | FA1\_DI, Pos. 52 |
| 28 | Present | Second-order | Something else fills that vacuum that is a worse outcome |  | Things take turn for the worst | FA1\_DI, Pos. 52 |