

VILNIAUS UNIVERSITETAS
MATEMATIKOS IR INFORMATIKOS FAKULTETAS

Requirements modeling

Reikalavimų modeliavimas

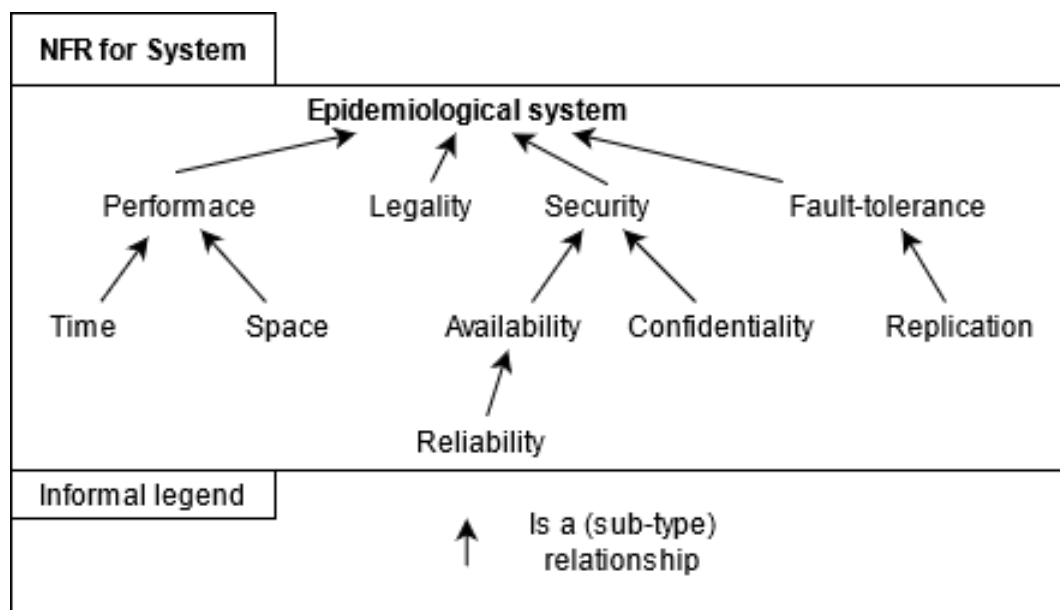
Programų sistemų inžinerijos modeliai ir metodai laboratorinis darbas 2

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1. NFR type catalogue

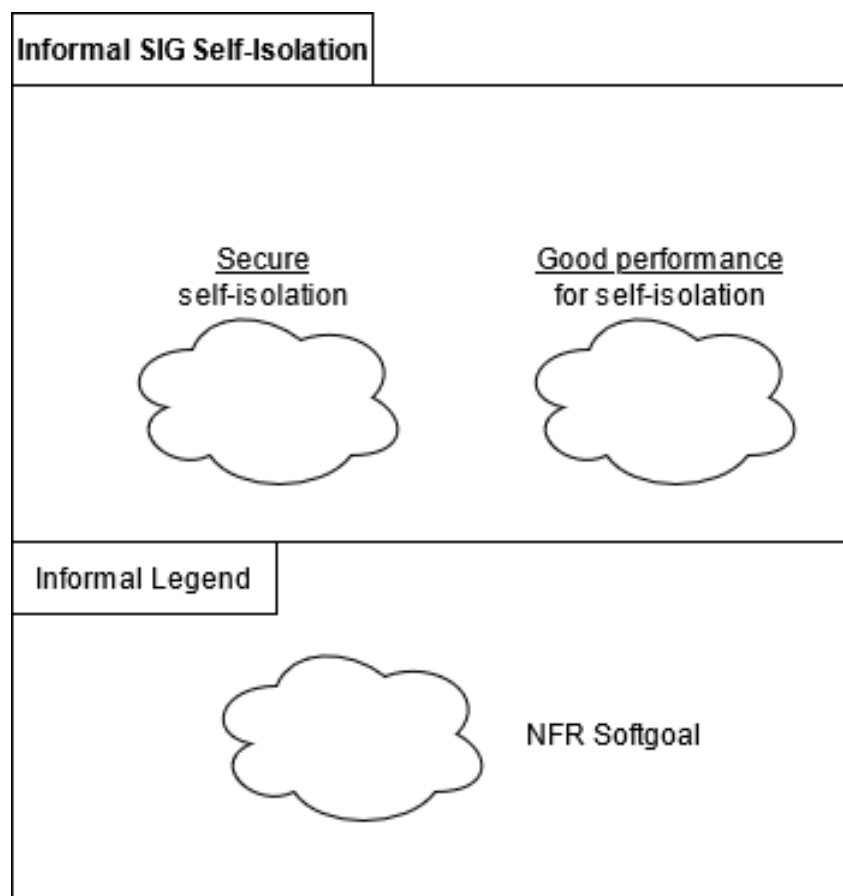


pav 1. NFR diagram

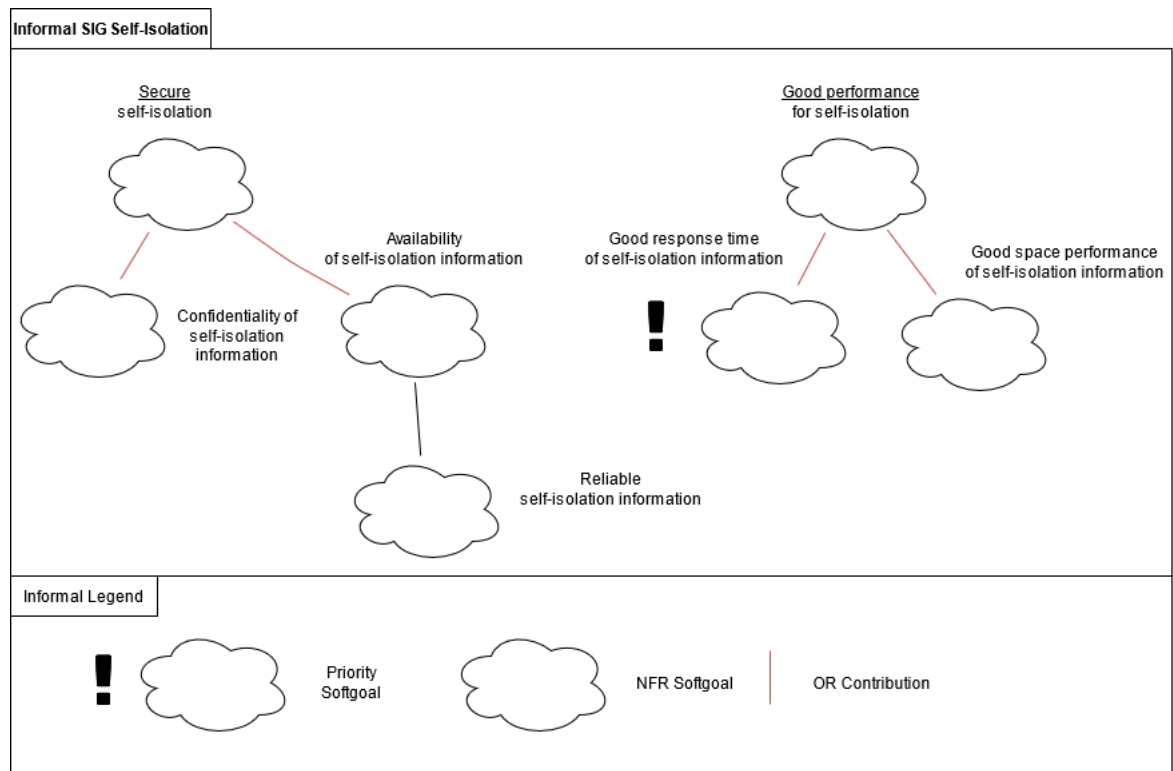
- **Time** - System is monitoring the epidemic therefore it's processes or workflows have to be efficient time-wise.
- **Space** - since the system will contain lots of different data (e.g. person's geographical coordinates), data must be stored efficiently.
- **Reliability** - Tracking the state of the epidemic must be ensured 24/7 to not miss any crucial data or trends.
- **Confidentiality** - epidemiological system must treat sensitive person information (e.g. received medical records) with respect to ensure systems credibility.
- **Legality** - due to the fact the the epidemiological system will deal with sensitive information, data handling must be in compliance with LT and EU data laws as well as GDPR.
- **Replication** - non sensitive data must have duplicate records stored to increase the system's fault-tolerance.

2. Modelling of the non-functional requirements

2.1. Self-isolation

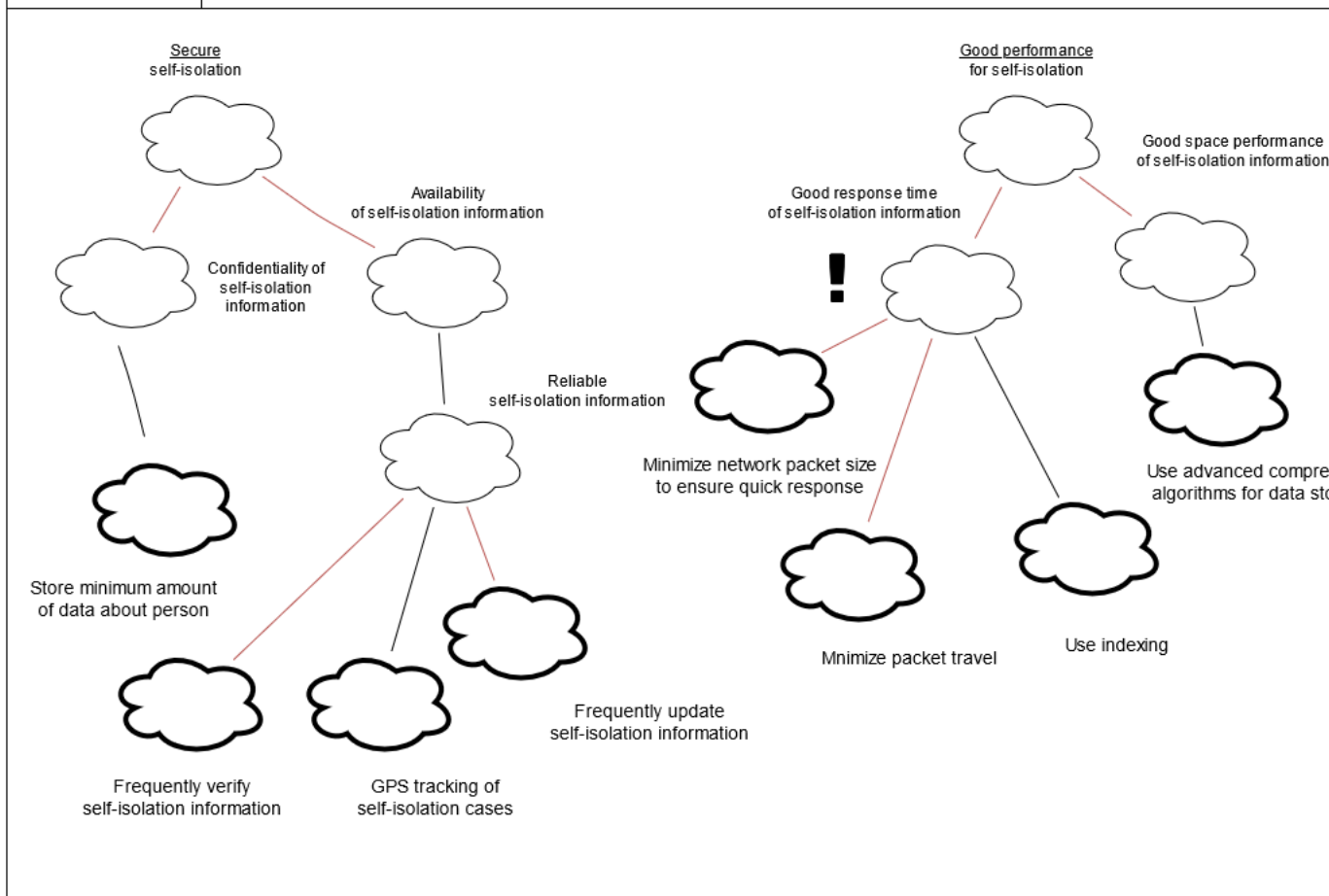


pav 2. NFR diagram

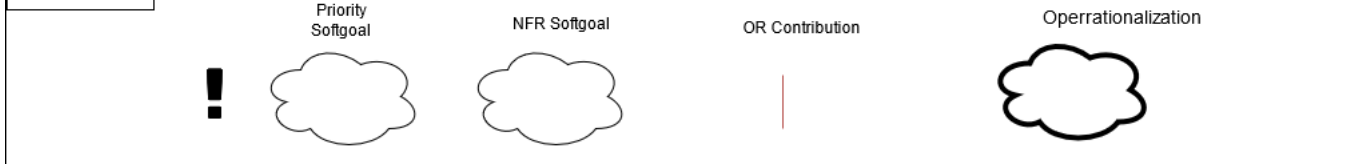


pav 3. NFR diagram

Informal SIG Self-Isolation

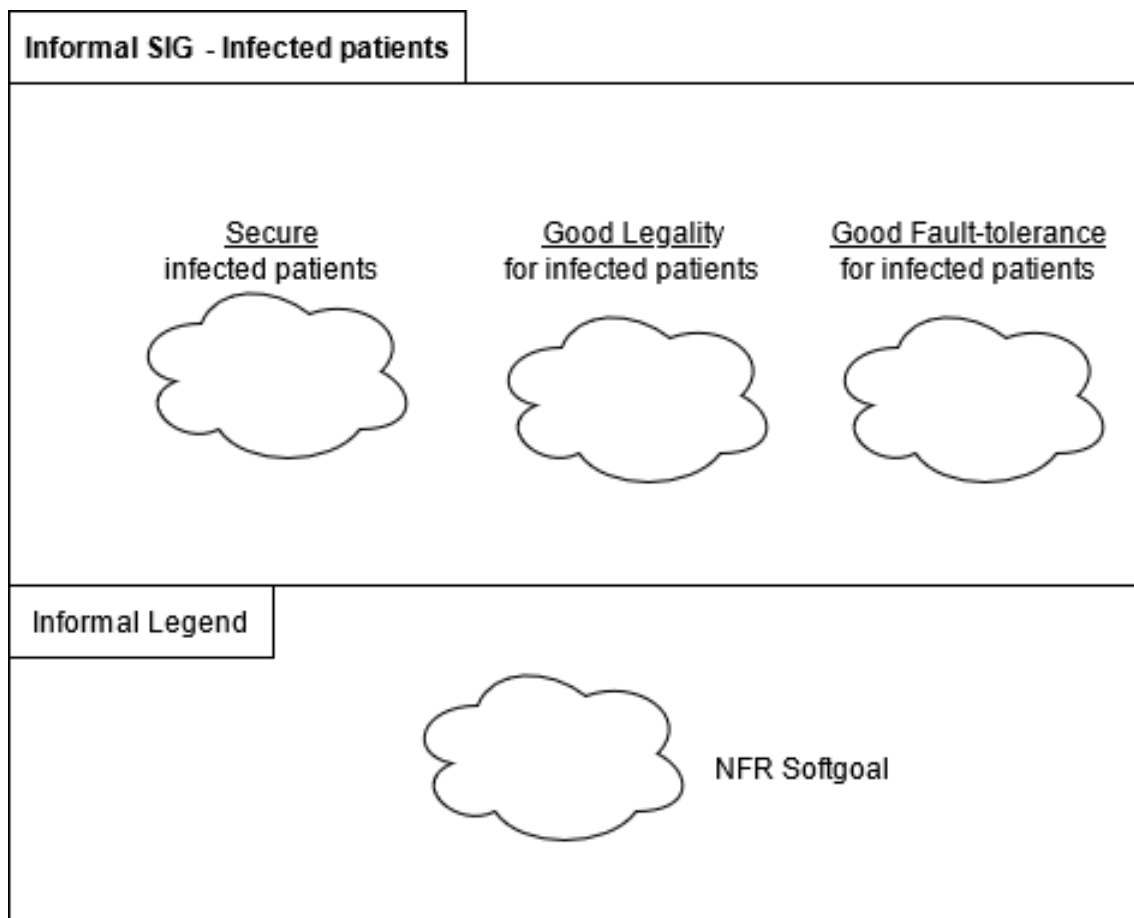


Informal Legend



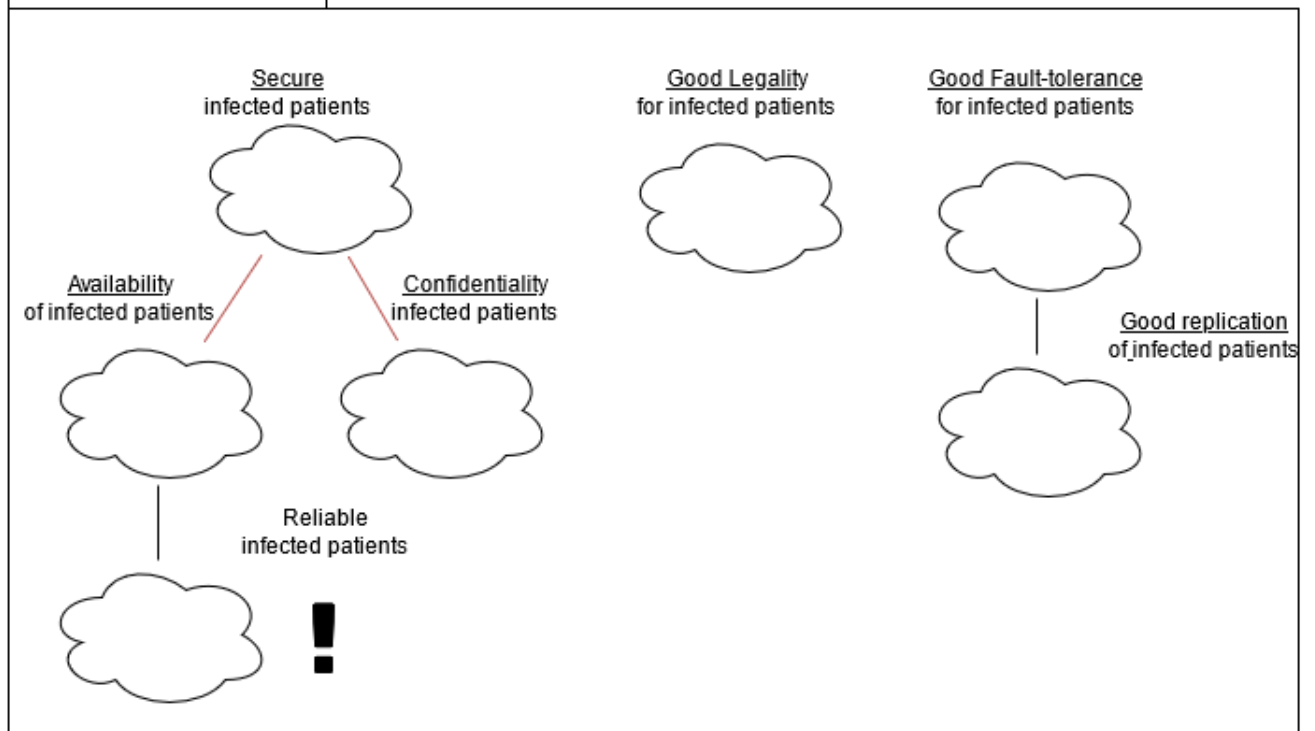
pav 4. NFR diagram

2.2. Infected patients



pav 5. NFR diagram

Informal SIG Infected Patients

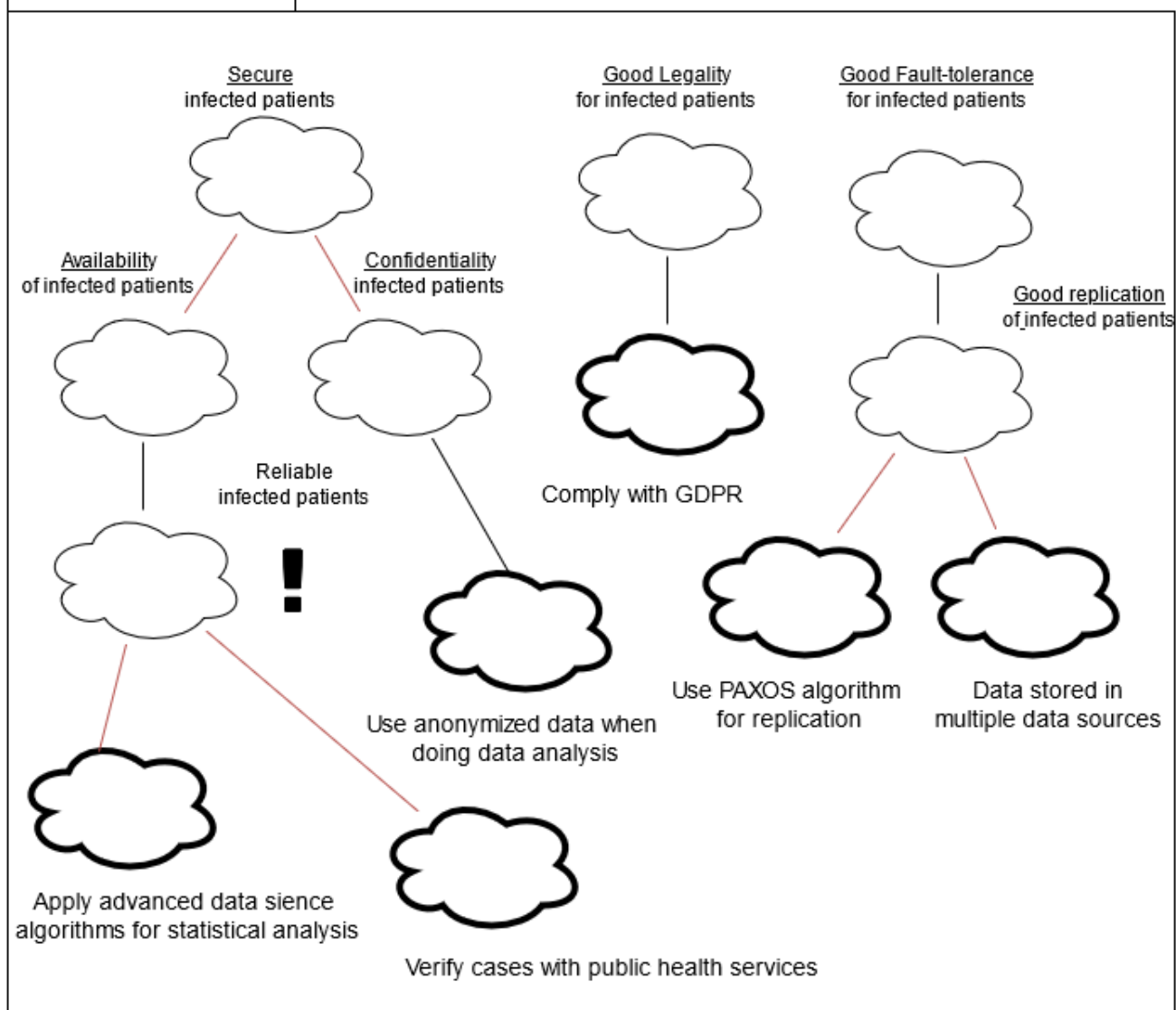


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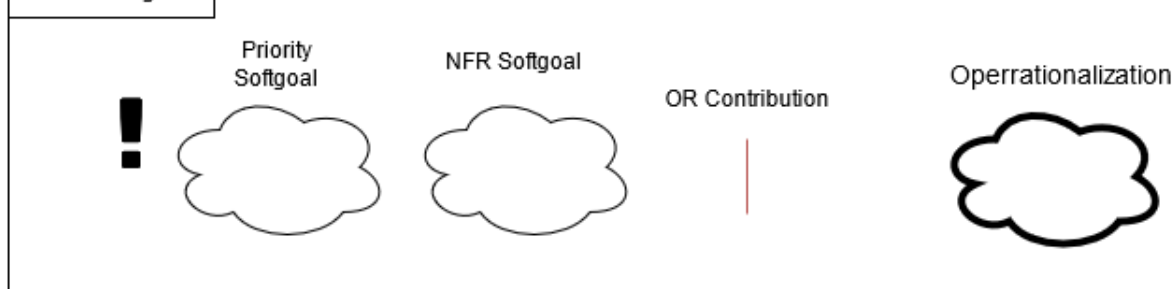


pav 6. NFR diagram

Informal SIG Infected Patients



Informal Legend



pav 7. NFR diagram

2.3. Dangerous countries

3. Identifying and modelling of possible operationalizations for NFR

4. Detecting and modelling of implicit interdependencies among NFR

5. Chosen operationalizations

6. Strategic rationale model

7. Conclusions about an actor dependency

Conclusions