Health Care Privacy Scenario

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Consider a health care scenario involving the privacy of patient's protected health information.

Hospitals are bound by law to keep their patient's electronic health records (EHR) private. Therefore, when a patient is admitted to a hospital, the physician treating the patient must not publish the patient's protected health information (PHI) online. However, the physician may share the patient's PHI with a colleague to get an expert opinion. Moreover, the physician may share the patient's PHI with the patient's family when there is an emergency.

Agents

PHYSICIAN, PATIENT, HOSPITAL

Propositions

 $true, emergency, patient_visit, access_ehr, publish_phi_online, share_phi_colleague, share_phi_family$

Deliverables

- Specify the natural language requirements for the scenario
- A requirements analyst has come up with the following norms for the scenario:

$$\begin{split} &\mathsf{P}(\mathsf{PHYSICIAN}, \mathsf{HOSPITAL}, true, publish_phi_online \ \mathsf{OR} \ share_phi_colleague) \\ &\mathsf{A}(\mathsf{PHYSICIAN}, \mathsf{HOSPITAL}, true, share_phi_family) \end{split}$$

Your task is to come up with a refinement of this design using the above agents and propositions, so as to satisfy the requirements for the scenario.