# Risk Based Testing Approach

**Types of tests:**

* **Patient Safety:** Errors that could lead to incorrect diagnoses or treatments.
* **Data Integrity:** Risks of data being lost, corrupted, or misinterpreted.
* **Usability:** Issues that might prevent healthcare providers from effectively using the system.
* **Compliance:** Ensuring the system adheres to relevant medical and data protection regulations.
* **Performance:** Ensuring the system performs well under expected load conditions.

We will primarily consider Patient Safety Tests

## Risk Evaluation

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Nr.** | **Risk** | **Consequence** | **Severity** | **Likelihood** |
| 1 | Patient fills out form incorrectly | Wrong disease diagnosed and wrong treatment is applied | ? |  |
| 2 | Patient fills out form correctly, but Decision Logic is bugged | Wrong disease diagnosed and wrong treatment is applied |  |  |
| 3 | Patient fills out form correctly, but Decision Logic works, but doesn’t lead to right disease. | Wrong disease diagnosed and wrong treatment is applied |  |  |
| 4. | Patient fills out form correctly, but Decision Logic works, but Disease is not recognized | Disease is not treated | ? |  |

## Testcases

### L2

Test All “routes to L3

### L3 Testcases

TC 3.1:

* Has the patient had a known exposure to an STI that causes genital ulcers in the last 90 days?" YES
* -> what disease is it? -> question has to be implemented

TC3.2:

* Has the patient had a known exposure to an STI that causes genital ulcers in the last 90 days?" No
* "Is the ulcer painful" Yes
* Is the appearance consistent with Herpes simplex virus (HSV)?" YES
* -> **Recommended Treatment Options for Herpes**
* What if there are no ulcers

TC3.3:

* Has the patient had a known exposure to an STI that causes genital ulcers in the last 90 days?" No
* "Is the ulcer painful" Yes
* Is the appearance consistent with Herpes simplex virus (HSV)?" NO
* **("Consider alternative diagnosis (e.g., syphilis, chancroid). Administer empiric treatment if risk factors are present**

TC3.4:

* Has the patient had a known exposure to an STI that causes genital ulcers in the last 90 days?" No
* "Is the ulcer painful" Yes
* Is the appearance consistent with Herpes simplex virus (HSV)?" Yes
* **("Recommended Treatment Options for Herpes**

* **TC3.5**
* Has the patient had a known exposure to an STI that causes genital ulcers in the last 90 days?" No
* "Is the ulcer painful" No
* Is rapid syphilis testing available?" Yes
* Is testing positive for syphilis?" Yes
* **Initiate treatment for syphilis based on current guidelines**

TC3.6

* Has the patient had a known exposure to an STI that causes genital ulcers in the last 90 days?" No
* "Is the ulcer painful" No
* Is rapid syphilis testing available?" Yes
* Is testing positive for syphilis?" No
* Has patient or sexual partner lived or traveled to an LGV-endemic area OR does patient have painful lymphadenopathy present?"Yes
* **Testing for LGV is recommended. Administer empiric treatment while awaiting results.**

**TC3.7**

* Has the patient had a known exposure to an STI that causes genital ulcers in the last 90 days?" No
* "Is the ulcer painful" No
* Is rapid syphilis testing available?" Yes
* Is testing positive for syphilis?" No
* Has patient or sexual partner lived or traveled to an LGV-endemic area OR does patient have painful lymphadenopathy present?"No
* **If the initial tests are negative and/or there is no response to therapy, further evaluation is needed, Including Evaluation for Non-STI Causes**

**TC3.8**

* Has the patient had a known exposure to an STI that causes genital ulcers in the last 90 days?" No
* "Is the ulcer painful" No
* Is rapid syphilis testing available?" No
* ("Is the patient at high risk for syphilis Yes
* **("Treat empirically for syphilis while awaiting further result**
* But syphilis testing is not available

**TC3.9**

* Has the patient had a known exposure to an STI that causes genital ulcers in the last 90 days?" No
* "Is the ulcer painful" No
* Is rapid syphilis testing available?" No
* ("Is the patient at high risk for syphilis No
* **"If the initial tests are negative, further evaluation is needed, Including Evaluation for Non-STI Causes**