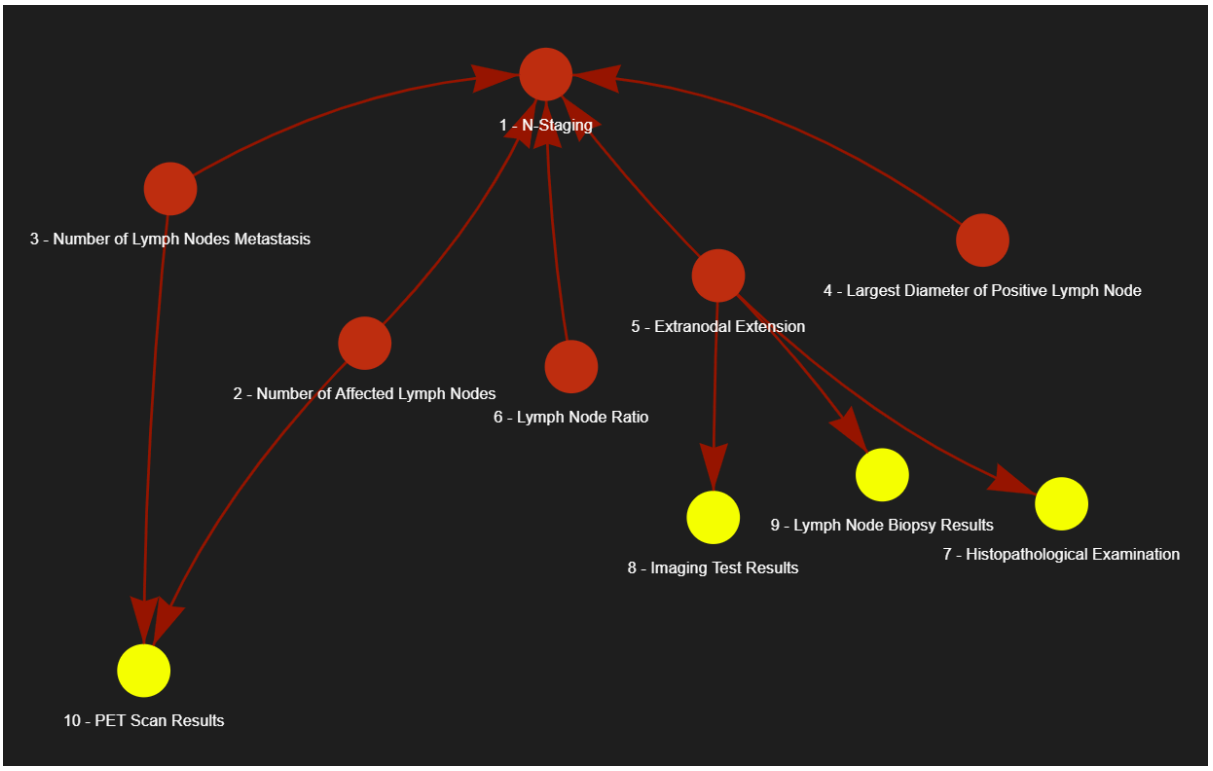
N-Stage-Marcus

Inputs to this were only the node identifiers and their states and the edges. CPTs also however are just placeholders with uniform distribution.



Nodes Informations (extracted using the tool):

1. **Id:** N_Staging_1
   States: ['present', 'absent']
   Type: Decision Node
   Observability: Needs to be Predicted
   Label: Nearby Lymph Nodes Cancer Staging
   Description: This node represents the staging of cancer in nearby lymph nodes, which is a critical factor in determining the extent of cancer spread and guiding treatment decisions. The staging helps in assessing the prognosis and planning the appropriate therapeutic approach.
   Node States:

State Name	State Description
present	Cancer is present in the nearby lymph nodes, indicating that the cancer has spread beyond the primary site. This is an important factor in staging and affects treatment decisions and prognosis.
absent	Cancer is absent in the nearby lymph nodes, suggesting that the cancer has not spread to these nodes. This is a favorable sign and influences the staging and treatment plan.

Entities Information:

Ontology Name	Label	Description
MeSH	Lymph Nodes	Small, bean-shaped organs located throughout the lymphatic system that filter lymph and store white blood cells.
MeSH	Neoplasm Staging	Methods which attempt to express in replicable terms the extent of the neoplasm in the patient.
SNOMED-CT	Lymph node structure	Anatomical structure that is part of the lymphatic system, involved in the filtration of lymph and immune response.
SNOMED-CT	Cancer staging	The process of determining the extent and spread of cancer within the

		body.
Wikidata	Lymph node	An organ of the lymphatic system and the adaptive immune system that is widely present throughout the body.
Wikidata	Cancer staging	The process of determining the size and spread of cancer within the body.

2. **Id:** Number_of_Affected_Lymph_Nodes_2
States: ['present', 'absent']
Type: Patient Situation
Observability: Unobserved
Label: Number of Affected Lymph Nodes
Description: This node represents the clinical assessment of whether there are affected lymph nodes in the patient, which is crucial for staging cancer and determining the extent of metastasis.
Node States:

State Name	State Description
present	There are affected lymph nodes, indicating potential metastasis and a more advanced stage of cancer.
absent	There are no affected lymph nodes, suggesting no metastasis to the lymphatic system and potentially an earlier stage of cancer.

Entities Information:

Ontology Name	Label	Description
MeSH	Lymph Nodes	Small, bean-shaped organs located throughout the lymphatic system that filter lymph and store white blood cells.
SNOMED-CT	Lymph node structure	Anatomical structure that is part of the lymphatic system, involved in the filtration of lymph and immune response.
Wikidata	Lymph node	An organ of the lymphatic system and the adaptive immune system that is widely present throughout the body.

3. **Id:** Number_of_Lymph_Nodes_Metastasis_3
States: ['present', 'absent']
Type: Patient Situation
Observability: Unobserved
Label: Assessment of Lymph Node Metastasis
Description: This node represents the assessment of whether metastasis is present in the lymph nodes. It is crucial for staging cancer and determining the extent of its spread, which impacts treatment decisions and prognosis.
Node States:

State Name	State Description
present	Metastasis is present in the lymph nodes, indicating that cancer has spread to these nodes.
absent	Metastasis is absent in the lymph nodes, indicating that cancer has not spread to these nodes.

Entities Information:

Ontology Name	Label	Description
MeSH	Lymph Nodes	Small, bean-shaped organs located throughout the lymphatic system that filter lymph and store white blood cells.
MeSH	Neoplasm Metastasis	The transfer of a neoplasm from one organ or part of the body to another remote from the primary site.
SNOMED-CT	Lymph node structure	Anatomical structure that is part of the lymphatic system, involved in the filtration of lymph and immune response.

SNOMED-CT	Metastasis	The spread of a disease from one organ or part to another non-adjacent organ or part.
Wikidata	Lymph node	An organ of the lymphatic system and the adaptive immune system that is widely present throughout the body.
Wikidata	Metastasis	The spread of a cancer or other disease from one organ or part to another not directly connected with it.

4. **Id:** Largest_Diameter_of_Positive_Lymph_Node_4
States: ['present', 'absent']
Type: Patient Situation
Observability: Unobserved
Label: Largest Diameter of Positive Lymph Node
Description: This node represents the measurement of the largest diameter of a positive lymph node, specifically the fourth one in a clinical context. The size of lymph nodes is crucial in assessing the extent of cancer spread and is used in staging and prognosis.
Node States:

State Name	State Description
present	The largest diameter of the positive lymph node is measurable, indicating potential lymph node involvement in cancer.
absent	There is no measurable largest diameter for the positive lymph node, suggesting no significant lymph node involvement or the absence of detectable cancer spread in the lymph nodes.

Entities Information:

Ontology Name	Label	Description
MeSH	Lymph Nodes	Small, bean-shaped organs located throughout the lymphatic system that filter lymph and store white blood cells.
SNOMED-CT	Lymph node structure	Anatomical structure that is part of the lymphatic system, involved in the filtration of lymph and immune response.
Wikidata	Lymph node	An organ of the lymphatic system and the adaptive immune system that is widely present throughout the body.

5. **Id:**Extranodal_Extension_5
States: ['present', 'absent']
Type: Patient Situation
Observability: Unobserved
Label: Extranodal Extension
Description: Extranodal extension refers to the spread of cancer beyond the lymph node capsule into surrounding tissues. It is a significant factor in cancer staging and prognosis, as it indicates a more advanced disease and may influence treatment decisions.
Node States:

State Name	State Description
present	Extranodal extension is present, indicating that cancer has spread beyond the lymph node into surrounding tissues.
absent	Extranodal extension is absent, indicating that cancer is contained within the lymph node and has not spread to surrounding tissues.

Entities Information:

Ontology Name	Label	Description
MeSH	Lymphatic Metastasis	The transfer of a neoplasm from one organ or part of the body to another remote from the primary site, involving lymph nodes.

SNOMED-CT	Extranodal extension of tumor	The extension of a tumor beyond the capsule of a lymph node into surrounding tissues.
Wikidata	Extranodal extension	The spread of cancer from a lymph node to the surrounding tissues.

6. **Id:**Lymph_Node_Ratio_6
States: ['present', 'absent']
Type: Patient Situation
Observability: Unobserved
Label: Lymph Node Ratio Category
Description: This node represents a specific category or threshold of the ratio of affected lymph nodes in a patient, which is used to assess the extent of lymphatic involvement in a disease process.
Node States:

State Name	State Description
present	The 'present' state indicates that the lymph node ratio falls within category 6, suggesting a significant level of lymphatic involvement.
absent	The 'absent' state indicates that the lymph node ratio does not fall within category 6, suggesting a lower level of lymphatic involvement.

Entities Information:

Ontology Name	Label	Description
MeSH	Lymph Nodes	Small, bean-shaped organs located throughout the lymphatic system that filter lymph and store white blood cells.
MeSH	Ratio	The relation between two quantities expressed as the quotient of one divided by the other.
SNOMED-CT	Lymph node structure	Anatomical structure that is part of the lymphatic system, involved in the filtration of lymph and immune response.
SNOMED-CT	Ratio	A relationship between two numbers indicating how many times the first number contains the second.
Wikidata	Lymph node	An organ of the lymphatic system and the adaptive immune system that is widely present throughout the body.
Wikidata	Ratio	A relationship between two numbers indicating how many times the first number contains the second.

7. **Id:** Histopathological_Examination_7
Type: Examination Result
Observability: Observed
States: ['present', 'absent']
Label: Histology Pathology Examination
Description: This node represents the result of a histopathological examination, which is a diagnostic procedure where tissue samples are examined under a microscope to look for disease, such as cancer. It is crucial for diagnosing and understanding the nature of various diseases, particularly cancers.
Node States:

State Name	State Description
present	The 'present' state indicates that the histopathological examination has found evidence of disease or abnormality in the tissue sample.
absent	The 'absent' state indicates that the histopathological examination has not found any evidence of disease or abnormality in the tissue sample.

Entities Information:

Ontology Name	Label	Description

MeSH	Histology	The study of the structure of various tissues of organisms on a microscopic level.
MeSH	Pathology	Pathology is the study of the causes and effects of disease or injury.
SNOMED-CT	Histology	The study of the microscopic structure of tissues.
SNOMED-CT	Pathology	Pathology is the medical specialty concerned with the study of the nature and causes of diseases.
Wikidata	Histology	The study of the microscopic anatomy of cells and tissues of plants and animals.
Wikidata	Pathology	Pathology is the study of the causes and effects of disease or injury.

8. **Id:** Imaging_Test_Results_8
Type: Examination Result
Observability: Observed
States: ['present', 'absent']
Label: Diagnostic Imaging Test Results
Description: This node represents the results of a diagnostic imaging test, which is used to observe and assess specific clinical findings. The test results can indicate whether certain findings are present or absent, providing crucial information for diagnosis and treatment planning.
Node States:

State Name	State Description
present	The imaging test has detected the presence of specific findings or abnormalities.
absent	The imaging test has not detected any specific findings or abnormalities.

Entities Information:

Ontology Name	Label	Description
MeSH	Diagnostic Imaging	The production of diagnostic images, including radiography, ultrasonography, and other imaging techniques.
MeSH	Test Results	The outcomes or findings from medical tests, including laboratory tests and imaging tests.
SNOMED-CT	Diagnostic imaging procedure	A procedure that uses imaging technology to diagnose a disease or condition.
SNOMED-CT	Test result	The outcome of a medical test, which may include laboratory, imaging, or other diagnostic tests.
Wikidata	Medical imaging	The technique and process of creating visual representations of the interior of a body for clinical analysis and medical intervention.
Wikidata	Medical test	A medical procedure performed to detect, diagnose, or monitor diseases, disease processes, susceptibility, or to determine a course of treatment.

9. **Id:** Lymph_Node_Biopsy_Results_9
Type: Examination Result
Observability: Observed
States: ['present', 'absent']
Label: Lymph Node Biopsy Examination Results
Description: This node represents the results of a biopsy performed on a lymph node to determine the presence or absence of pathological findings, such as cancer cells. It is a critical diagnostic examination used to assess the spread of cancer to the lymphatic system.
Node States:

State Name	State Description

present	The 'present' state indicates that the biopsy results show the presence of pathological findings, such as cancer cells, in the lymph node.
absent	The 'absent' state indicates that the biopsy results do not show any pathological findings in the lymph node, suggesting no presence of cancer cells.

Entities Information:

Ontology Name	Label	Description
MeSH	Lymph Nodes	Small, bean-shaped organs located throughout the lymphatic system that filter lymph and store white blood cells.
MeSH	Biopsy	The removal and examination of tissue, cells, or fluids from the living body.
SNOMED-CT	Lymph node structure	Anatomical structure that is part of the lymphatic system, involved in the filtration of lymph and immune response.
SNOMED-CT	Biopsy procedure	A procedure involving the removal of tissue for examination.
Wikidata	Lymph node	An organ of the lymphatic system and the adaptive immune system that is widely present throughout the body.
Wikidata	Biopsy	A medical test involving the extraction of sample cells or tissues for examination to determine the presence or extent of a disease.

10. **Id:** PET_Scan_Results_10
Type: Examination Result
Observability: Observed
States: ['extracapsular_spread_of_lymph_nodes', 'unilateral_lymph_node_involvement', 'bilateral_lymph_node_involvement', 'absence_of_lymph_node_involvement', 'enlarged_lymph_node_size', 'present', 'absent']
Label: Positron Emission Tomography Scan Results
Description: This node represents the results of a PET scan, which is an imaging test used to observe metabolic processes in the body. The results are crucial for assessing the involvement of lymph nodes, which is important in cancer diagnosis, staging, and treatment planning. The PET scan can reveal whether there is extracapsular spread, unilateral or bilateral lymph node involvement, or absence of lymph node involvement, as well as the size of lymph nodes.
Node States:

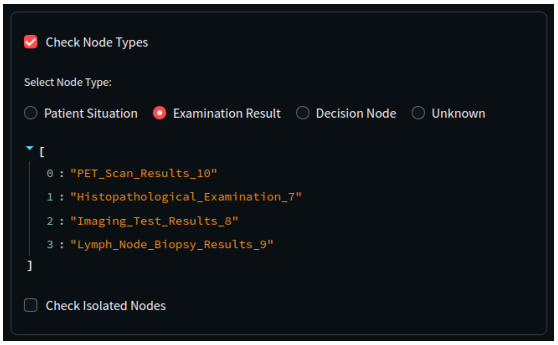
State Name	State Description
extracapsular_spread_of_lymph_nodes	This state indicates that the cancer has spread beyond the capsule of the lymph nodes, which can be a sign of more advanced disease.
unilateral_lymph_node_involvement	This state indicates that cancer involvement is present in the lymph nodes on one side of the body.
bilateral_lymph_node_involvement	This state indicates that cancer involvement is present in the lymph nodes on both sides of the body.
absence_of_lymph_node_involvement	This state indicates that there is no detectable cancer involvement in the lymph nodes.
enlarged_lymph_node_size	This state indicates that the lymph nodes are enlarged, which can be a sign of cancer or other pathological processes.
present	This state indicates the presence of a finding or condition as detected by the PET scan.
absent	This state indicates the absence of a finding or condition as detected by the PET scan.

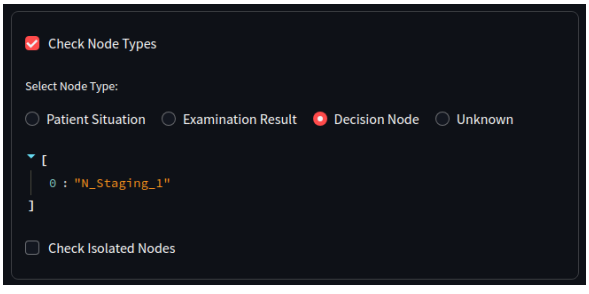
Entities Information:

Ontology Name	Label	Description
MeSH	Positron-Emission Tomography	An imaging technique that uses radioactive substances to visualize and measure changes in metabolic processes.
MeSH	Lymphatic Metastasis	The transfer of a neoplasm from one organ or part of the body to another remote from the primary site, involving lymph nodes.
MeSH	Lymph Nodes	Small, bean-shaped organs located throughout the lymphatic system that filter lymph and store white blood cells.
SNOMED-CT	Positron emission tomography	A nuclear medicine functional imaging technique used to observe metabolic processes in the body.
SNOMED-CT	Lymph node metastasis	The spread of cancer cells to lymph nodes.
SNOMED-CT	Lymph node structure	Anatomical structure that is part of the lymphatic system, involved in the filtration of lymph and immune response.
Wikidata	Positron emission tomography	A type of nuclear medicine procedure that measures metabolic activity of the cells of body tissues.
Wikidata	Lymphatic metastasis	Spread of cancer cells through the lymphatic system to distant sites.
Wikidata	Lymph node	An organ of the lymphatic system and the adaptive immune system that is widely present throughout the body.

All edges are Schema Valid Edges

Node Types:





No Multiple Paths