Synthesized Hackathon Data

**Note Types for Breast Cancer Patients**

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| **Note Name** | **Note Description** |
| Consultation | Initial meeting between the patient and their healthcare provider.   The patient discusses their medical history, symptoms, and any concerns they may have related to breast health. The healthcare provider conducts a physical examination, possibly orders further tests or imaging studies (i.e., **see imaging and pathology notes below)**, and discusses potential next steps, including referrals to other specialists if necessary. |
| Imaging Report | Provide detailed interpretations of imaging studies. Used to assess the size and location of tumors, detect metastases to nearby lymph nodes or distant organs, and monitor treatment response over time. |
| Pathology | Detailed information about the analysis of tissue samples (biopsies) from breast tumor or lymph nodes. Used to determine the type of breast cancer, grade, hormone receptor status (ER, PR), HER2 status, and other important characteristics. These determine prognosis and guiding treatment decisions, such as whether chemotherapy, hormone therapy, or targeted therapy is appropriate. |
| Oncology or Medical Oncology  Consult Note | Generated when a patient is referred to an oncologist for evaluation. Summarizes the oncologist's assessment of the patient's condition, including the stage of the cancer, results of diagnostic tests (i.e., **see imaging and pathology notes**), and recommended treatment plan (i.e., **see operative report below**) based on patient's preferences and goals for care. A medical oncologist specializes in chemotherapy care and the oncologist refers patient to one if this care is recommended. |
| Operative Report | Details of surgical procedures performed on breast cancer patients, such as lumpectomy, mastectomy, or lymph node dissection. Include surgical intervention documentation and communication among members of the healthcare team. |
| Oncology Progress Note | Document the patient's ongoing care and treatment progress during follow-up visits with their oncologist. Typically include updates on treatment response, any side effects experienced, adjustments to treatment plans, and discussions about supportive care and symptom management. |
| Discharge Summary | Generated when a breast cancer patient is discharged from the hospital following surgery, chemotherapy, or other treatments. Summarizes the patient's hospital stay, including the reason for admission, procedures performed, medications prescribed, follow-up care instructions, and any recommendations for ongoing management. |

**Note**: One sample exists for two patients (i.e., Patient A and Patient B).

**Structured Data Elements**

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| **Table Name** | **Columns** | **Description** |
| biomarker | patient\_id, Er, pr, Her2 | Biomarkers are commonly used in breast cancer diagnosis, prognosis, and treatment planning. |
| comorbidities | patient\_id, comorbidity\_description | Pre-existing medical conditions or comorbidities that the breast cancer patient may have. E.g., hypertension |
| encounter | patient\_id, encounter\_id, location, provider\_type, activity\_description | Encounter the patient has related to their breast cancer diagnosis and treatment |
| imaging | patient\_id, image\_id, modality, body\_region, result, lymph\_node | Results of imaging studies performed to evaluate the breast cancer |
| metastasis | patient\_id, metastasis\_id, site | Documents any evidence of metastasis, or spread of the breast cancer to distant sites in the body. |
| patient\_detail | patient\_id, sex, systemic\_initial\_indication, became\_palliative, active | Demographic and clinical information about the breast cancer patient, e.g., sex |
| surgery | patient\_id, procedure\_type, side | Surgical procedures performed as part of the breast cancer treatment.  e.g., mastectomy |
| tumour\_location | patient\_id, site, side | Location of the breast tumor within the breast tissue, such as left/right, and breast/liver/ect. |
| tumour\_size | patient\_id,  size\_on\_clinical\_exam, size\_uom | Size of the breast tumor, typically measured in centimeters or millimeters |
| tumour\_type | patient\_id, tumour\_type | Categorizes the breast tumor based on its histological type. E.g., ductal carcinoma in situ (DCIS) |

**Note**: The following tables are not provided:

* To restrict scope: esas, radiation, systemic\_detail, systemic\_regimen
* Other: auxillary\_nodes, complications, pathologic\_complete\_response, sentinel\_nodes