[研究議題：Assessing the Relationship Between the Variability of Diagnostic Measures and the Risk of Diabetic Complications]

**研究目的**: 各項檢測項目變異程度(穩定性)對應糖尿病患者的各項併發症關係

參考論文: Predictions of diabetes complications and mortality using hba1c variability: a 10‑year observational cohort study

**資料區間** : 2008-2019

**目標病患** : 糖尿病併發症患者(一年內 2次門診 或 1 次住院)

Index Date定義: 發病日

ICD CODE:

ICD9: 250.00, 250.01, 250.02, 250.03, 250.10, 250.11, 250.12, 250.13, 250.20, 250.21, 250.22, 250.23, 250.30, 250.31, 250.32, 250.33, 250.40, 250.41, 250.42, 250.43, 250.50, 250.51, 250.52, 250.53, 250.60, 250.61, 250.62, 250.63, 250.70, 250.71, 250.72, 250.73, 250.80, 250.81, 250.82, 250.83, 250.90, 250.91, 250.92, 250.93, 251.8, 357.2, 362.01, 362.02, 366.41, 583.81

ICD10: E08, E09, E10, E11, E12

Outcom: 糖尿病引起的相關併發症:

|  |  |  |
| --- | --- | --- |
| 糖尿病相關併發症 | ICD CODE | 操作定義 |
| Eye complications  EyeComp | ICD9: 362.01、362.02、362.55、362.11、365.44、369、361、369.60  ICD10: H33.001, H33.002, H33.003, H33.009, H33.011, H33.012, H33.013  H33.019, H33.021, H33.022, H33.023  H33.029, H33.031, H33.032, H33.033, H33.039, H33.041, H33.042, H33.043, H33.049, H33.051, H33.052, H33.053, H33.059, H33.8, H33.101, H33.102, H33.103, H33.109, H33.191, H33.192, H33.193, H33.199, H33.111, H33.112, H33.113, H33.119, H33.20, H33.21, H33.22, H33.23, H33.301, H33.302, H33.303, H33.309, H33.321, H33.322, H33.323, H33.329, H33.311, H33.312, H33.313, H33.319, H33.331, H33.332, H33.333, H33.339, H33.40, H33.41, H33.42, H33.43, E11.311, E11.319, E11.321, E11.329, E11.331, E11.339, E11.341, E11.349, E11.351, E11.359, H35.031, H35.032, H35.033, H35.039, H35.381, H35.382, H35.383, H35.389, H42, H54.0, H54.10, H54.11, H54.12, H54.2, H54.3, H54.8, H54.40, H54.41, H54.42, H54.50, H54.51, H54.52, H54.60, H54.61, H54.62, H54.7 | 一年內 2次門診 或 1 次住院。 |
| Cardiovascular disease  CardioDisease | ICD9: 414.9、413.9、411.1、412、428、425、402  ICD10: I11.9, I11.0, I20.0, I25.2, I20.8, I20.9, I25.9, I42.3, I42.1, I42.8, I42.4, I42.0, I42.2, I42.5, I42.9, I42.6, I43, I42.7, I50.20, I50.21, I50.22, I50.23, I50.30, I50.31, I50.32, I50.33, I50.40, I50.41, I50.42, I50.43, I50.9, I50.1 |
| Cerebrovascular disease  CerebroDisease | ICD9: 435.9、434.91、432.9、437.1  ICD10:  I62.9, I63.50, I63.511, I63.512, I63.519, I63.521, I63.522, I63.529, I63.531, I63.532, I63.539, I63.541, I63.542, I63.549, I63.59, I63.8, I63.9, G45.9, I67.841, I67.848, I67.81, I67.82, I67.89 |
| Peripheral vascular disease  PeripheralVascDisease | ICD9: 440.2、440.20、440.21、440.22、440.23、440.24  ICD10: I70.201, I70.202, I70.203, I70.208, I70.209, I70.92, I70.211, I70.212, I70.213, I70.218, I70.219, I70.221, I70.222, I70.223, I70.228, I70.229, I70.231, I70.232, I70.233, I70.234, I70.235, I70.238, I70.239, I70.241, I70.242, I70.243, I70.244, I70.245, I70.248, I70.249, I70.25, I70.261, I70.262, I70.263, I70.268, I70.269, I70.291, I70.292, I70.293, I70.298, I70.299, I75.011, I75.012, I75.013, I75.019, I75.021, I75.022, I75.023, I75.029 |
| Nephropathy  Nephropathy | ICD9: 583、585、V451  ICD10:  N05.9, N05.2, N06.2, N07.2, N05.3, N05.4, N05.5, N06.3, N06.4, N06.5, N07.3, N07.4, N07.5, N17.1, N17.2, E10.21, E11.21, N16, N05.0, N05.1, N05.6, N05.7, N05.8, N06.0, N06.1, N06.6, N06.7, N06.8, N07.0, N07.1, N07.6, N07.7, N07.8, N14.0, N14.1, N14.2, N14.3, N14.4, N15.0, N15.8, N06.9, N07.9, N15.9, N18.4, N18.5, N18.6, N18.9, |
| Diabetic neuropathy  DiabeticNeuro | ICD9: 357.2、337.1、353  ICD10: G99.0, G54.0, G54.1, G54.2, G54.3, G54.4, G54.5, G54.6, G54.7, G54.8, G55, G54.9, E08.42, E09.42, E10.40, E10.42, E11.40, E11.42, E13.42 |

**Exclude (TODO)**

* 病歷號對應多組性別年齡
* 小於OR 大於 K歲患者
* 檢驗至少三次
* 追蹤至少一年
* **前一年是否有下列疾病:**

|  |  |  |  |
| --- | --- | --- | --- |
| 疾病名稱 | ICD9 CODE | ICD10 CODE | 操作定義 |
| Essential hypertension | 401 |  |  |
| Peripheral enthesopathies and allied syndromes | 726 |  |
| Other ill-defined and unknown causes of morbidity and mortality | 799 |  |
| Disorders of lipoid metabolism | 272 |  |
| Acute upper respiratory infections of multiple or unspecified sites | 465 |  |
| Other symptoms involving abdomen and pelvis | 724 |  |
| Other symptoms involving abdomen and pelvis | 789 |  |
| Dermatophytosis | 110 |  |
| General symptoms | 780 |  |
| Symptoms involving respiratory system and other chest symptoms | 786 |  |
| Symptoms involving head and neck | 784 |  |
| Contact dermatitis and other eczema | 692 |  |
| Viral infection in conditions classified elsewhere and of unspecified site | 79 |  |
| Overweight, obesity and other hyperalimentation | 278 |  |
| Other and unspecified disorders of joint | 719 |  |
| Acute bronchitis and bronchiolitis | 466 |  |
| Other disorders of soft tissues | 729 |  |
| Nonspecific findings on examination of blood | 790 |  |
| Disorders of refraction and accommodation | 367 |  |
| Disorders of conjunctiva | 372 |  |

**流程圖:**

