**Table 1.** Socio-demographic and health status variables included in VIP.net and VDR dataset and in the resulting linked dataset.

|  |  |
| --- | --- |
| **Variable** | **variables PRESENT** |
|  | ***VIP.net*** | ***VDR*** | ***Linked dataset*** |
| **Inclusion/ Exclusion criteria** |
| **National health Index number** | ✓ | ✓  | ✓ Used to link VIP with VDR records. |
| **Primary health organisation (PHO) enrolment** | ✗ All cases require PHO-enrolment. | ✓ Non-PHO enrolled included in study. | ✓ Non-PHO enrolled included in study. |
| **Socio-demographic characteristics** |
| **Geographical (Domicile) location** | ✓Suburb that a diabetic resides within. Self-reported, but cross-checked with NHI records (within CMDHB ophthalmology clinics).  | ✓DOM-Code recorded. | ✓DOM-Code was used. N.B. When suburbs in both databases did not match, but were either (1) located within the CMDHB region OR (2) had the VDR location as within the CMDHB region, then the ‘geographical location’ was classified as the locality noted in the VDR. If the suburb noted in the VIP.net database was within the CMDHB region, but outside the CMDHB region in the VDR, then locality was classified as “No match”. |
| **Age** | ✓15 years and over as at 31/12/15.  | ✓All cases were aged 15 years and over. Age was adjusted to a common index-date of 31/12/15  | 15 years and over  |
| **Gender** | ✓ (M/F) | ✓ (M/F/Unknown) | ✓ (M/F) |
| **Ethnicity** | ✓Self-identification of one ‘main’ ethnicity, plus additional ‘minor’ ethnicities. (15 categories for Pacific ethnicity including Fijian Indian). | ✓Ethnicity is based on records from health care services. Ministry Of Health (MOH) prioritized ethnicity - Level 2 coding for “Pacific peoples” used\*. NB. Fijian Indian not included  |  |
| **Level of deprivation** | ✗  | ✓ NZDep13 indicated through domicile code.The deprivation categories based on quintiles 1-5 i.e. Quantile 1 (least deprived), Quantile 5 (most deprived) |  ✗ |
| **Diabetes-related information** |
| **DM Diagnosis** | ✓Made by GP/other health professional | ✓Estimated by linking datasets (HbA1c, out-patient-referral, retinal screening, pharmacy dispensing) | ✓ |
| **Type of DM** | ✓T1D, T2D, Gestational DM, Other (e.g. steroid-induced DM) | ✗  | ✓ |  |
| **Duration with DM** | ✓Predicted duration (years) by health professional as at 31/12/15 based on age of diagnosis, severity at last examination and presence of risk factors.  | ✓First “diagnosis” date detected (i.e. first inpatient/ outpatient/ labs/ pharmacy date). Adjusted to the date 31st December 2015.  | ✓The maximum duration out of the two estimated in the VIP.net and VDR was selected.  |
| **Diabetic retinopathy related variables** |
| **Retinal Screening**  | ✓No specific ‘retinal screened’ variable in the VIP.net database. An assumption was made that if an individual was referred to CMDHB Ophthalmology clinics and attended the clinic, then retinal screening occurred. | ✓Counts of screens in the last two years examined. Based on DR screening purchase unit code [21] | ✓ |
| **DR GRADE** | ✓As per the Grading categories: R0=no DR, R1=minimal DR, R2=mild DR, R3=moderate DR, R4=severe DR, R5=proliferative DR and R6=advanced DR) [23]. In cases where the screening result differed between eyes, the higher grade of the two was used. | ✗  | ✗ |
| **Treatment for retinopathy** | ✓ | ✗  | ✗ |
| **Insulin** | ✓prescribed | ✓dispensed  | ✓prescribed and dispensed |
| **Oral diabetes medication** | ✓prescribed | ✓dispensed | ✓prescribed and dispensed |
| **Diet MANAGEMENT alone** | ✓ | ✗ | ✗ |
| **HbA1c level** | ✓VIP.net standard: Less than 6.9=good; 7.0-8.9=moderate; over 9.0=poor | ✗Number of HbA1c tests, not level | ✗ |
| **Co-morbidities** | ✓Binary categories (Yes/No) for the presence of Maculopathy, Hypertension, Dyslipidaemia, Cardiovascular disease, Cerebral, PVD, Nephropathy, Neuropathy. The presence of these is determined by the general practitioner. | ✗  | ✗ |

\*Source: Ministry of Health. 2004. *Ethnicity Data Protocols for the Health and Disability Sector* [Online]. Wellington: Ministry of Health. Available: <http://www.health.govt.nz/publication/ethnicity-data-protocols-health-and-disability-sector>.