**Supplementary Appendix**

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**Classification of diabetes type in the NDSS**

Registrants were classified as having type 1 diabetes if they were assigned type 1 diabetes by the registering healthcare practitioner, and met any one of the following criteria: 1) there was less than a year between diagnosis of diabetes and their first prescription for insulin, 2) when date of diagnosis is missing, there was evidence of insulin use at registration on the NDSS and the registrant was <45 years of age of registration, or 3) for those with an age of diagnosis <30 years (or if missing a diagnosis date, registration at age <45 years) who registered on the NDSS prior to 2002, and whose insulin initiation date on the NDSS was missing, there had to be evidence of ongoing treatment with insulin early in the years we had data from the PBS available (from 2002). Additionally, type 1 status was assigned to registrants whose original assignment was type 2, but were <30 years old at diabetes onset and showed evidence of insulin use within a year, a pattern more consistent with type 1 diabetes. An additional requirement for assigning type 1 was evidence of ongoing treatment with insulin (≥2 prescriptions for insulin on the PBS), except when time to census/death was <2 years. Individuals satisfying none of these criteria were classified as having type 2 diabetes. Additionally, because type 2 diabetes is rarely diagnosed in children under 10 years of age, registrants who were classified as having type 2 diabetes diagnosed at <10 years of age were excluded from all analyses to decrease the likelihood of including people with type 1 diabetes.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Age of onset of diabetes** | **Sex** | **Total number** | **Number with incident ESKD** | **Number of deaths without ESKD** | **Person-years of follow-up** | **Time from onset to ESKDc** | **Diabetes duration at end of follow-upc** |
| **Type 2**  **Overall** | **Total** | 1,113,201 | 7,592 | 192,005 | 7,839,075 | 12.1 (6.9-16.7) | 8.8 (4.2-14.5) |
| **Males** | 610,460 | 4,842 | 112,802 | 4,138,175 | 12.0 (6.8-16.6) | 8.2 (3.8-13.9) |
| **Females** | 502,741 | 2,750 | 79,203 | 3,700,900 | 12.3 (7.0-16.9) | 9.4 (4.5-15.2) |
| **10-29** | **Total** | 28,403 | 257 | 773 | 250,639 | 18.4 (13.6-25.0) | 14.0 (6.7-18.5) |
| **Males** | 8,755 | 142 | 416 | 65,423 | 19.5 (15.1-25.6) | 10.4 (4.8-17.4) |
| **Females** | 19,648 | 115 | 357 | 185,217 | 16.4 (12.4-23.9) | 15.2 (8.3-18.8) |
| **30-39** | **Total** | 85,506 | 736 | 3,316 | 709,135 | 16.3 (12.0-21.2) | 11.7 (5.5-17.2) |
| **Males** | 38,828 | 467 | 1,975 | 290,034 | 16.3 (12.0-21.3) | 9.7 (4.4-16.1) |
| **Females** | 46,678 | 269 | 1,341 | 419,101 | 16.3 (11.8-21.1) | 13.3 (6.7-17.7) |
| **40-49** | **Total** | 190,946 | 1,747 | 14,182 | 1,474,328 | 14.8 (10.2-18.5) | 10.2 (4.7-16.3) |
| **Males** | 113,412 | 1,099 | 9,275 | 857,581 | 14.7 (10.2-18.3) | 9.8 (4.5-16.1) |
| **Females** | 77,534 | 648 | 4,907 | 616,747 | 14.9 (10.4-18.9) | 10.7 (5.0-16.7) |
| **50-59** | **Total** | 316,177 | 2,336 | 38,107 | 2,317,578 | 12.8 (7.8-16.9) | 9.2 (4.4-15.0) |
| **Males** | 182,695 | 1,487 | 24,114 | 1,319,173 | 12.7 (7.6-16.9) | 9.0 (4.3-14.8) |
| **Females** | 133,482 | 849 | 13,993 | 998,405 | 13.1 (8.2-17.1) | 9.4 (4.5-15.3) |
| **60-69** | **Total** | 309,387 | 1,822 | 67,623 | 2,044,986 | 9.4 (5.4-13.2) | 8.1 (3.8-13.6) |
| **Males** | 172,887 | 1,172 | 40,274 | 1,101,058 | 9.6 (5.4-13.4) | 7.5 (3.6-13.0) |
| **Females** | 136,500 | 650 | 27,349 | 943,927 | 9.3 (5.5-13.1) | 8.8 (4.2-14.3) |
| **70-79** | **Total** | 182,782 | 694 | 68,004 | 1,042,408 | 4.8 (2.0-8.3) | 6.7 (3.3-10.9) |
| **Males** | 93,883 | 475 | 36,748 | 504,905 | 4.9 (2.0-8.3) | 6.1 (3.0-10.2) |
| **Females** | 88,899 | 219 | 31,256 | 537,503 | 4.6 (2.1-8.4) | 7.3 (3.7-11.6) |

**Table S1 – Participant number, incident treated ESKD, number of deaths in those without treated ESKD, time to ESKD, and diabetes duration at end of follow-up, by age of onset and sex in type 2 diabetes.**

a: Rates expressed per 1000 person years (95% confidence interval).

b: Expressed as Hazard Ratio (95% confidence interval)

c: Expressed as median, interquartile range.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **ESKD treated with RRT** | | **Death due to ESKD without RRT** |
| **Age of onset of diabetes** | **DN** | **Other** |  |
| **Total** | 5,471 (41%) | 2,121 (26%) | 5,671 (43%) |
| **10-29** | 216 (75%) | 41 (14%) | 30 (10%) |
| **30-39** | 620 (77%) | 116 (14%) | 66 (8%) |
| **40-49** | 1417 (68%) | 330 (16%) | 351 (17%) |
| **50-59** | 1751 (51%) | 585 (16%) | 1086 (32%) |
| **60-69** | 1138 (30%) | 684 (18%) | 2032 (53%) |
| **70-79** | 329 (12%) | 365 (13%) | 2106 (75%) |

Pearson chi-squared p<0.001

**Table S2 – Proportion of ESKD that is treated and untreated, and proportion of treated ESKD due to DN or other causes by age of onset of diabetes.** The abbreviation DN denotes diabetic nephropathy, and RRT renal replacement therapy.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Age of onset of diabetes** | **Sex** | **Duration of diabetes (years)** | | | | | | | |
| **0-4** | **5-9** | **10-14** | **15-19** | **20-24** | **25-29** | **30-34** | **35-39** |
| **10-29** | **Males** | 0.31 (0.14-0.69) | 0.53 (0.28-1.03) | 1.59 (1.03-2.46) | 5.06 (3.68-6.95) | 8.53 (5.96-12.20) | 11.71 (7.28-18.84) | 12.27 (7.13-21.14) | 6.58 (2.74-15.81) |
| **Females** | 0.11 (0.04-0.30) | 0.24 (0.14-0.42) | 0.57 (0.40-0.81) | 0.95 (0.66-1.38) | 2.13 (1.28-3.53) | 5.07 (2.73-9.43) | 5.51 (2.63-11.57) | 2.20 (0.55-8.78) |
| **30-39** | **Males** | 0.31 (0.22-0.45) | 0.69 (0.53-0.89) | 1.90 (1.58-2.29) | 4.04 (3.39-4.81) | 6.18 (4.97-7.68) | 7.08 (5.17-9.68) | 4.50 (2.61-7.74) | 5.86 (3.05-11.27) |
| **Females** | 0.16 (0.10-0.26) | 0.21 (0.14-0.30) | 0.69 (0.55-0.86) | 1.24 (0.98-1.57) | 3.55 (2.68-4.70) | 4.79 (3.12-7.35) | 2.15 (0.90-5.17) | 3.78 (1.57-9.07) |
| **40-49** | **Males** | 0.35 (0.29-0.43) | 0.72 (0.62-0.83) | 1.69 (1.51-1.89) | 3.41 (3.06-3.79) | 3.22 (2.69-3.85) | 3.97 (2.94-5.35) | 3.66 (2.24-5.97) | - |
| **Females** | 0.32 (0.25-0.41) | 0.54 (0.44-0.66) | 1.28 (1.11-1.49) | 2.62 (2.28-3.02) | 2.79 (2.23-3.49) | 3.52 (2.45-5.07) | 4.28 (2.58-7.09) | - |
| **50-59** | **Males** | 0.48 (0.42-0.55) | 0.77 (0.69-0.86) | 1.57 (1.43-1.73) | 3.05 (2.76-3.36) | 2.64 (2.19-3.17) | 2.85 (1.92-4.21) | - | - |
| **Females** | 0.36 (0.30-0.43) | 0.55 (0.47-0.64) | 1.31 (1.16-1.48) | 1.73 (1.50-2.00) | 2.30 (1.87-2.83) | 2.14 (1.36-3.35) | - | - |
| **60-69** | **Males** | 0.59 (0.52-0.66) | 1.08 (0.98-1.20) | 1.74 (1.57-1.93) | 1.93 (1.66-2.26) | 1.25 (0.82-1.90) | - | - | - |
| **Females** | 0.44 (0.37-0.51) | 0.72 (0.63-0.83) | 0.98 (0.85-1.13) | 1.06 (0.86-1.29) | 0.28 (0.12-0.62) | - | - | - |
| **70-79** | **Males** | 0.93 (0.82-1.06) | 1.00 (0.86-1.16) | 0.93 (0.72-1.19) | 0.64 (0.33-1.23) | - | - | - | - |
| **Females** | 0.46 (0.38-0.55) | 0.38 (0.30-0.48) | 0.38 (0.27-0.53) | 0.23 (0.10-0.56) | - | - | - | - |

**Table S3 – Incidence rate of treated ESKD in type 2 diabetes at different diabetes duration intervals; stratified by age of onset of diabetes and sex. Rates are per 1000 person-years (95% confidence interval).**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Age of onset of diabetes** | **Duration of diabetes (years)** | | | | | | | | |
| **0-4** | **5-9** | **10-14** | **15-19** | **20-24** | **25-29** | **30-34** | **35-39** |
| **10-29** | 2.79 (0.79-9.88) | 2.19 (0.94-5.12) | 2.81 (1.60-4.95) | 5.32 (3.27-8.67) | 4.01 (2.16-7.46) | 2.31 (1.06-5.04) | 2.23 (0.89-5.58) | 3.00 (0.58-15.44) |
| **30-39** | 1.98 (1.08-3.65) | 3.31 (2.08-5.28) | 2.77 (2.07-3.70) | 3.25 (2.43-4.36) | 1.74 (1.22-2.48) | 1.48 (0.87-2.51) | 2.09 (0.74-5.86) | 1.55 (0.52-4.63) |
| **40-49** | 1.10 (0.80-1.51) | 1.32 (1.03-1.70) | 1.32 (1.09-1.59) | 1.30 (1.09-1.55) | 1.15 (0.87-1.53) | 1.13 (0.70-1.80) | 0.85 (0.42-1.73) | - |
| **50-59** | 1.35 (1.08-1.68) | 1.40 (1.16-1.70) | 1.20 (1.03-1.39) | 1.76 (1.48-2.09) | 1.15 (0.87-1.51) | 1.33 (0.73-2.42) | - | - |
| **60-69** | 1.35 (1.10-1.64) | 1.50 (1.27-1.79) | 1.76 (1.48-2.10) | 1.83 (1.42-2.36) | 4.51 (1.83-11.12) | - | - | - |
| **70-79** | 2.03 (1.63-2.54) | 2.64 (1.99-3.51) | 2.45 (1.60-3.73) | 2.74 (0.92-8.17) | - | - | - | - |

**Table S4 – Treated ESKD Incidence rate ratios for males compared to females (reference) for each category of age of onset of diabetes by duration of diabetes interval. Data are presented as incidence rate ratio (95% confidence interval).**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Age of onset of diabetes** | **Duration of diabetes (years)** | | | | | | | |
| **0-4** | **5-9** | **10-14** | **15-19** | **20-24** | **25-29** | **30-34** | **35-39** |
| **10-29** | 0.53 (0.28-1.00) | 0.49 (0.32-0.75) | 0.50 (0.38-0.67) | 0.58 (0.45-0.75) | 1.40 (1.01-1.94) | 2.09 (1.34-3.25) | 2.18 (1.25-3.83) | - |
| **30-39** | 0.67 (0.48-0.94) | 0.61 (0.48-0.78) | 0.73 (0.62-0.87) | 0.73 (0.62-0.86) | 1.59 (1.27-1.98) | 1.61 (1.14-2.26) | 0.88 (0.49-1.57) | - |
| **40-49** | 1(ref) | 1(ref) | 1(ref) | 1(ref) | 1(ref) | 1(ref) | 1(ref) | - |
| **50-59** | 1.26 (1.04-1.52) | 1.05 (0.90-1.22) | 0.96 (0.86-1.08) | 0.80 (0.71-0.90) | 0.82 (0.67-0.99) | 0.66 (0.45-0.96) | - | - |
| **60-69** | 1.53 (1.27-1.83) | 1.42 (1.23-1.65) | 0.90 (0.80-1.02) | 0.48 (0.42-0.56) | 0.23 (0.16-0.35) | - | - | - |
| **70-79** | 2.06 (1.71-2.48) | 1.04 (0.88-1.24) | 0.41 (0.33-0.51) | 0.13 (0.08-0.22) | - | - | - | - |

**Table S5 – Treated ESKD Incidence rate ratios comparing categories of age of onset of diabetes for different diabetes duration intervals. Data are presented as incidence rate ratio (95% confidence interval).**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Age of onset of diabetes** | **Attained age (years)** | | | | | | | | | | | | |
| **30-34** | **35-39** | **40-44** | **45-49** | **50-54** | **55-59** | **60-64** | **65-69** | **70-74** | **75-79** | **80-84** | **85-89** |
| **10-29** |  |  | 6.54 (4.01-10.65) | 5.72 (3.92-8.35) | 10.66 (7.35-15.46) | 7.38 (4.90-11.14) | 2.16 (1.12-4.17) |  |  |  |  |  |
| **30-39** |  |  | 1.56 (0.97-2.53) | 2.44 (1.91-3.10) | 3.46 (2.88-4.15) | 2.78 (2.30-3.36) | 2.04 (1.59-2.62) | 1.50 (1.02-2.22) | 1.13 (0.63-2.01) |  |  |  |
| **40-49** |  |  | 1(ref) | 1(ref) | 1(ref) | 1(ref) | 1(ref) | 1(ref) | 1(ref) | 1(ref) |  |  |
| **50-59** |  |  |  |  | 0.51 (0.38-0.67) | 0.38 (0.33-0.44) | 0.27 (0.24-0.31) | 0.45 (0.39-0.52) | 0.66 (0.54-0.82) | 0.54 (0.39-0.75) |  |  |
| **60-69** |  |  |  |  |  |  | 0.17 (0.13-0.21) | 0.19 (0.17-0.23) | 0.29 (0.24-0.36) | 0.31 (0.23-0.43) |  |  |
| **70-79** |  |  |  |  |  |  |  |  | 0.21 (0.16-0.28) | 0.18 (0.13-0.25) |  |  |

**Table S6 – Treated ESKD Incidence rate ratios comparing categories of age of onset of diabetes for different attained age intervals. Data are presented as incidence rate ratio (95% confidence interval).**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Age of onset of diabetes** | **Sex** | **Duration of diabetes (years)** | | | | | | | |
| **0-4** | **5-9** | **10-14** | **15-19** | **20-24** | **25-29** | **30-34** | **35-39** |
| **10-29** | **Total** | 0.20 (0.11-0.36) | 0.33 (0.22-0.49) | 0.78 (0.59-1.02) | 1.87 (1.47-2.36) | 4.45 (3.34-5.92) | 9.93 (7.10-13.90) | 9.02 (5.88-13.83) | 4.79 (2.39-9.57) |
| **Males** | 0.31 (0.14-0.69) | 0.53 (0.28-1.03) | 1.67 (1.09-2.56) | 5.32 (3.90-7.26) | 9.10 (6.43-12.86) | 13.78 (8.89-21.35) | 13.22 (7.83-22.32) | 7.89 (3.55-17.57) |
| **Females** | 0.14 (0.06-0.33) | 0.26 (0.16-0.44) | 0.57 (0.40-0.81) | 0.98 (0.68-1.42) | 2.13 (1.28-3.53) | 7.10 (4.21-12.00) | 5.51 (2.63-12.00) | 2.20 (0.55-8.78) |
| **30-39** | **Total** | 0.23 (0.18-0.31) | 0.40 (0.32-0.49) | 1.17 (1.02-1.35) | 2.40 (2.09-2.74) | 5.13 (4.34-6.06) | 6.57 (5.15-8.38) | 4.60 (3.09-6.87) | 7.69 (5.07-11.68) |
| **Males** | 0.32 (0.22-0.46) | 0.70 (0.54-0.91) | 2.00 (1.67-2.40) | 4.33 (3.65-5.12) | 6.71 (5.45-8.27) | 7.26 (5.32-9.89) | 5.88 (3.65-9.46) | 8.47 (4.92-14.58) |
| **Females** | 0.16 (0.10-0.26) | 0.21 (0.14-0.30) | 0.73 (0.59-0.91) | 1.33 (1.06-1.67) | 3.62 (2.75-4.78) | 5.70 (3.85-8.44) | 3.01 (1.44-6.32) | 6.80 (3.54-13.00) |
| **40-49** | **Total** | 0.36 (0.31-0.42) | 0.69 (0.62-0.78) | 1.70 (1.56-1.85) | 3.56 (3.29-3.85) | 4.21 (3.74-4.74) | 5.71 (4.74-6.89) | 8.12 (6.35-10.37) | 8.64 (6.01-12.44) |
| **Males** | 0.38 (0.31-0.46) | 0.77 (0.67-0.89) | 1.90 (1.71-2.11) | 3.98 (3.61-4.39) | 4.16 (3.55-4.87) | 5.72 (4.46-7.33) | 8.23 (5.93-11.40) | 8.35 (5.12-13.63) |
| **Females** | 0.33 (0.26-0.43) | 0.59 (0.48-0.71) | 1.42 (1.24-1.64) | 3.00 (2.63-3.42) | 4.28 (3.57-5.13) | 5.71 (4.29-7.60) | 7.98 (5.51-11.56) | 9.03 (5.24-15.55) |
| **50-59** | **Total** | 0.48 (0.43-0.53) | 0.84 (0.77-0.91) | 1.94 (1.81-2.07) | 3.88 (3.64-4.14) | 5.47 (4.99-6.00) | 7.53 (6.35-8.92) | 6.23 (4.27-9.09) | 9.14 (4.57-18.27) |
| **Males** | 0.54 (0.48-0.61) | 0.96 (0.87-1.06) | 2.07 (1.90-2.25) | 4.52 (4.17-4.89) | 5.53 (4.87-6.28) | 8.09 (6.41-10.21) | 5.46 (3.02-9.86) | 12.35 (5.14-29.67) |
| **Females** | 0.39 (0.33-0.46) | 0.68 (0.59-0.78) | 1.76 (1.59-1.95) | 3.11 (2.80-3.46) | 5.41 (4.73-6.19) | 6.97 (5.44-8.94) | 6.90 (4.23-11.26) | 6.37 (2.06-19.76) |
| **60-69** | **Total** | 0.69 (0.63-0.75) | 1.50 (1.41-1.60) | 2.98 (2.81-3.15) | 5.06 (4.74-5.41) | 6.33 (5.59-7.17) | 9.40 (6.95-12.73) | 9.58 (3.59-25.52) | 73.17 (10.31-520.00) |
| **Males** | 0.78 (0.70-0.86) | 1.75 (1.61-1.90) | 3.43 (3.19-3.69) | 5.52 (5.04-6.04) | 6.64 (5.54-7.95) | 8.86 (5.51-14.25) | 15.52 (3.88-62.05) | - |
| **Females** | 0.58 (0.50-0.66) | 1.22 (1.10-1.35) | 2.50 (2.28-2.73) | 4.64 (4.21-5.11) | 6.09 (5.13-7.22) | 9.82 (6.63-14.53) | 6.93 (1.73-27.69) | 84.09 (11.85-600.00) |
| **70-79** | **Total** | 1.49 (1.39-1.60) | 2.67 (2.50-2.85) | 5.22 (4.87-5.59) | 7.93 (7.06-8.91) | 13.35 (9.94-17.94) | 9.77 (1.38-69.33) | - | - |
| **Males** | 1.77 (1.62-1.94) | 3.26 (3.00-3.55) | 6.02 (5.46-6.64) | 9.07 (7.63-10.79) | 18.44 (12.14-28.00) | 31.31 (4.41-222.30) | - | - |
| **Females** | 1.20 (1.07-1.34) | 2.14 (1.93-2.36) | 4.61 (4.18-5.08) | 7.18 (6.13-8.41) | 10.47 (6.89-15.89) | - | - | - |

**Table S7 – Incidence rate of treated and untreated ESKD at different diabetes duration intervals; stratified by age of onset of diabetes and sex. Rates are per 1000 person-years (95% confidence interval).**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Age of onset of diabetes** | **Duration of diabetes (years)** | | | | | | | | | | | | |
| **10** | | | **20** | | | **30** | | | **40** | | | |
| **Males** | **Females** | **Overall** | **Males** | **Females** | **Overall** | **Males** | **Females** | **Overall** | **Males** | **Females** | **Overall** |
| **10-29** | 0.42 (0.24-0.65) | 0.18 (0.10-0.28) | 0.25 (0.16-0.34) | 3.63 (2.82-4.52) | 0.98 (0.73-1.23) | 1.58 (1.33-1.86) | 12.51 (10.01-15.43) | 5.61 (3.82-7.62) | 8.13 (6.41-9.67) | 19.13 (15.74-22.94) | 8.88 (6.21-12.10) | 13.43 (10.85-15.66) |
| **30-39** | 0.50 (0.40-0.62) | 0.18 (0.13-0.23) | 0.31 (0.25-0.37) | 3.51 (3.10-3.93) | 1.27 (1.06-1.47) | 2.09 (1.90-2.29) | 9.13 (7.97-10.27) | 5.52 (4.43-6.73) | 7.14 (6.33-7.98) | 12.97 (11.27-14.62) | 8.97 (6.81-11.31) | 10.92 (9.63-12.25) |
| **40-49** | 0.56 (0.50-0.62) | 0.45 (0.38-0.53) | 0.52 (0.47-0.57) | 3.20 (3.00-3.41) | 2.56 (2.32-2.78) | 2.93 (2.78-3.08) | 6.59 (6.07-7.10) | 6.32 (5.68-7.08) | 6.47 (6.09-6.89) | - | - | - |
| **50-59** | 0.72 (0.66-0.78) | 0.52 (0.47-0.58) | 0.64 (0.60-0.68) | 3.35 (3.18-3.53) | 2.63 (2.47-2.82) | 3.05 (2.94-3.18) | 6.59 (6.14-7.16) | 6.41 (5.79-7.03) | 6.51 (6.12-6.89) | - | - | - |
| **60-69** | 1.14 (1.06-1.21) | 0.84 (0.77-0.90) | 1.01 (0.96-1.05) | 3.72 (3.55-3.88) | 3.30 (3.13-3.50) | 3.53 (3.40-3.64) | - | - | - | - | - | - |
| **70-79** | 1.92 (1.80-2.05) | 1.40 (1.28-1.50) | 1.67 (1.58-1.74) | 3.85 (3.62-4.04) | 3.53 (3.32-3.79) | 3.68 (3.53-3.83) | - | - | - | - | - | - |

**Table S8 – Cumulative incidence of treated and untreated ESKD (%), at different diabetes durations; stratified by age of onset of diabetes and sex. Data are presented as cumulative incidence (95% confidence interval).**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Age of onset of diabetes** | **Duration of diabetes (years)** | | | | | | | |
| **0-4** | **5-9** | **10-14** | **15-19** | **20-24** | **25-29** | **30-34** | **35-39** |
| **10-29** | 0.17 (0.08-0.34) | 0.28 (0.16-0.47) | 0.78 (0.53-1.14) | 3.31 (2.34-4.68) | 5.09 (3.35-7.73) | 8.79 (5.98-13.00) | 8.59 (5.54-13.00) | 4.19 (2.00-8.79) |
| **30-39** | 0.17 (0.11-0.24) | 0.31 (0.24-0.41) | 1.04 (0.86-1.26) | 2.91 (2.38-3.56) | 6.11 (5.02-7.43) | 6.35 (4.93-8.17) | 3.45 (2.17-5.48) | 4.90 (2.90-8.27) |
| **40-49** | 0.27 (0.22-0.32) | 0.51 (0.43-0.59) | 1.17 (1.03-1.34) | 2.96 (2.58-3.40) | 3.11 (2.56-3.77) | 3.93 (3.08-5.02) | 3.93 (2.77-5.59) | - |
| **50-59** | 0.29 (0.26-0.34) | 0.50 (0.44-0.56) | 0.96 (0.85-1.08) | 2.29 (1.99-2.65) | 2.27 (1.82-2.83) | 2.57 (1.85-3.56) | - | - |
| **60-69** | 0.38 (0.34-0.44) | 0.76 (0.69-0.85) | 1.06 (0.94-1.21) | 1.40 (1.12-1.75) | 0.66 (0.35-1.23) | - | - | - |
| **70-79** | 0.56 (0.48-0.64) | 0.56 (0.48-0.67) | 0.63 (0.49-0.82) | 0.28 (0.09-0.86) | - | - | - | - |

**Table S9 – Incidence rate of treated ESKD at different diabetes duration intervals, using only people with a diagnosis date; stratified by age of onset of diabetes. Rates are per 1000 person-years (95% confidence interval).**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Age of onset of diabetes** | **Duration of diabetes (years)** | | | | | | | |
| **0-4** | **5-9** | **10-14** | **15-19** | **20-24** | **25-29** | **30-34** | **35-39** |
| **10-29** | 0.07 (0.03-0.19) | 0.19 (0.11-0.32) | 0.66 (0.49-0.88) | 1.52 (1.17-1.97) | 3.98 (2.94-5.38) | 7.32 (4.94-11.00) | 8.17 (5.21-13.00) | 4.21 (2.01-8.82) |
| **30-39** | 0.12 (0.08-0.18) | 0.27 (0.21-0.35) | 0.93 (0.80-1.09) | 2.03 (1.76-2.36) | 4.58 (3.84-5.46) | 5.18 (3.93-6.81) | 2.89 (1.74-4.79) | 3.86 (2.14-6.96) |
| **40-49** | 0.21 (0.18-0.26) | 0.45 (0.39-0.52) | 1.26 (1.15-1.39) | 2.69 (2.45-2.94) | 2.64 (2.27-3.07) | 3.31 (2.59-4.24) | 3.18 (2.15-4.70) | - |
| **50-59** | 0.27 (0.24-0.31) | 0.45 (0.40-0.51) | 1.15 (1.06-1.26) | 1.97 (1.80-2.15) | 2.08 (1.79-2.41) | 1.98 (1.42-2.76) | - | - |
| **60-69** | 0.29 (0.25-0.33) | 0.52 (0.47-0.58) | 0.96 (0.87-1.06) | 1.04 (0.90-1.21) | 0.51 (0.33-0.79) | - | - | - |
| **70-79** | 0.31 (0.26-0.36) | 0.34 (0.28-0.40) | 0.34 (0.26-0.45) | 0.17 (0.08-0.38) | - | - | - | - |

**Table S10 – Incidence rate of treated ESKD due to DN at different diabetes duration intervals; stratified by age of onset of diabetes. Rates are per 1000 person-years (95% confidence interval).**