Table 1. Data element validity test results, HCCN 1, 2023

| **Data elements** | **Age group** | **Sensitivity** | **Specificity** | **PPV** | **NPV** |
| --- | --- | --- | --- | --- | --- |
| Had a SINC response | **15-44** | **0.88** | **1.00** | **1.00** | **0.98** |
|  | 21-44 | 0.85 | 1.00 | 1.00 | 0.97 |
|  | 15-20 | 1.00 | 1.00 | 1.00 | 1.00 |
| Female sterilization | **15-44** | **0.00** | **1.00** | **NA** | **0.97** |
|  | 21-44 | 0.00 | 1.00 | NA | 0.96 |
|  | 15-20 | NA | 1.00 | NA | 1.00 |
| Infecund | **15-44** | **1.00** | **1.00** | **1.00** | **1.00** |
|  | 21-44 | 1.00 | 1.00 | 1.00 | 1.00 |
|  | 15-20 | NA | 1.00 | NA | 1.00 |
| Has a qualifying encounter during measurement year | **15-44** | **0.85** | **1.00** | **1.00** | **0.80** |
|  | 21-44 | 0.85 | 1.00 | 1.00 | 0.81 |
|  | 15-20 | 0.86 | 1.00 | 1.00 | 0.77 |
| Had a prenatal visit during the year prior to the measurement year and 9 months in the measurement year | **15-44** | **0.92** | **1.00** | **1.00** | **0.99** |
|  | 21-44 | 0.91 | 1.00 | 1.00 | 0.99 |
|  | 15-20 | 1.00 | 1.00 | 1.00 | 1.00 |
| Had a live birth date during the last 3 months of the prior year and the measurement year | **15-44** | **0.40** | **1.00** | **1.00** | **0.98** |
|  | 21-44 | 0.40 | 1.00 | 1.00 | 0.97 |
|  | 15-20 | NA | 1.00 | NA | 1.00 |
| Had an estimated delivery date during the last 3 months of the prior year and the measurement year | **15-44** | **0.00** | **1.00** | **NA** | **0.98** |
|  | 21-44 | 0.00 | 1.00 | NA | 0.97 |
|  | 15-20 | NA | 1.00 | NA | 1.00 |
| Had a non-live during the last 3 months of the prior year and the measurement year | **15-44** | **0.50** | **1.00** | **1.00** | **0.99** |
|  | 21-44 | 0.50 | 1.00 | 1.00 | 0.99 |
|  | 15-20 | NA | 1.00 | NA | 1.00 |

NA indicates that the validity statistics could not be calculated because the denominator to calculate the statistics was 0. E.g. the patient chart (authoritative source) indicates no women in the 15-20 age group had female sterilization.

Table 2. Data element validity test results, HealthEfficient, 2023

| **Data elements** | **Age group** | **Sensitivity** | **Specificity** | **PPV** | **NPV** |
| --- | --- | --- | --- | --- | --- |
| Had a SINC response | **15-44** | **0.74** | **1.00** | **1.00** | **0.90** |
|  | 21-44 | 0.70 | 1.00 | 1.00 | 0.89 |
|  | 15-20 | 0.90 | 1.00 | 1.00 | 0.95 |
| Female sterilization | **15-44** | **0.25** | **1.00** | **1.00** | **0.98** |
|  | 21-44 | 0.25 | 1.00 | 1.00 | 0.97 |
|  | 15-20 | NA | 1.00 | NA | 1.00 |
| Infecund | **15-44** | **NA** | **1.00** | **NA** | **1.00** |
|  | 21-44 | NA | 1.00 | NA | 1.00 |
|  | 15-20 | NA | 1.00 | NA | 1.00 |
| Has a qualifying encounter during measurement year | **15-44** | **0.86** | **0.90** | **0.96** | **0.73** |
|  | 21-44 | 0.85 | 0.90 | 0.96 | 0.68 |
|  | 15-20 | 0.95 | 0.91 | 0.95 | 0.91 |
| Had a prenatal visit during the year prior to the measurement year and 9 months in the measurement year | **15-44** | **0.95** | **0.99** | **0.95** | **0.99** |
|  | 21-44 | 0.93 | 1.00 | 1.00 | 0.99 |
|  | 15-20 | 1.00 | 0.96 | 0.80 | 1.00 |
| Had a live birth date during the last 3 months of the prior year and the measurement year | **15-44** | **1.00** | **1.00** | **1.00** | **1.00** |
|  | 21-44 | 1.00 | 1.00 | 1.00 | 1.00 |
|  | 15-20 | 1.00 | 1.00 | 1.00 | 1.00 |
| Had an estimated delivery date during the last 3 months of the prior year and the measurement year | **15-44** | **0.70** | **1.00** | **1.00** | **0.98** |
|  | 21-44 | 0.75 | 1.00 | 1.00 | 0.98 |
|  | 15-20 | 0.50 | 1.00 | 1.00 | 0.97 |
| Had a non-live during the last 3 months of the prior year and the measurement year | **15-44** | **NA** | **1.00** | **NA** | **1.00** |
|  | 21-44 | NA | 1.00 | NA | 1.00 |
|  | 15-20 | NA | 1.00 | NA | 1.00 |

NA indicates that the validity statistics could not be calculated because the denominator to calculate the statistics was 0. E.g. the patient chart (authoritative source) indicates no women in the 15-20 age group had female sterilization.