

Patient Age Determination in ePACT2

Prescriptions are submitted to the NHSBSA via both paper-based and electronic means. Electronic prescriptions include the patients date of birth. Paper-based prescriptions, which include both date of birth and age, are scanned using optical character recognition . Where prescription content is misaligned within the standard form; stamps encroach in key scanning areas; forms are blurred, faded or crumpled; forms are handwritten, etc. this can impact on the accuracy of the scanning process.

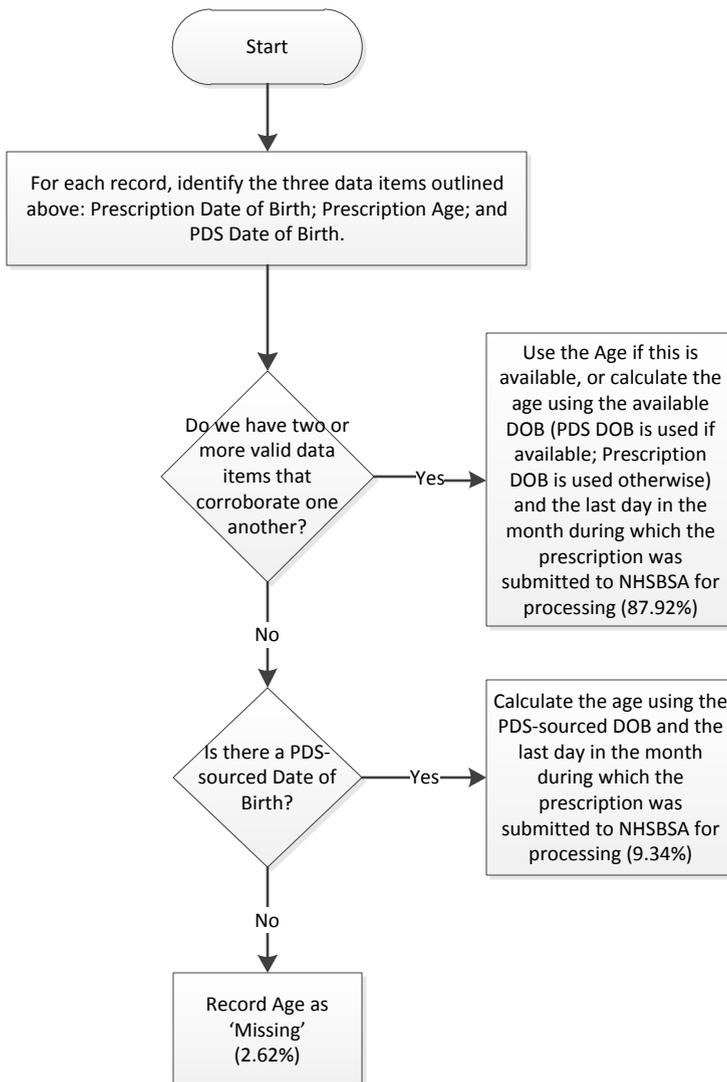
As a result of this variation, NHSBSA needs to use a number of data items in order to determine the ages of patients. Three pieces of information are generally available:

- the data of birth as provided via a batch tracing of NHS numbers between NHSBSA and NHS Digital using the Patient Demographics Service (PDS);
- the date of birth as provided on the prescription (The PDS date of birth is also provided automatically via electronically provided prescriptions); and
- the age as provided on the prescription

The high-level flow chart below outlines the various scenarios that can occur when processing these records, and how NHSBSA determines patient age in each case. Included in brackets are the percentages of total records from May 2017 that fell within each cohort.

As with any process of this nature, it is possible that false-positives are accepted / created as being correct. NHSBSA has sought to minimise these through the design of the logic outlined below, and the volume of errors found via random sampling of records in the impacted cohorts is very small. On balance, it is felt to make the data more useful to include the majority of correct records, however these false-positives are likely to manifest themselves as outliers in any data analysis. End users are therefore advised to always proceed with caution, and to assess the quality of the data for their specific purpose as part of any analysis they undertake.

If users have any concerns either generally with this process, or regarding any specific instances, please raise these via: nhsbsa.help@nhs.net



Notes:

1. A small percentage of records will have ages accepted where either: only the age has been captured, and this is between 1 and 99 years (0.09%); or where small discrepancies exist between the available data items (0.02%)
2. Ages scanned as being in days, weeks or months; or those over 100 years, are typically recorded as missing by the scanning process; some ages are therefore more likely to be under-reported, particularly where no Date of Birth is available to support calculation i.e. ages <1 and >99
3. The total of the percentages quoted does not sum to 100% due to rounding