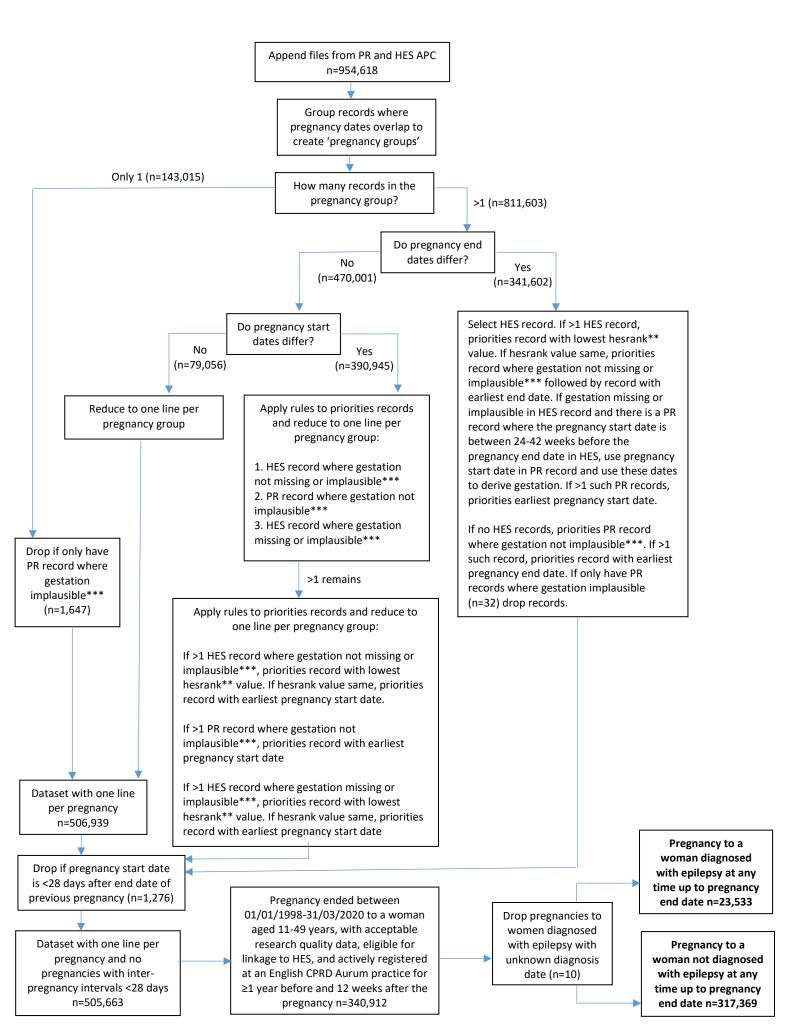
Pregnancies ending in a live birth or stillbirth between 01/01/1998-31/03/2020 according to CPRD pregnancy register (PR) or Hospital Episode Statistics admitted patient care (HES APC), to women age 11-49 years, with acceptable research quality data, eligible for linkage to HES, actively registered at an English practice for at least 1 year before pregnancy and at least 12 weeks after pregnancy identified Epilepsy diagnosed any time up to pregnancy end date? No Yes Select a 10% random sample Request the complete primary care and linked data for these women Records with an OPCS delivery Records from HES PR records with an outcome Records with an ICD delivery related code in HES APC APC maternity of live birth or stillbirth related code in HES APC (outcome 1, 2, 3, 11, 12) n=859,812 n=996,794 n=1,119,698 n=443,436 If >1 delivery related code in same Collapsed down to 1 row Drop duplicates with hospitalisation or on the same date, per episode of care per same data in all fields keep just 1 prioritising one related to woman except matorder mode of birth. If >1 related to mode of n=470,391 n=592,624 birth, priorities one with most invasive mode of birth (see Table S1). If >1 with same mode of birth or no mode of Merge records from HES APC birth codes, keep record with earliest maternity with records with an date OPCS or ICD delivery related n=438,826 code using patid and epikey (episode of care identifier) n=618,802 **hesrank: 1 - mode of birth OPCS code & maternity HES indicating a delivery & ICD delivery related code Drop records with no data in maternity 2 - mode of birth OPCS code & maternity HES indicating a delivery HES indicating a delivery and no OPCS or 3 - mode of birth OPCS code & ICD delivery related code ICD delivery related codes and create a 4 - mode of birth OPCS code only variable hesrank**, ranking episodes of 5 - non-mode of birth OPCS delivery related code & maternity HES care according to what delivery related indicating a delivery & ICD delivery related code information they contain 6 - non-mode of birth OPCS delivery related code & maternity HES n=511.182 indicating a delivery 7 - non-mode of birth OPCS delivery related code & ICD delivery related 8 - maternity HES indicating a delivery & ICD delivery related code Create a pregnancy start date by 9 - maternity HES indicating a delivery only subtracting gestational age if 10 - non-mode of birth OPCS delivery related code only available and not implausible ***, or 11 - ICD delivery related code only 36 wks from the evdate or epistart if no evdate for singletons, and 35 wks *** Gestational age values of <24 weeks or >43 weeks regarded as for multiples implausible and recoded as missing. Append files from PR and HES APC n=954,618

S1 Fig. Flow diagram of identification of study population – part1 (continued on next page)



S1 Fig. Flow diagram of identification of study population – part 2