

Data Formatting Requirements

Version 1.1

OVERVIEW

This document specifies the data fields accepted by the Growth Intelligence platform for retrospective fetal growth analysis. Fields are organized into three tiers. Only Tier 1 fields are required. Tiers 2 and 3 enrich the analysis but are not required for submission.

DATA DICTIONARY

Tier 1: Required

Field	Type	Unit	Description	Example
patient_id	string	—	De-identified unique patient identifier	P-00412
ga_scan	numeric	days	Gestational age at time of ultrasound	224
ac	numeric	mm	Abdominal circumference	275.3
ga_delivery	numeric	days	Gestational age at delivery	274
birth_weight	numeric	g	Birth weight	3180

Gestational age: days preferred. Weeks+days (e.g. 32+2) and decimal weeks (e.g. 32.3) also accepted.

Measurements: millimeters preferred. Centimeters, inches, grams, kilograms, and pounds/ounces also accepted.

Multiple scans per patient may be submitted as one row per scan visit (long format) or one row per patient with numbered columns (wide format).

Tier 2: Recommended

Field	Type	Unit	Description	Example
hc	numeric	mm	Head circumference	298.1
bpd	numeric	mm	Biparietal diameter	81.4
fl	numeric	mm	Femur length	62.8
crl	numeric	mm	Crown-rump length (first trimester)	55.0
ga_crl	numeric	days	GA at CRL measurement	84

Field	Type	Unit	Description	Example
delivery_mode	string	—	Mode of delivery	vaginal, cesarean, assisted
apgar_1	integer	—	Apgar score at 1 minute	8
apgar_5	integer	—	Apgar score at 5 minutes	9
nicu	string	—	NICU admission	yes / no
shoulder_dystocia	string	—	Shoulder dystocia occurrence	yes / no

Tier 3: Optional

Field	Type	Unit	Description	Example
maternal_age	numeric	years	Maternal age at delivery	34
maternal_bmi	numeric	kg/m ²	Pre-pregnancy BMI	27.3
gdm	string	—	Gestational diabetes	yes / no
preeclampsia	string	—	Preeclampsia or hypertension	yes / no
gravida	integer	—	Number of pregnancies	3
para	integer	—	Number of prior deliveries	1
prior_sibling_bw	numeric	g	Prior sibling birth weight(s)	3650, 4100
prior_sga	string	—	History of SGA	yes / no
prior_macrosomia	string	—	History of macrosomia	yes / no
maternal_birth_wt	numeric	g	Maternal birth weight	3050
paternal_birth_wt	numeric	g	Paternal birth weight	3400
paternal_height	numeric	cm	Paternal height	178
paternal_weight	numeric	kg	Paternal weight	82
ethnicity	string	—	Self-reported ethnic background	free text
family_health_hx	string	—	Family health history (see below)	free text
nicu_days	integer	days	NICU length of stay	4
neonatal_dx	string	—	Neonatal diagnosis codes (ICD-10)	P05.1, P08.0

Field	Type	Unit	Description	Example
delivery_cx	string	—	Delivery complications	free text
birth_injury	string	—	Birth injury documentation	free text

Family health history: any available information on growth patterns, birth weights, diabetes, hypertension, or other conditions relevant to fetal growth across maternal and paternal family members, including grandparents where known. Free text or coded entries accepted.

ACCEPTED FILE FORMATS

CSV, XLSX, XLS, TSV, JSON, XML, HL7, FHIR.

For files exceeding 10MB, submission via secure file transfer link is recommended.

DE-IDENTIFICATION

All submitted data must be de-identified prior to upload in accordance with HIPAA Safe Harbor (45 CFR 164.514(b)(2)). All 18 categories of direct identifiers must be removed. Gestational ages and birth weights are relative clinical measurements and are not considered identifiers.

ADDITIONAL FIELDS

Data fields beyond those listed above are accepted and encouraged. Any structured clinical data relevant to fetal growth, pregnancy outcomes, or maternal and family health history will be incorporated into the analysis where applicable.