

## Beneficiary Entity Documentation

### High-Level Overview

The **Beneficiary entity** represents households or individuals registered in the system. It is the central record used for linking to **Projects**, **Payments**, and **Children** entities. Each beneficiary moves through a defined set of workflow stages, from initial registration to project completion. Along the way, their details are enriched with personal, vulnerability, and eligibility information, which helps determine whether they qualify for assistance programs.

The stages are:

- **Registered** → newly entered records pending verification.
- **Verified** → details confirmed by staff.
- **Eligible** → meets program criteria and can be considered for inclusion.
- **Included in Program / Payment Created** → beneficiary has been assigned to a project and payment process begins.
- **Completed** → participation finished; record archived with project history.

This ensures a clear pipeline from registration to service delivery.

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### Technical Details

#### General Information Fields

- **First Name, Last Name, Patronymic** → core identity fields.
- **Date of Birth, Gender, ID Number** → essential personal details.
- **Phone Number, Address, Region** → contact and location information.

#### Vulnerability Criteria

A set of **Yes/No (List) fields** used to identify household vulnerability, including:

- Multi-children family
- Single parent household
- Adopted parents of orphans
- Orphans

- Single elderly person
- Family with PWD
- Low-income family
- Homeless person

Verification fields support data validation:

- **Personal Details Verified**
- **Vulnerability Criteria Verified**
- **Additional Vulnerability Criteria Verified**

#### Household Composition

- **Number of children under 18**
- **Number of children under 18 in the household**
- **Number of family members with disabilities**
- **Number of PWD in the household**
- **Relations with disabilities**

These fields provide quantifiable data to support vulnerability scoring.

#### Eligibility & Project Tracking

- **Eligible for projects** (True/False)
- **Which project?** (string)
- **How many different projects?** (number)
- **Previous Projects** (string list for project history)

Scripts update these fields automatically during eligibility checks and resets.

#### Deduplication & Data Quality

- **Duplicate Check?** (enum: Unique / Potential Duplicate / Duplicate)
- **Potential Duplicated Field** (stores reason e.g., “Duplicate National ID”)
- **Children verified?** (True/False)
- **Children deduplicated check** (enum: Unique / Duplicate)

- **Duplicate Record** (linked record reference)

These ensure that no duplicate beneficiaries or child records enter the system.

### Project Tracking & Status

- **Project started?** (string)
- **Stage IDs** control the pipeline: Registered → Verified → Eligible → Included in Program → Payment Created → Completed.

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### Integration Notes

- Field IDs follow the ufCrm... format and must be mapped in **system\_config.json** under IMPORT\_FIELDS, ELIGIBILITY\_FIELDS, and deduplication settings.
- Scripts (Duplicate\_Check.py, Child\_deduplication.py, Eligibility\_Check.py, etc.) rely on these fields for updates.
- Previous Projects is used when resetting beneficiaries to keep history intact.