

DATA DOCUMENTATION INITIATIVE

DDI Lifecycle

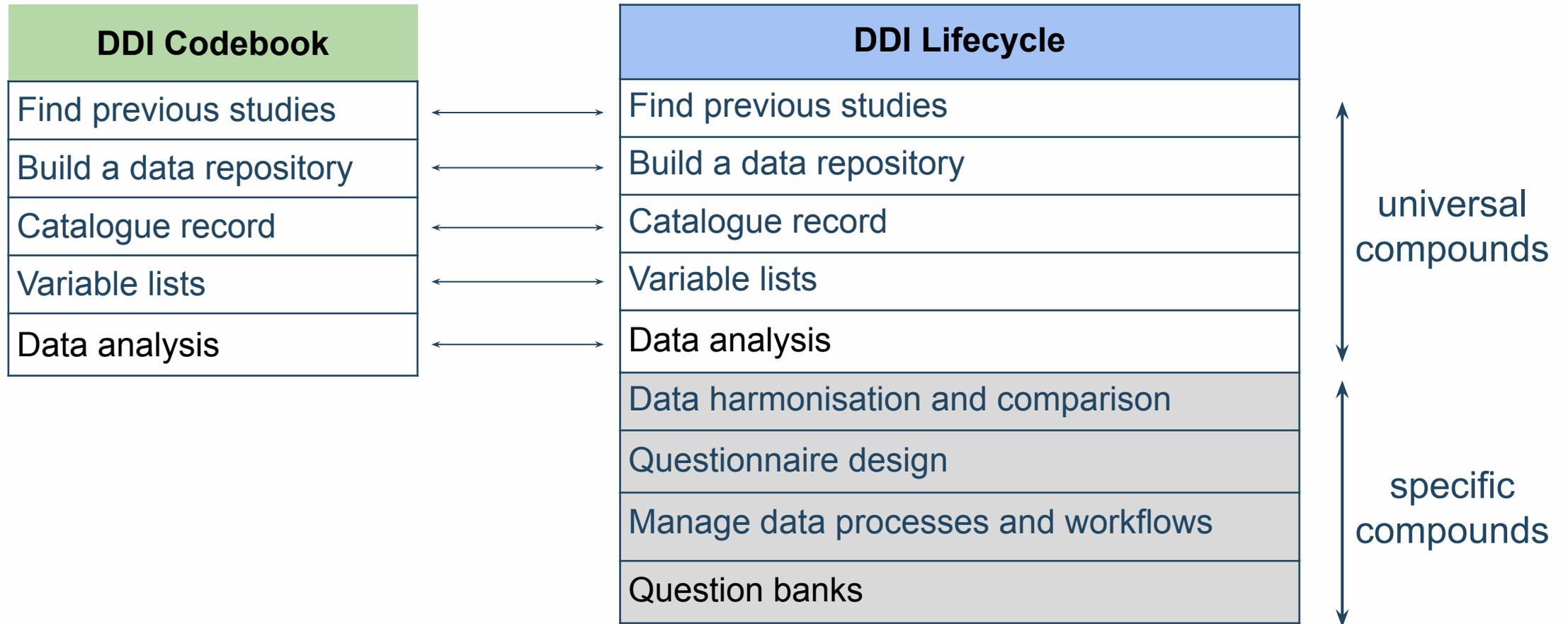
INTRODUCTION AND OVERVIEW

Hayley Mills, CLOSER, UCL

Contents

- Difference between DDI Codebook and DDI Lifecycle
- Features of DDI Lifecycle
- Activities DDI Lifecycle supports
- Summary

Difference between DDI Codebook and DDI Lifecycle



DDI Codebook

Unstructured un-standardised metadata



Lost metadata manager

Structured DDI-C metadata



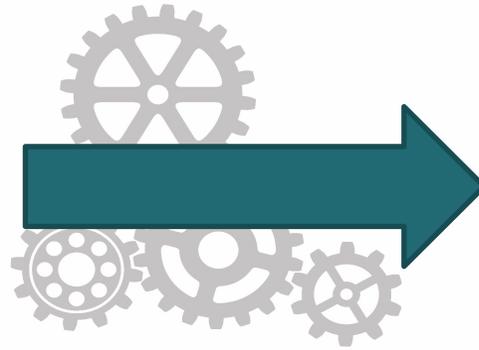
- Basic descriptive content for variables, files, source material, and study level information.
- Supports discovery, preservation, and the informed use of data.
- Documentation of a simple study data.

DDI Lifecycle - Broken down into different functions

Unstructured un-standardised metadata



Lost metadata manager



Universe Scheme

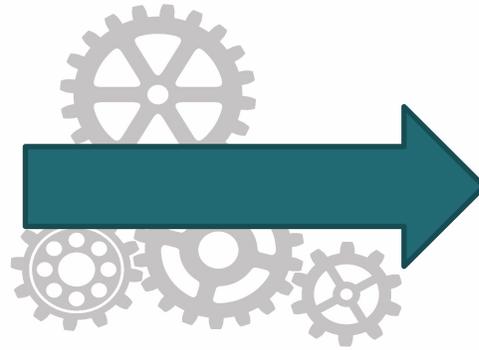
Instrument Scheme



- Information is broken up into more discreet content.
- DDI-Lifecycle is modular and extensible.
- Metadata reuse.

DDI Lifecycle - Reuse

Structured DDI-L metadata



Metadata specified by DDI Lifecycle standard

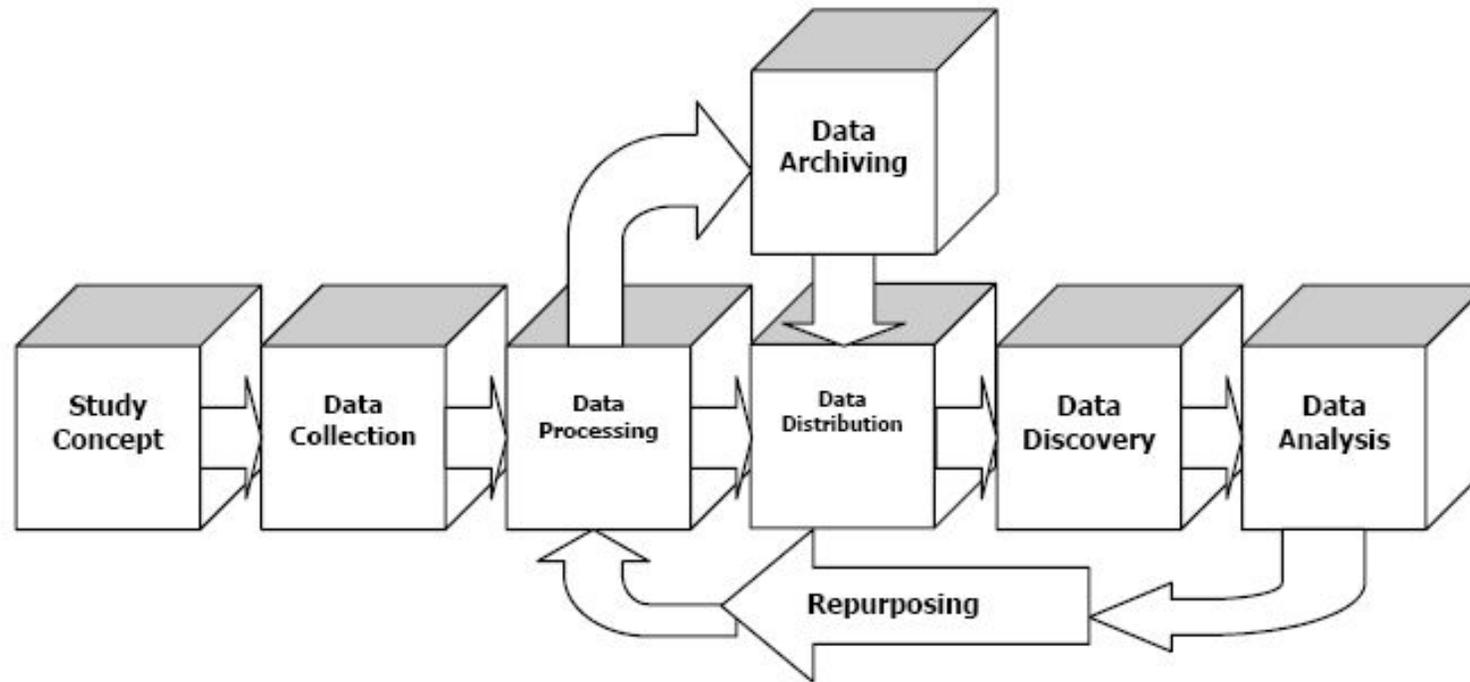


- Document and *manage* data across the entire data life cycle.
- Supports preservation, discovery, access and analysis in a much easier way.
- Documentation of repeated studies/surveys

Features of DDI Lifecycle

- Lifecycle expands on the idea of Codebook in terms of:
 - Content coverage and depth
 - Allows grouping and comparing related studies or series of studies
 - Metadata management over time
 - Reusable metadata
 - Manage questions and questionnaires
 - Support for the planning, capture, processing, storage, discovery and dissemination of data (allows for active management of metadata)

Data lifecycle model



Content coverage and depth

- **Conceptual objects:** concept, unit, unit type, universe, population, geographic structures, and representation
- **Methodological objects:** approaches to sample selection, data capture, weighting, quality control, and process management
- **Quantitative and qualitative data objects:** concept, universe, representation, usage, data type, record, record relationships, storage, access, and descriptive statistics
- **Data management:** ownership, access, rights management, restrictions, quality standards, organization, agent management, relationship between products, versioning, and provenance
- **Processing:** data capture, data processing, analysis, and data management

Metadata management over time

NACDA-ICPSR Portal

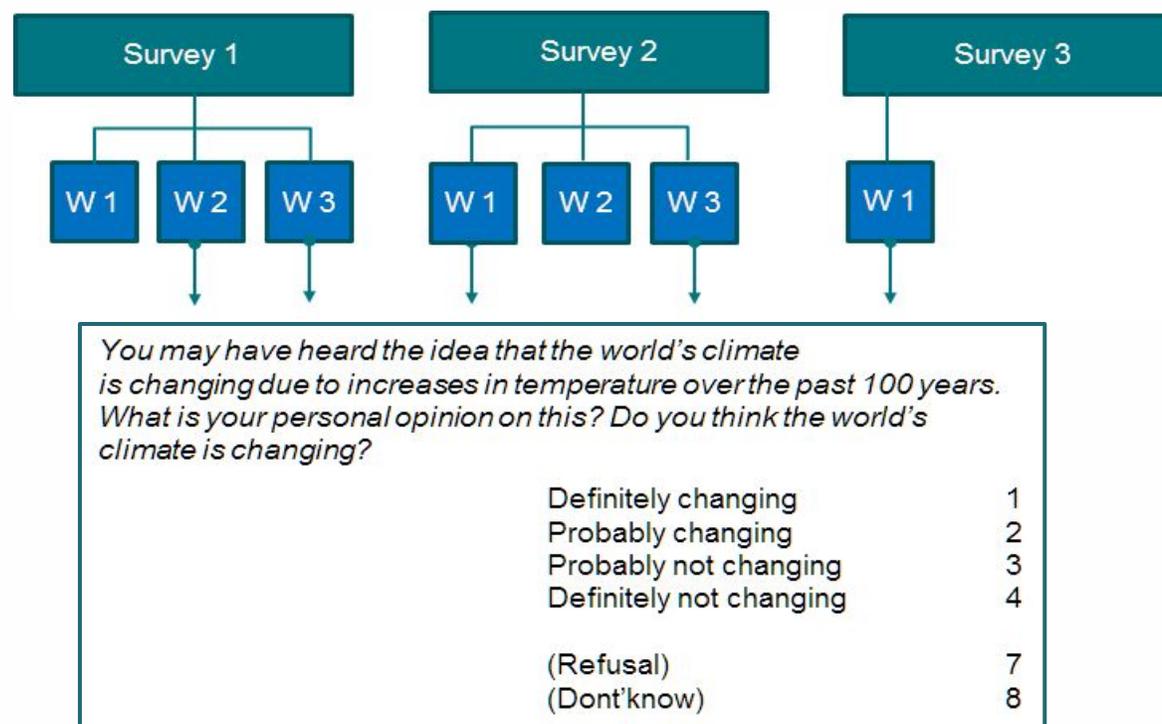
Name reascano7

Label CG1D SP CANT ANS SP TOO ILL

	Round 1	Round 2	Round 3	Round 4	Round 5	Round 6	Round 7	Round 8
	R1 SP cg1reascano7	R2 SP cg2reascano7	R3 SP cg3reascano7	R4 SP cg4reascano7	R5 SP cg5reascano7	R6 SP cg6reascano7	R7 SP cg7reascano7	R8 SP cg8reascano7
-9 Missing	-9	-9	-9	-9	-9	-9	-9	-9
-8 DK	-8	-8	-8	-8	-8	-8	-8	-8
-7 RF	-7	-7	-7	-7	-7	-7	-7	-7
-1 Inapplicable	-1	-1	-1	-1	-1	-1	-1	-1
1 Yes	1		1	1	1	1	1	1
1 SP HAS DEMENTIA/ALZHEIMER'S/ NOT ABLE		1						
2 No	2		2	2	2	2	2	2
2 SP IS UNABLE TO SPEAK		2						
3 SP IS UNABLE TO HEAR		3						
4 SP REFUSED		4						
5 PROXY REFUSED		5						
6 SP NOT PRESENT		6						
7 SP TOO ILL		7						
8 SP LANGUAGE BARRIER		8						
91 OTHER (SPECIFY)		91						

Reusable metadata

- Reuse of a question in different waves/rounds/sweeps of a survey and across surveys.



Manage questions and questionnaires

Topic	DDI Codebook	DDI Lifecycle
Question	qstn	QuestionItem, QuestionGrid, QuestionBlock
Non-question measures		MeasurementItem
Questionnaire		Instrument
Questionnaire routing		Sequence, IfThenElse, Loop, RepeatUntil, RepeatWhile
Questionnaire content usage		QuestionConstruct, MeasurementConstruct, ComputationItem, StatementItem

Allows grouping and comparing related studies or series of studies



Navigation icons:

1 - 18 / 18 Page 1

	qi_7	7	Please count the number of rooms your household has for its own use. The total number of rooms is: <small>Hertfordshire Cohort Study / HCS Home Interview and Clinic Visit / Health Questionnaire /</small>
	qi_8	8	Is your accommodation owned/mortgaged or rented by your household? <small>Hertfordshire Cohort Study / HCS Home Interview and Clinic Visit / Health Questionnaire /</small>
	qi_7.1	7.1	What type of accommodation do you live in? <small>Southampton Women's Survey / 24 Months / 24 Month Child Questionnaire /</small>
	qi_7.2	7.2	On what floor is the main part of living accommodation? <small>Southampton Women's Survey / 24 Months / 24 Month Child Questionnaire /</small>
	qi_7.3	7.3	*Do you own your own home, or are you buying it on a mortgage, or do you rent it in some way? <small>Southampton Women's Survey / 24 Months / 24 Month Child Questionnaire /</small>
	qi_7.4	7.4	*How many rooms do you have for use only by your household? <small>Southampton Women's Survey / 24 Months / 24 Month Child Questionnaire /</small>
	qi_7.5	7.5	How many bedrooms do you have? <small>Southampton Women's Survey / 24 Months / 24 Month Child Questionnaire /</small>
	qi_7.6	7.6	How many years have you lived at this address? .. yrs .. mths <small>Southampton Women's Survey / 24 Months / 24 Month Child Questionnaire /</small>
	qi_7.7	7.7	Since the birth of the study child, have you changed address? <small>Southampton Women's Survey / 24 Months / 24 Month Child Questionnaire /</small>
	qi_9.1	9.1	*How is your flat/house principally heated? <small>Southampton Women's Survey / 24 Months / 24 Month Child Questionnaire /</small>
	qi_9.2	9.2	Is the room where your child usually sleeps heated in this way? <small>Southampton Women's Survey / 24 Months / 24 Month Child Questionnaire /</small>
	qi_9.3	9.3	*How is the room where your child usually sleeps heated? <small>Southampton Women's Survey / 24 Months / 24 Month Child Questionnaire /</small>
	qi_10.1	10.1	Does he/she sleep mainly <small>Southampton Women's Survey / 24 Months / 24 Month Child Questionnaire /</small>

Activities DDI Lifecycle supports

- Data catalogue - Archival preservation of descriptive and production content
- Structured human-readable data dictionary
- Metadata driven statistical systems
- Descriptive documentation of the content, meaning, provenance, and access
- Discovery and exchange of data at the study, data file, variable, and question level
- Question banks

Example - Create a Data Catalogue

Consortium of European Social Science Data Archives

 English

Reset filters Clear search About User Guide REST API

Similar results

- Eurobarometer 95.1 (2021)
- Eurobarometer 95.1 (2021)
- How Much Do People Value Future Generations? Climate Change, Trust, and Public Support for Future-Oriented Policies
- Public Perceptions of Climate Change and Energy Futures in Britain, 2010
- Will Covid-19 Change What the Public Expect of Government, 2020-2021

Access data View JSON Back

Summary information

Study title
Eurobarometer 95.1: COVID-19, Future of Europe, Climate Change, Fishery and Aquaculture products (2021)

Creator
European Commission

Study number / PID
SI394 (UniData)

Abstract
The Eurobarometer survey is designed to provide regular monitoring of public social and political attitudes in the EU through specific trend questions. Therefore, the general aim of EB is to know the attitudes and evaluations of European citizens about large general themes. The questions concern to the European integration issues, but sometimes they regard also specific problem about single country or common problems of economic, political or social nature. The arguments of Eurobarometer 95.1 are as follows: - Covid-19: appraisal of EU Coronavirus responses, knowledge and satisfaction about measures taken to fight the Coronavirus pandemic, EU priorities in its response to the Coronavirus pandemic, consequences of the restriction measures on health and economy, impact of Coronavirus on personal income, current emotional status. - European Parliament Spring Survey: awareness of, knowledge about, attitudes towards the European Parliament, EP policies and actions, European identity issues, attitudes towards and (dis)advantages of European

Example- Create a data dictionary

PDF basket download from Colectica portal

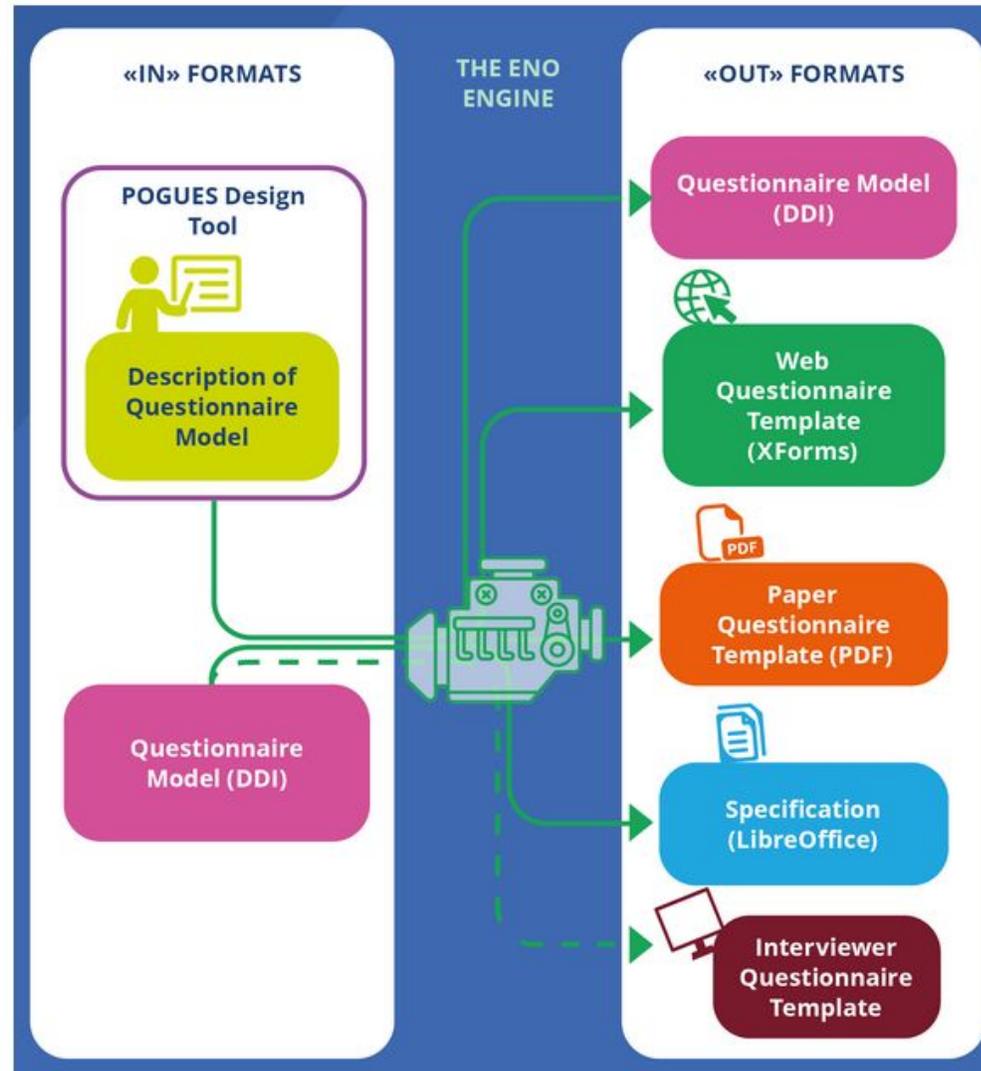
own89 - Ownership of house 1989	
Type	Code
qi_12	Who owns it?
Study	National Survey of Health and Development
Sweep	1989 (Age 43)
Dataset	1989 Main Questionnaire Dataset
Variable Group	1989 Main Questionnaire Dataset
Variable Group	102 - Housing and local environment
Variable Group	10201 - Housing

			Frequency
Valid	0	Owns it or is buying it	2,687
	1	Renting it from the Council	294
	2	Renting it from a relative	21
	3	Renting it from a private landlord	104
	4	Renting it from a housing association	14
	5	Other, specify	137
	9	Unknown	5

Valid	Invalid	Minimum	Maximum
3262	2100	0	9

Example - Create a metadata driven statistical system

INSEE - Architecture of the Eno Engine



Example - Provide descriptive documentation of the content, meaning, provenance, and access

CLOSER Discovery lineage

The screenshot displays the CLOSER Discovery lineage interface. At the top, a breadcrumb trail shows the path: 1970 British Cohort Study > Age 42 Survey (2012) > BCS70 Paper Self Completion (2012) Dataset. Below this, there are three tabs: Variable, Details, and Lineage, with the Lineage tab selected. The main content area shows a vertical lineage of variables:

- BCS70 Paper Self Completion (2012) Dataset - BD9AUDG** (Derived) AUDIT-PC Group
- BCS70 Paper Self Completion (2012) Dataset - BD9AUDIT** (Derived) Total AUDIT-PC Score
- BCS70 Paper Self Completion (2012) Dataset - B9SCQ32** PAPI:Frequency of having an alcoholic drink
 - qi_32** How often do you have a drink containing alcohol?
- BCS70 Paper Self Completion (2012) Dataset - B9SCQ33** PAPI:Number of alcoholic drinks consumed on a typical day when drinking
 - qi_33** How many drinks containing alcohol do you drink on a typical day when you are drinking?
- BCS70 Paper Self Completion (2012) Dataset - B9SCQ34** PAPI:Frequency of not being able to stop drinking once started over last year

Summary

- Supports the whole data lifecycle for the planning, capture, processing, storage, discovery and dissemination of data
- More suitable for:
 - multi-series/study
 - projects with surveys
 - larger projects
- Allows active management of metadata
 - Create products and processes for efficiency, consistency, quality, transparency and discovery

Image Attributions

Lego bricks [“LEGOS workers fired from job”](#) by [woodleywonderworks](#) is licensed under [CC BY 2.0](#)

Lego excavator ["Lego Excavator \(8853\)"](#) by [Stephen Edmonds](#) is licensed under [CC BY SA 2.0](#)

Lego sorted [“Technic bits“](#) by [Windell Oskay](#) is licensed under [CC BY 2.0](#)

Lego race car ["Lego Rally Shock & Roll Racer \(8840\)"](#) by [Stephen Edmonds](#) is licensed under [CC BY SA 2.0](#)

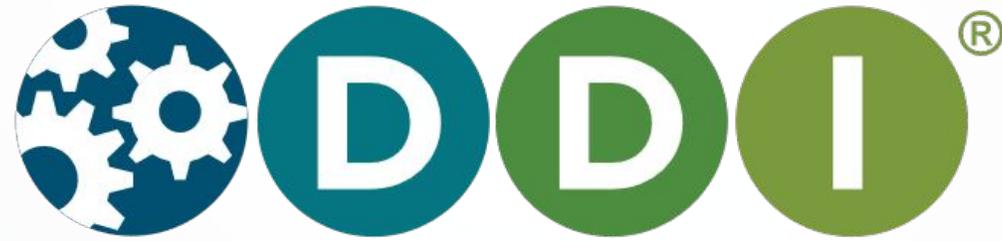
Lego bulldozer [“Lego Motorized Bulldozer \(8275\)"](#) by [Stephen Edmonds](#) is licensed under [CC BY SA 2.0](#)

Lego control centre ["Lego 8094 Control Centre \(4\)"](#) by [Stephen Edmonds](#) is licensed under [CC BY SA 2.0](#)

Credits: DDI Train the Trainer Workshop 2018

Alina Danciu
Guillaume Duffes
Adrian Duşa
Lauren Eickhorst
Dan Gillman
Arofan Gregory
Taras Günther
Lea Sztuk Haahr
Sanda Ionescu
Jon Johnson
Chifundo Kanjala
Kaia Kulla

Amber Leahey
Alexandre Mairot
Johan Fihn Marberg
Hayley Mills
Olof Olofsson
Hilde Orten
Anja Perry
Dan Smith
Wendy Thomas
Joachim Wackerow
Knut Wenzig



DATA DOCUMENTATION INITIATIVE

Thank you

QUESTIONS?