QUAD:

QUANTIFICATION, ADMINISTRATIVE CAPACITY AND DEMOCRACY (GRANT NUMBER ES/N018869/1)

GUIDE QUAD INDICATORS DATABASE:

DEFINITIONS AND CODING

1. Objectives

Through quantification, public services have experienced a fundamental transformation from "government by rules" to "governance by numbers", with the aim to produce a self-regulating human society. The quantification of control in the public services has fundamental implications not just for our understanding of the nature of public service itself, but also for wider debates about the nature of citizenship, democracy and the state, as well as for understandings of public administration. **The ESRC-funded QUAD project (ES/N018869/1)** set out to scrutinize the relationship between quantification, administrative capacity and democracy across three policy sectors (healthcare/hospitals, higher education/universities, criminal justice/prisons). It investigated how quantification came to alter modalities of governing and control in the public services, and with what consequences for the users of these services and public administration more generally.

More specifically, it examined:

(i) How quantification travels; how different instruments of quantification have spread across different public service sectors;

(ii) Relations between quantification and administrative capacity; how different instruments of quantification have impacted on and placed specific demands on administrative capacities;

(iii) Relations between quantification and democracy; how different instruments of quantification have redefined relations between public service and public welfare, notions of citizenship, equity, accountability and legitimacy.

This specific database seeks to capture the rise and extent of quantification as a tool of government by tracing the development of performance indicators used for regulatory purposes between 1985 and 2015 across different public service sectors (health/hospitals; criminal justice/prisons; higher education/universities) in the UK (with a specific focus on England). The cross-sectoral comparison intends to capture the diffusion of indicators across domains, and to compare temporal dynamics in the adoption of similar or different new public management instruments: Do indicators develop in a similar pace across sectors? What are their focus, audience and goals? And how did these change over time?

2. What is an indicator?

Based on the Oxford English Dictionary, **an indicator can be defined as a statistic, a variable, an index, etc., used to gauge performance in a given sector or organisation**. It generally consists of a collection of data, often from various sources, ordered to provide an assessment of performance. The data transforms the complex social processes that characterise any given domain into numbers that make visible some realities and render them comparable and actionable, in particular by measuring them against defined standards. 'Indicator' is thus a general category that comprises various sorts of numbers and ways of compiling them, such as indexes, rankings, etc. Very often, an indicator consists of an aggregation or a combination of various numbers on a given topic for the purpose of evaluating and steering behaviour. What distinguishes indicators from other numerical data is their effectiveness in filtering, naming, and ranking raw data with a specific view or intention on the phenomena that are described (K. E. Davis, Kingsbury, and Merry 2012).

The QUAD project was particularly concerned with **indicators associated with 'new public management' reforms** that have, since the 1980s, aimed to measure performance and use performance measurement as a tool to govern the public services (Hood 1991; Hood et al. 2004). Such performance measures provide representations of public services that are intended to facilitate, or rather orientate, administrative control in new ways, focusing on the dimensions of economy, efficiency and effectiveness (Hood 1991). New public management is often said to be output-driven (in opposition to rules-based systems of bureaucracy). The purpose of the database of performance indicators compiled here is to approach the measurement of public service performance empirically, by looking at different definitions and regulatory uses of performance indicators across three different public service sectors (healthcare/hospitals, higher education/universities, criminal justice/prisons) over time (1985, 1995, 2005, 2015).

3. A Note on methodology: How was the database built?

The database aims to provide a comprehensive overview of different indicators used by regulators to measure the performance of universities, hospitals and prisons in England at different points of time (1985, 1995, 2005, 2015). It intends to be exhaustive. However, we cannot lay claim to completeness, given the growing extent and scope of indicators which makes 100% completeness a

difficult goal to attain. We nevertheless believe that our collection of indicators is significant and provides core insight into indicator development in each of the sectors between 1985 and 2015.

- ***Choice of sectors***

The chosen sectors (higher education/universities, healthcare/hospitals and criminal justice/prisons) constitute three public sectors where performance measurement took hold, and where issues of quality, economy, and democracy have been publicly discussed. All three sectors have been particularly exposed to managerialist thinking over the past three decades and present ideal cases to explore tensions between "government by rules" and "governance by numbers". All three of them pose particular challenges for quantification. One is that the measurement of outputs and outcomes is problematic. Arguably, all three sectors are able to produce some form of output data. Yet, how such data contribute to overall outcomes is highly problematic. Furthermore, there are inherent conflicts regarding the outputs that are being measured, highlighting not just tensions between different values (efficiency vs. equity vs. redundancy), but also potential dynamics towards prioritizing quantifiable over, potentially more important, non-quantifiable matters.

- ***Choice of dates***

The database starts in 1985 as it aims to assess the impact of new public management reforms that began in the 1980s on the development of performance indicators. Indicators were then re-assessed every ten years to capture their development over time (1995, 2005, 2015).

- ***Identification and selection of indicators included in the database***

One challenge we faced was to identify empirically what counts as an indicator. As noted above, indicators are often based on a compilation of data assessing performance. They often involve multiple sources of data and various ways of data aggregation, which complicates the task of identifying what counts as an indicator (or its sub-component). In addition, some indicators are more easily accessible than others. For the purpose of compiling this database, we identified and selected indicators through two main methods. First, we reviewed different primary sources where indicators are published (official reports, websites, etc.). Second, we complemented our search with a review of secondary sources (academic articles and books in particular) to check for completeness and gain information about indicators that was otherwise not available. As highlighted above, the database is aimed at being as comprehensive as possible, however, it does not (and cannot) provide a complete overview of all indicators that may have existed at the time.

4. Definitions and coding

The database provides a brief description of each indicator that has been included. Further, it provides users with basic information about where the indicator was produced, where it was published, by whom, and when, and whether or not it is publicly available. Next, the database analyses each indicator by considering its purpose and focus (for more detail see below). Here, it

also provides information about whether or not the indicator is associated with a target and/or rankings. Then, it provides information about who mandates/produces the indicator, and the target audience (e.g. parliament, executive government, service users, etc.). Subsequently, information is provided about the different control styles associated with the indicator, following Hood et al.'s (2004) distinction between contrived randomness, competition, mutuality and oversight. The database also includes information about the frequency and operating dates of the indicator, as well as temporal nature of the data on which it is based (forward or backward looking, real time). Finally, the database provides information about the sources, including web links when available, where the indicator was retrieved. Below we provide further explanation of the different categories employed when compiling and cataloguing the different indicators found.

It should be noted that sometimes not all information was available for each indicator, especially the older ones for which no online archives exist. We gathered as much information as possible, but when information was not available, we have left cells empty. In some cases, we have also added some further explanation about the indicators themselves and how they were retrieved.

Explanation of categories used in the compilation and cataloguing of indicators:

What is counted: This column provides an overall categorisation of the indicator so as to provide a better overview of 'what is counted'. When available, we replicated the original categories of the document in which the indicators were published. Otherwise, we provided our own categorisation.

- Example: Number of patients, students or prisoners admitted per year.

Short description: Brief explanation or definition of indicator

- Example: Cases requiring patient admission to hospital

Examples: This column offers a selection of specific examples as listed in the original source (note that this list of examples is not exhaustive but merely illustrative).

- Example: Urgent, immediate or emergency in-patient admissions per 1000 population served

Source of the indicator: Name of the report, survey, database, website where the indicator was found.

- Example: National Students Survey

Published in: Describes where the indicator features: report, website, etc. This may be the same as the source in some cases.

- Example: Indicators from the National Students Survey are published as Key Information Set on the Unistats website.

Data collected by: Name of the authority/organisation(s) that gather the data and produce the report, document or website where the indicator is published. These two may not be the same.

- Example: The National Student Survey is produced by IPSOS Mori for the Office for Students, on behalf of various Departments

When in operation: Provides information about the year an indicator was created and came into operation, and when its publication, production or use was discontinued (if relevant or if the information was available – note that often information about the end date of an indicator's operation/use was not available).

Availability: Denotes whether the indicator is/was publicly accessible (yes = 1; no = 0).

- Example: An indicator is publicly accessible if it is made available (e.g. through reports or websites) to the general public. When not publicly available, the indicators are normally used inside government departments, regulatory agencies, or other bodies.

What is the purpose/focus? Here, we assess what kind of issue the indicator intends to capture, what it is aimed at controlling and/or reporting on. Note that one indicator can feature in several categories (yes = 1; no = 0).

Inputs/resources: Does the indicator measure anything related to the use of resources or inputs (i.e. what 'feeds' an organisation)?

- Example: Number of patients admitted, number of rooms available, etc.

Administrative processes: Is the indicator responding to/reporting on compliance with administrative requirements/procedures?

- Example: Filling in forms measuring tasks accomplished, or providing required (descriptive) information about patients, students, inmates.

Costing: Does the indicator measure costs and the use of financial resources?

- Example: Cash flow against annual plans, performance in accordance with cost reduction plans

Environment: Does the indicator measure any item related to the working environment? Working environment can refer to the quality of the building, of staff, or the institutional context.

- Example: Executive staff turnover, prisons overcrowding

Timeliness: Does the indicator capture how quickly tasks are accomplished?

- Example: Are patients' complaints treated in less than one month?

Quality - User Experience: Does the indicator measure the perception of quality by users of a given sector (i.e. patients, students, inmates)?

- Example: Satisfaction with teaching or hospital services; perceived clarity of marking criteria

Quality - Output/Outcome: Does the indicator relate to capturing quality in terms of outputs or outcomes?

- Example: Graduate destination after studying; emergency re-admissions; number of basic skills awards achieved by prisoners; etc.

Equity – Access: Does the indicator seek to capture information related to the accessibility of a particular service?

- Example: Number of students with disabilities

Equity- Fairness/Rectitude: Indicators that aim to assess how democratic concerns are taken into account by a given organisation or sector.

- Example: Are inmates treated with respect?

Slack/Redundancy: Indicators that aim to assess whether organisations have 'spare' resources or capacities to deal with emergencies or unexpected events.

- Example: Number of empty beds per night in an hospital

Control purposes: Provides information about whether an indicator is attached to specific control or performance targets. In other words, is the indicator associated with specified targets or a component of rankings, with the aim of modifying behaviours of actors. (yes = 1; no = 0)

Is the indicator associated with a specific target?

- Example: The indicator is rated against a pre-defined performance target

Is the indicator associated with rankings?

- Example: The indicator is part of a rating or ranking used to judge performance

Who produces it? Provides information about the organisation/actor that produces the indicator in order to assess from which type of institution the indicators emerge. (yes = 1; no = 0).

Government: Includes Cabinet, Parliament, and Ministries

Regulators: Regulatory agencies independent from Government that regulate a sector

- Example: Office for Students

Regulatees/addressees: The regulated organisations and their members that perform a public service in a given sector

- Example: Hospitals, prisons or universities

Professionals: Those that compose the main professions of a given sector.

- Example: Professional body (e.g. medical doctors, nurses, academics, prison governors)

Private sector: For-profit organisations outside of government

- Example: Newspapers' hospitals rankings, information provides by poll institutes, etc.

Civil society: Not-for-profit organisations (often those that seek to represent/speak for the users of a given sector)

- Example: Non-governmental organisations, patient interest groups, prison interest groups etc.

Who is the audience? Captures for whom the indicator is produced (focusing on the primary target audience). (yes = 1; no = 0)

Parliament: Members of parliament to whom government is accountable.

Executive government (vertical): Refers to vertical (hierarchical) lines of accountability:

- Ex: Ministers, regulators, etc.

Executive government (horizontal): Refers to government as whole.

Regulatees (management): Universities, prisons or hospitals management

Regulatees (workers): Refers to "street-level workers" (those interacting with users).

- Example: Lecturers, doctors and nurses, prison officers

Service user: Students, patients, prisoners

Public: General public

Control style: Seeks to identify the different control styles in which the indicators are implicated. We distinguish between four different control styles following Hood et al., *Controlling Modern Government* (2004, pp. 5-10). Following Hood et al., control is used as a synonym for steering or governance (here: of the public services). Note that an indicator can be related to more than one control style. (yes = 1; no = 0)

Contrived randomness: "denotes control of individuals in government and the public sector by more or less deliberately making their lives unpredictable in some way, as in the classic example of election or selection of public office holders by lot."

Competition: "Competition denotes control of individuals in the public sector by processes of rivalry."

Mutuality: "Mutuality denotes control of individuals by formal or informal group processes, whether by deliberate design or otherwise." (For example: peer-review)

Oversight: "This approach is often linked with the previous three control forms. Oversight means scrutiny and steering from some point 'above' or 'outside' the individuals in question."

Frequency: Indicates how often an indicator is compiled and updated (weekly, monthly, quarterly, annually). Above one year, the indicator was categorised as infrequent. (yes = 1; no = 0)

Data period considered: Does the indicator reflect past, present or future states of an organisation or a sector? (yes = 1; no = 0)

Retrospective: The indicator is based on historical data

Real time: Data used to produce the indicator are processed in real or near real time

Prospective: The indicator relies on an evaluation of future prospects.

Link to further details: Provides information about where the indicator can be retrieved.

Primary source: Provides a full description of the source where/in which the indicator is published.

- Example: Website, report, etc.

Secondary sources: Lists additional sources that were consulted to obtain information about the indicator, especially when the primary source was not directly accessible.

- Example: Academic literature, reports, etc.

Weblinks: Internet address where the data can be accessed (when available)

Free access: indicates whether or not the resources can be freely accessed on the internet. This refers to the availability of the documents used to build the database, not the 'publicly available character' of a given indicator.

Comments: Where deemed useful, we provided additional comments on the availability of data, the historical background of an indicator, as well as coding issues related to specific sources/indicators.

5. References

Davis, Kevin E., Benedict Kingsbury, and Sally Engle Merry. 2012. 'Introduction: Global Governance by Indicators'. In *Governance by Indicators. Global Power through Quantification and Rankings*, edited by Kevin Davis, Angelina Fisher, Benedict Kingsbury, and Sally Engle Merry, 3–28. Oxford: Oxford University Press.

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