

Paper Summary

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Title: Development and Actionability of the Dutch COVID-19 Dashboard: Descriptive Assessment and Ex

Authors: Véronique L. L. C. Bos, Tessa Jansen, Niek S. Klazinga, Dionne S. Kringos

DOI: 10.2196/31161

Year: 2021

Publication Type: Journal

Discipline/Domain: Public Health / Health Communication

Subdomain/Topic: COVID-19 dashboards, performance intelligence, public reporting

Eligibility: Eligible

Overall Relevance Score: 87

Operationalization Score: 78

Contains Definition of Actionability: Yes

Contains Systematic Features/Dimensions: Yes

Contains Explainability: Yes

Contains Interpretability: Yes

Contains Framework/Model: Yes

Operationalization Present: Yes

Primary Methodology: Mixed Methods (Descriptive assessment + expert appraisal)

Study Context: Dutch COVID-19 government dashboard development and adaptation over pandemic pha

Geographic/Institutional Context: Netherlands / Ministry of Health, Welfare and Sport

Target Users/Stakeholders: Policymakers, general public, public health experts

Primary Contribution Type: Empirical case study with conceptual framing

CL: Yes

CR: Yes

FE: Partial

TI: Yes

EX: Yes

GA: Partial

Reason if Not Eligible: N/A

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****Title.****

Development and Actionability of the Dutch COVID-19 Dashboard: Descriptive Assessment and Expert Appraisal

****Authors:****

Véronique L. L. C. Bos, Tessa Jansen, Niek S. Klazinga, Dionne S. Kringos

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****Discipline/Domain:****

Public Health / Health Communication

****Subdomain/Topic:****

COVID-19 dashboards, performance intelligence, public reporting

****Contextual Background:****

Examines the development of the Dutch government's COVID-19 dashboard from June 2020 to January 2021

****Geographic/Institutional Context:****

Netherlands / Ministry of Health, Welfare and Sport

****Target Users/Stakeholders:****

Policymakers, general public, public health experts

****Primary Methodology:****

Mixed Methods (Descriptive assessment + expert appraisal)

****Primary Contribution Type:****

Empirical case study with conceptual framing

General Summary of the Paper

This study investigates the evolution of the Dutch COVID-19 dashboard, assessing its actionability through a descriptive assessment and expert appraisal.

Eligibility

Eligible for inclusion: ****Yes****

How Actionability is Understood

Actionability is defined as the potential of a dashboard to inform decision-making by being:

- **Fit for purpose**: meeting a specific information need.
 - **Fit for use**: delivering the right information to the right audience at the right time, in an understandable way.
- > “Information can be actionable only if it is fit for purpose and fit for use.” (p. 2)
- > “Actionability refers to a dashboard’s potential to inform decision making by way of providing information in a timely and understandable way.” (p. 2)

What Makes Something Actionable

- Knowing the audience and their needs
- Managing type, volume, and flow of information
- Clear data sources and methods
- Linking time trends to policy
- Providing data “close to home”
- Disaggregation into relevant subgroups
- Storytelling and visual cues

How Actionability is Achieved / Operationalized

- **Framework/Approach Name(s)**: Seven common features of highly actionable dashboards (Ivankovits et al., 2020)
 - **Methods/Levers**: Descriptive monitoring, actionability scoring, reflection meetings with dashboard developers
 - **Operational Steps / Workflow**: Iterative adaptation, feedback integration, thematic navigation, indicators selection
 - **Data & Measures**: Epidemiological indicators, health system metrics, behavioral surveys, sewage testing
 - **Implementation Context**: Netherlands, government-led pandemic monitoring tool
- > “The dashboard has been designed for... high-frequency (daily) updates...” (p. 7)
- > “Transparency of data was maximized by making it largely available as open source.” (p. 7)

Dimensions and Attributes of Actionability (Authors’ Perspective)

- **CL (Clarity)**: Yes — Efforts to explain indicators; news-like items for public understanding.
- **CR (Contextual Relevance)**: Yes — Geographic and thematic tailoring, audience shift to public.
- **FE (Feasibility)**: Partial — Constraints due to data access, privacy, and resources.
- **TI (Timeliness)**: Yes — Daily updates, responsive to pandemic phases.
- **EX (Explainability)**: Yes — Narratives and visual cues to aid interpretation.
- **GA (Goal Alignment)**: Partial — Aligned with public health monitoring goals, but not fully integrated with other goals.
- **Other Dimensions Named by Authors**: Transparency, granularity, equity focus (through subgroup data disaggregation)

Theoretical or Conceptual Foundations

- Lasswell's Model of Communication (1948)
- Performance intelligence in health
- WHO pandemic monitoring framework (public health, health system, behavioral, socioeconomic)

Indicators or Metrics for Actionability

- Availability of disaggregation
- Indicator variety (epidemiological, health system, socioeconomic)
- Navigation and usability features
- Timeliness of updates

Barriers and Enablers to Actionability

- **Barriers:**
 - Limited access to neighborhood-level data
 - Privacy constraints on granular data
 - Lack of integrated socioeconomic and ethnicity data
- **Enablers:**
 - Open-source data
 - Political commitment to transparency
 - Ongoing public understanding research

Relation to Existing Literature

Builds on Ivankovič et al. (2021) framework for actionable COVID-19 dashboards, adapting it to the Dutch

Summary

The Dutch COVID-19 dashboard transitioned from a policy-focused monitoring tool to a public-facing com

Scores

- **Overall Relevance Score:** 87 — Strong conceptual clarity, clear criteria, and framework application to
- **Operationalization Score:** 78 — Provides a structured approach to achieving actionability with practi

Supporting Quotes from the Paper

- “Actionability refers to a dashboard’s potential to inform decision making by way of providing information
- “Seven common features... knowing the audience... managing the type, volume... linking time trends to
- “Transparency of data was maximized by making it largely available as open source.” (p. 7)
- “Two of the four key components advised by WHO... were still missing: indicators of available capacity.

Actionability References to Other Papers

- Ivankovi█ et al. (2021) – Features Constituting Actionable COVID-19 Dashboards
- Barbazza et al. (2021) – Actionability of healthcare performance indicators
- WHO (2020) – Pandemic transition monitoring framework