Paper Summary

<!--META_START-->

Title: Actionable Recommendations in the Bright Futures Child Health Supervision Guidelines

Authors: S.M.E. Finnell, J.L. Stanton, S.M. Downs

DOI: http://dx.doi.org/10.4338/ACI-2014-02-RA-0012

Year: 2014

Publication Type: Journal Article

Discipline/Domain: Clinical Informatics / Pediatrics

Subdomain/Topic: Pediatric preventive care guidelines, clinical decision support, guideline implementabil

Eligibility: Eligible

Overall Relevance Score: 88

Operationalization Score: 80

Contains Definition of Actionability: Yes (explicit via GLIA criteria)

Contains Systematic Features/Dimensions: Yes (decidability, executability)

Contains Explainability: Partial

Contains Interpretability: No

Contains Framework/Model: Yes (Service Interval Diagram, GLIA)

Operationalization Present: Yes

Primary Methodology: Qualitative (guideline content analysis)

Study Context: Evaluation of Bright Futures pediatric preventive care guideline for computer implementat

Geographic/Institutional Context: United States; Indiana University School of Medicine / Regenstrief Instit

Target Users/Stakeholders: Pediatricians, clinical decision support developers, public health agencies

Primary Contribution Type: Conceptual and methodological assessment

CL: Yes

CR: Yes

FE: Partial

TI: No

EX: Partial

GA: Partial

Reason if Not Eligible: n/a

<!--META_END-->

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Actionable Recommendations in the Bright Futures Child Health Supervision Guidelines

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Publication Type:

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Discipline/Domain:

Clinical Informatics / Pediatrics

Subdomain/Topic:

Pediatric preventive care guidelines, clinical decision support, guideline implementability

Contextual Background:

Bright Futures is the most widely accepted pediatric preventive health care guideline in the U.S., organize

Geographic/Institutional Context:

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Target Users/Stakeholders:

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Primary Methodology:

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Conceptual and methodological assessment

General Summary of the Paper

This study evaluates the Bright Futures pediatric preventive care guidelines to determine their suitability f

Eligibility

Eligible for inclusion: **Yes**

How Actionability is Understood

Actionability is explicitly defined through GLIA as requiring:

- **Decidability**: Clear specification of the conditions under which to apply a recommendation.

- **Executability**: Specific, unambiguous, detailed description of what action to take.

> "Actionable recommendation statements are both decidable (…clinical circumstances… clearly enough

> "It is impossible to create computer implementable decision rules if the guideline statements are vague

What Makes Something Actionable

- Precise conditions for applicability (decidability)

- Specific, detailed, unambiguous action steps (executability)

- Consistency in recommendation wording

- Potential adaptation to continuous age-based intervals for missed or delayed visits

How Actionability is Achieved / Operationalized

- **Framework/Approach Name(s):** GuideLine Implementability Appraisal (GLIA) v2.0; Service Interval D

- **Methods/Levers:** Consolidation of action statements, GLIA-based assessment, representation of rec

- **Operational Steps / Workflow:**

  1. Consolidate duplicate and fragmented actions into discrete recommendations

  2. Apply decidability criterion first; if met, apply executability

  3. Develop SID to map recommendations across ages

- **Data & Measures:** 2,161 Bright Futures actions; reduced to 245 recommendations; 52 actionable

- **Implementation Context:** Pediatric preventive care; EHR-based clinical decision support

> "The SID spans… from birth to 21 years… represents the appropriate time for delivering services as a c

Dimensions and Attributes of Actionability (Authors' Perspective)

- **CL (Clarity):** Yes — clarity in conditions and actions is essential.

- **CR (Contextual Relevance):** Yes — recommendations should be relevant to specific ages and conte

- **FE (Feasibility):** Partial — feasibility implied but not systematically assessed.

- **TI (Timeliness):** No explicit link to actionability.

- **EX (Explainability):** Partial — some detail provided, but not uniformly.

- **GA (Goal Alignment):** Partial — linked indirectly via alignment with preventive care objectives.

- **Other Dimensions Named by Authors:** None beyond GLIA's standard eight dimensions.

Theoretical or Conceptual Foundations

- GLIA v2.0 (Shiffman et al., 2005) for implementability assessment

- CDC immunization schedule concept for SID format analogy

Indicators or Metrics for Actionability

- Meets GLIA decidability and executability criteria

- Count and proportion of recommendations deemed actionable

Barriers and Enablers to Actionability

- **Barriers:**

- Vague recommendations lacking specificity

  - Organization by visit rather than age interval

  - Inconsistent wording across visits

  - Lack of detail for sensitive topics (e.g., mental health)

- **Enablers:**

  - Clear, specific age-based criteria

  - Standardized, detailed action descriptions

  - Consolidation of redundant actions

Relation to Existing Literature

Authors build on prior GLIA applications in multiple clinical domains and extend the method to pediatric p

Summary

The paper provides a rigorous, criteria-based evaluation of Bright Futures guidelines' actionability, focusi

Scores

- **Overall Relevance Score:** 88 — Explicit definition of actionability via GLIA; comprehensive applicatic

- **Operationalization Score:** 80 — Clear process for assessing and representing actionability; SID offe

Supporting Quotes from the Paper

- "Actionable recommendation statements are both decidable… and executable…" (p. 652)

- "It is impossible to create computer implementable decision rules if the guideline statements are vague

- "The SID spans… from birth to 21 years… represents the appropriate time for delivering services as a c

- "Only 52 (21%) meet criteria for actionability…" (p. 657)

Actionability References to Other Papers

- Shiffman RN et al. (2005) on GLIA

- CDC immunization schedules as a model for SID

- Multiple GLIA applications in other specialties (Hill et al., Peleg & Garber, Nagler et al., van Dijk et al.)