

Digital Adaptation Kits

What are they and why should I use them?

SMART GUIDELINES



L1
Narrative guideline



L2
Digital adaptation kit



L3
Machine readable content



L4
Reference software





L5
Precision health model




What are Digital Adaptation Kits (DAKs)?

Digital adaptation kits (DAKs) are part of the WHO SMART Guidelines approach, which empowers countries to integrate recommended clinical and public health practices, and data recommendations into digital systems.

DAKs are:







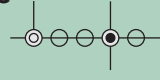

-  A software-neutral, systematic approach to digitize clinical and public health content and ensure use of standards (e.g. International Classification of Diseases—ICD).
-  Structured documentation based on WHO clinical, health system and data use recommendations to inform the design of digital systems.

Challenges with paper-based systems at point of care:





-  Narrative format of guidelines requires significant efforts to accurately translate for use in digital systems.
-  Paper service registers hamper timely uptake of care standards.
-  Inadequate mechanisms to assess consistency of health protocols to recommendations within paper systems.

human reproduction programme
research for impact
UNDP·UNFPA·UNICEF·WHO·WORLD BANK

What is in a SMART DAK?

1	Health interventions and recommendations		Relevant health interventions and recommendations from WHO guidelines and guidance
2	Generic personas		Roles, responsibilities, competencies and essential interventions performed by targeted personas
3	User scenarios		Brief narrative description of how the targeted personas may engage with the digital system
4	Business processes & workflows		Generic workflows representing clinical and non-clinical processes
5	Core data elements		Data elements used for clinical decision-making, indicators, and other data needs
6	Decision-support logic		Decision tables representing counselling and treatment algorithms, scheduling logic
7	Indicators and performance metrics		Indicators for reporting and monitoring with numerator, denominator of data elements based on existing guidance
8	Functional and non-functional requirements		A non-exhaustive list of key functions and non-functional requirements for a digital tracking and decision support system

DAKs aim to improve quality of care and interoperability by:

-  Defining the expected data, functionality, and health content to be incorporated into digital systems.
-  Providing clear descriptions of the decision-support logic, algorithms and indicator calculations for embedding within digital systems.
-  Detailing the core data elements, coded to the ICD and other terminology standards to ensure consistency of how data is represented.
-  Distilling workflows to help with the coordination of care between actors, augmented by digital systems.

How does it work?

DAKs support country's digitization journeys, regardless of where they are in that journey:



Digital system established
Update and incorporate content within digital system to align with WHO and national recommendations

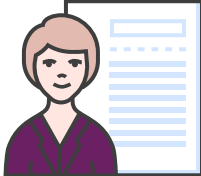


Digital system in planning stages
Kickstart the requirements gathering process for designing digital systems

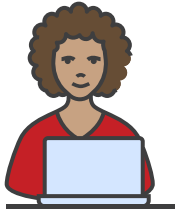


Updating paper registers and job aids
Align and update paper forms to be consistent with WHO recommendations


Value of DAKs across a country's digital health ecosystem:



Ministries of health can oversee and ensure validity of the underlying data and health content within the digital systems.



Software developers and technologists have clarity and a structured process for incorporating WHO recommendations into digital systems.



Health workers can access updated guidelines for decision support logic within the digital system to deliver quality care to clients.

INTERESTED IN IMPLEMENTING DAKS?



For all SMART Guidelines, including DAKs visit:
<https://www.who.int/teams/digital-health-and-innovation/smart-guidelines>

For information on how to introduce DAKs within your systems contact:
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