



IDM INSTITUTE FOR
DISEASE MODELING

Introduction to EasyVA

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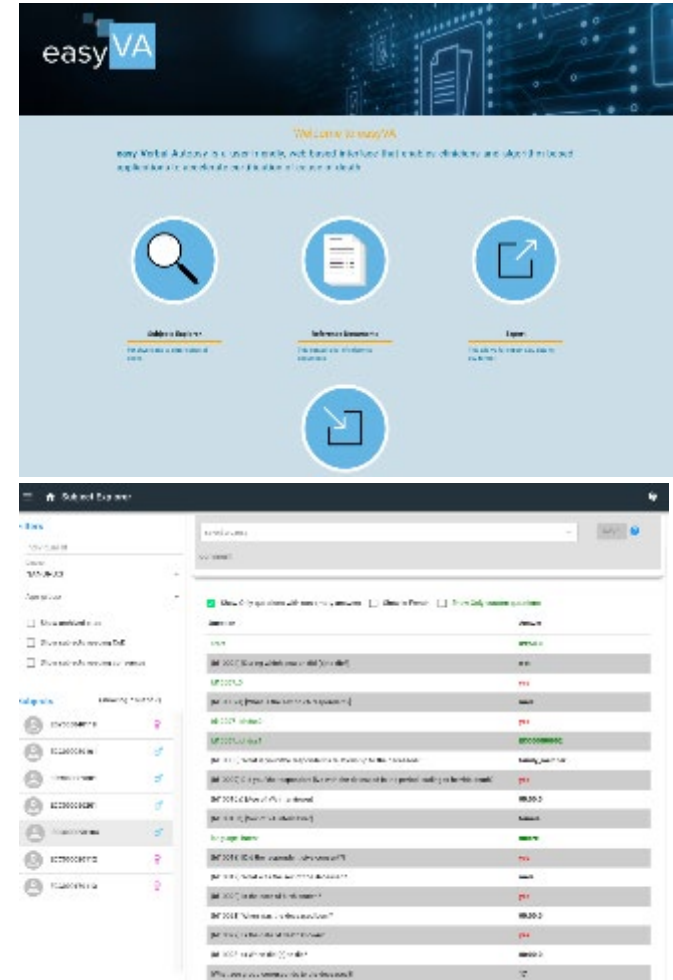
BILL & MELINDA
GATES *foundation*

Overview

- EasyVA is a web based tool to enable clinicians to accelerate certification of cause of death (CoD)
- Launched in 2019, EasyVA continues to evolve with the addition of new features
- Our primary user base consists of
 - HDSS (Health and Demographic Surveillance System) professionals in Nanoro, Burkina Faso
 - International Health Research Institute (icddr) in Bangladesh

Main features

- Allows clinicians / supervisors to read subjects' questionnaire and save CoD
- Provides a workflow to maximize data input accuracy and prevent bias
- Serves as a hub for VA applications integration
- Additional media files integration support
- Enables Single Signon (SSO) and role assignment
- Provides language support for English and French
- Utilizes CoD codes based on ICD-10 WHO-2016 version
- Supports questionnaire in ODK format
- Ensures data privacy. All name fields are removed during import
- Enables users to:
 - easy CoD lookup
 - import questionnaires and export data
 - create death certificates



User Roles, Responsibilities

Clinician

- Read questionnaire
- Save CoD
- Can't see others input

Supervisor

- See subjects needed
- consensus
- Read questionnaire
- Save CoD
- Hold consensus meeting and set final CoD

Site Rep

- Import and Export data
- View CoDs
- View VA apps result
- Can't save CoD
- Access to only 1 site

IDM Staff

- Similar to site Rep
- Access to multiple sites
- Assign users to site
- Can't save CoD

VA application integrations

- These applications use their algorithms to determine the probable CoD
- Currently, users can import CoDs resulted from these apps into EasyVA
- A new release in June allows running of VA apps as part of EasyVA during questionnaire import

InSilicoVA v1.4

InterVA v5

SmartVA v2.2

	DEMOGRAPHICS	SURVEY	FILES	DEATH CERTIFICATE	<u>ALGORITHM</u>	ADMIN
Algorithm		CoD.1			CoD.2	
InterVA		I4.02 Stroke Likelihood: 68%			I4.99 Other and unspecified cardiac dis Likelihood: 31%	
InSilicoVA		Other and unspecified infect dis Likelihood: 99%			Other and unspecified cardiac dis Likelihood: %	
SmartVA		I64 Stroke Likelihood: %			Likelihood: %	

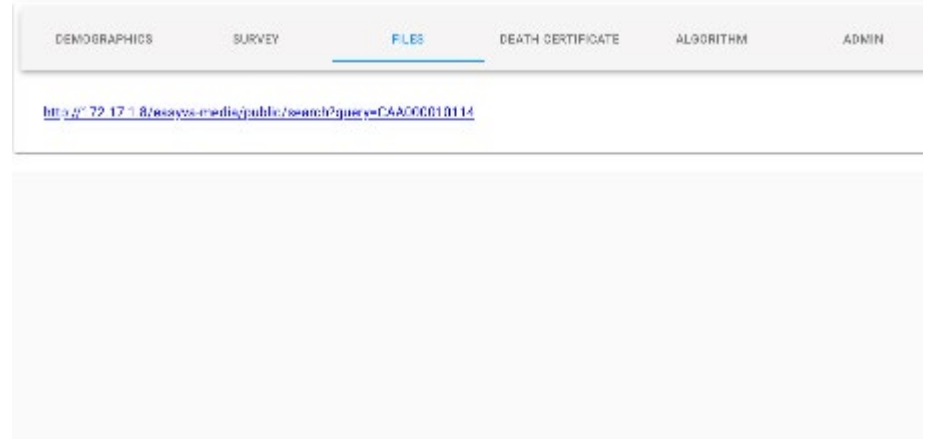
Workflow demo

scenario 1: Two clinicians enter the same CoD

Scenario 2: 3 clinicians enter different CoD and consensus is needed

Support for Auxiliary files

- Auxiliary files may exist for a subject. This may include:
 - Doctor notes
 - Audio files
- Provides a gateway to access those files
- Files are not stored in EasyVA
- Extra login process maybe needed



Death Certificate workflow

- Allow clinicians to save a death certificate.
- Allow only supervisors to save final death certificate and then print out for filing

DEATH CERTIFICATE

Part I: Cause leading to death

ICD-10 (WHO) code for the cause of death (cause and mechanism)	cause	duration
SELECT A CAUSE		duration
SELECT A CAUSE		duration
SELECT A CAUSE		duration

Part II: Underlying conditions that are certified as related to the cause

condition	duration	PRINT
condition	duration	SAVE PDF

Import demo

scenario: import sample questionnaire data and view algorithm results

Next step

- Release the work for VA applications processing pipeline (June 2023)
- We are planning to release source code to public
 - Allow outside collaborators to contribute
 - partners can deploy EasyVA in their environments
- Use AI
 - co-pilot. Eg: ChatGPT can be used to summarize the questionnaire
 - Determine CoD
- Continue to onboard new partners to EasyVA
- Add analytics

The team

- Andre Lin Ouedraogo, principal research scientist
- Bee Workeneh, backend software engineer and Db administrator
- David Kong, frontend software engineer
- Tony Tiny, QA software engineer

Questions / Comments

Thank you!