WHO VARG WORK PLAN 2021-2022	
ACTIVITIES	**DESCRIPTION**
Questionnaire Improvement & Maintenance	
Core and maintenance activities	
Routine maintenance of issues with the WHO VA instrument	Routine maintenance includes COVID-19 related adaptations as needed.
Management of translated versions of the WHO VA instrument	Repository/platform to support and make available translated versions of the 2016 WHO VA instrument created. Arranging process for verification of translations. Agreed to search for methodologies, options and guidelines for recommended steps in translation. Proposed to add as an
Maintain archive of VA methods, including questionnaire versions, version comparison, and algorithm versions	The WHO VARG SharePoint site has been established to track VA documentation, including translations. It needs to be updated to include the methods archive. The WHO VA version comparison tool also needs to be updated for 2021. For access to the WHO VARG SharePoint site, contact contact Carine Alsokhn at alsokhnc@who.int.
Focused activities	
Instrument revision (2021) - test electronic version, coordinate field test (research), and publish	A draft of the proposed revised instrument is now available in electronic version. Next steps are to review the electronic version, field test the questionnaire, and to publish the instrument.
Design the structure and process for a modular approach for VA questionnaire construction (i.e., what modules, questionnaire sequence); design and coordinate the process to incorporate modules, including consideration of impact on COD assignment.	The use of a modular approach was recommended as part of the questionnaire revision process to support the shortest feasible instrument for routine VA (focusing on questions related to COD), while providing for standardized additions of VA sections of common interest to users. Programming options to accommodate optional modules need to be explored. Complex modules might require validation testing to ensure they do not impact COD assignment as compared to the core instrument (research item).
Cause of death analysis	
Core and maintenance activities	
Develop standard VA and reference death archive to support standard global and regional SCI for VA at scale and to support future CCVA development	The WHO VARG SharePoint site was used to compile VA data for VARG analysis and evaluation purposes (limited access). Need to define the governance rules for contributing data, accessing and using the standard reference death archive for expanded purposes.
Coordinate and inform the development of CCVA	Strategy for supporting continued development of CCVA that supports countries/routine users. To link to validation protocol discussion.
Develop and Maintain Resources & Guidance for Instrument and Implementation	
Core and maintenance activities	
Assess the gap in resources and guidelines for the VA community of users	
Update and maintenance of the existing knowledge base and resources for the VA adoption, implementation, analysis and dissemination	Manuals and supporting materials include: WHO VA standards; VA Field Interviewer Guide; Manual for the training of interviewers; Manual for the training of master trainers and supervisors; Training curriculum and agenda for the training of VA interviewers; Training curriculum and agenda for the training of master trainers and supervisors; and the ODK for VA: A quick guide. Additional content suggested from WHO-FIC poll: Promote training in filling the VA, Indepth Training module for health care providers. Training manuals need to be adapted for the 2021 WHO VA instrument release.
Focused activities	
Assess the feasibility of compiling the existing guidelines and resources into an integrated online resource	
Strengthen the knowledge base and the resources available for the **analysis of VA data to ascertain the COD.** To be completed in the current workplan: 1. Development of standardized guidelines for physician certified VA (PCVA) in the CRVS context 2. Develop guidance on standard/recommended approaches to use of CCVA: algorithms, multiple/single cause, SCI	
Strengthen the knowledge base and the resources available for the **operationalization of VA in LMICs.** To be completed in the current workplan: 1. Guidelines for managing sensitive issues related to VA/ Review ethical principles & guidelines for VA implementation in the context of CRVS 2. SOP for QA of VA responses 3. Standard interviewer mental health support 4. Protocol for VA data quality review in CRVS settings (incl. QC checklist for household revisits) 5. Guide to implementing CRVS improvements - VA module (Pathway Guide) 6. Review standards, recommendations for 'interview design', language issues [interpreting, translation, etc.	

Strengthen the knowledge base and the resources available for the **use and dissemination of VA results to inform decision making processes.** To be completed in the current workplan: 1. Good practice guide'/toolkit for presenting vital statistics including VA and dissemination of data for timely use locally/in-country, including how to integrate MCCD and VA 2. Template for VA country reports 3. Guidance on analysis with VA and MCCD data 4. Guidance to aid in analysis and interpretation of VA data (interpretation of multiple COD outputs)	

IT Developments
Core and maintenance activities

OpenVA continued development (incl. guidance on use, training procedures and materials)	openVA is a software that runs automated VA coding algorithms and is available as a package for the R statistical software. The primary motivation is to help users compare results across different algorithms using a single tool. The software is freely available and open source. Available algorithms include InSilicoVA, InterVA4, InterVA5, and Naïve Bayes Classifier, Tariff. and Tariff2.

Work is underway with the programming team to update the WHO Mortality Database to include VA data; further input is needed on the terms for contributing VA data, including how COD should be captured and input into the db; these decisions need to be coordinated with IT developers to ensure the IT/analysis tools can provide the datafiles in the format needed for the database. Once the system is developed and tested, it would move to user engagement to encourage use.

Support integration of VA data into updated WHO Mortality Database	Now working with the WHO Mortality Database programming team for the Database to accommodate VA data; we will need input on terms for how COD should be captured and input into the db and to update the IT/analysis tools to output the data accordingly). Once the system is developed and tested, it would move to user engagement to encourage use.
Conversion of "Question by Question" guidance into more accessible format in ODK Collect	Use of question mark icon/button in ODK Collect that would make pop up the QbyQ guidance
Consolidate/rationalize VA IT investment and standards for VA-IT	Using the VA-IT components roadmap as a reference, assess status of and map existing tools and their related functions, determine approach and resources needed to support core system architecture, and develop approach for various VA tools to interface with core system, including standards for VA-IT; develop VA IT investment proposal/plan
Coordinate the development of omnibus VA manager tool for automated processing of VA data (e.g. VA Explorer + VA Manager)	Drawing from VA IT investment proposal/plan.
Facility for routine software development, maintenance, training, and 'help desk' support	Drawing from VA IT investment proposal/plan; Need discussion around "core" VA-IT components that WHO/VARG want to ensure continue to exist vs other "non-essential" components.

User Engagement & VA Advocacy
Core and maintenance activities

Maintenance of VA user and implementation tracking database and interactive map	Database and interactive map tracking past and current use with the 2016 WHO VA instrument. Updates planned on a yearly basis.
Maintenance and updates to the VARG web pages for VA standards and implementation resources (hosted at SwissTPH: https://www.swisstph.ch/en/about/eph/household-economics-and-health-systems-research/whova/)	Website intended as supplemental resource for VA users to access relevant additional tools and resources that support the implementation of VA.
Support the engagement of WHO collaborative centres	Participants of the WHO VA Reference Group are encouraged to formalize their support through a WHO Collaborating Center. Instructions for setting up Collaborative Centres can be found at the VARG SharePoint and in the following web page: https://www.who.int/collaboratingcentres/Guide_for_WHO_collaborating_centres_2014.pdf?ua=1 For more information, contact Carine Alsokhn at alsokhnc@who.int.
Create and maintain regular forums for sharing of experiences in use of VA methods etc. from end users in range of settings, for supporting compilation of evidence of VA performance, and for providing implementation support to VA users.	Current mechanism established for exchange of practices related to COVID-19 in VA; suggestions to develop and maintain a community of practice network for country-level VA Managers; and to provide active engagement with users to encourage use and support implementation of WHO VA tool (WHO CO, RO, local agencies).

Focused activities

Develop online monitoring tool for sites to log info (epi of VA use to help identify problems that need to be addressed, characteristics for monitoring implementation)	Include tracking the incorporation of VA data into mortality Information Systems.

Develop & Support Research Agenda
Core and maintenance activities

Inform, coordinate and provide oversight in VA research	

Focused activities (to be further reviewed and prioritized after gaps identifed)

Identify research gaps and develop research agenda - resource development research agenda AND implementation research agenda	

- Design (protocol) and implementation of the validation of the 2021 WHO VA instrument.	Testing instrument in ODK Collect, testing effect of item reduction on algorithms, field testing and validating the 2021 WHO VA instrument. Generic/consensus principles for validation of VA to be comparable (users, design and outcomes) might emerge from the validation of the 2021 WHO VA instrument. Linked to algorithm governance activity.
- Investigate how to best use the narrative for CCVA	
- Evaluate the performance of the addition of COVID-19 to the VA tools (questionnaire and cause list)	CDC, Vital Strategies, and Swiss TPH are developing a prospective meta analysis methodology to coordinate and review findings. They will report findings to the VARG for review and consideration.
- Research around problems with notification and ways to improve it	
- Possibilities of retrospective analysis using the current tool for the past data	To be discussed in next VARG meeting -Agree that there is a current gap in this guidance. Would be helpful to brainstorm what should be included and to identify volunteers.