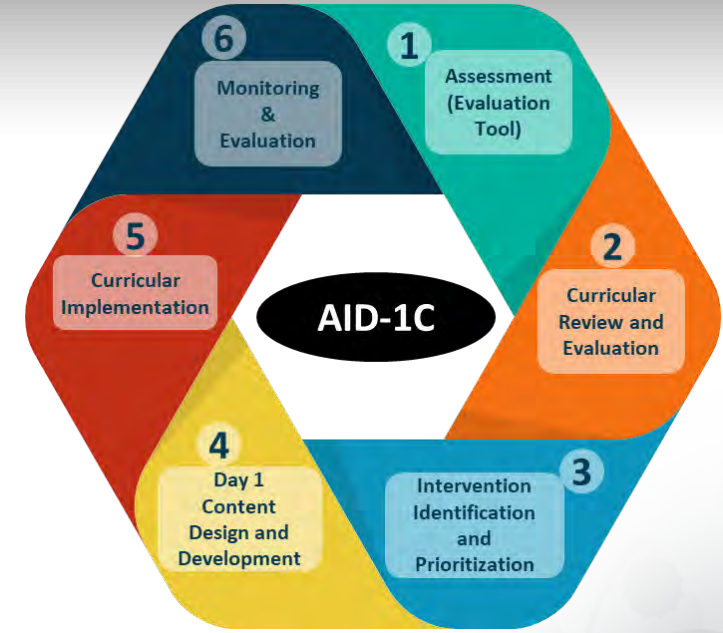




Overview of the Curriculum Assessment Process (AID-1C) and Timeline



**“The 1st OIE Sub-Regional Virtual Workshop on
Veterinary Education Establishment (VEE) Accreditation”**

Thailand, 1st September 2021

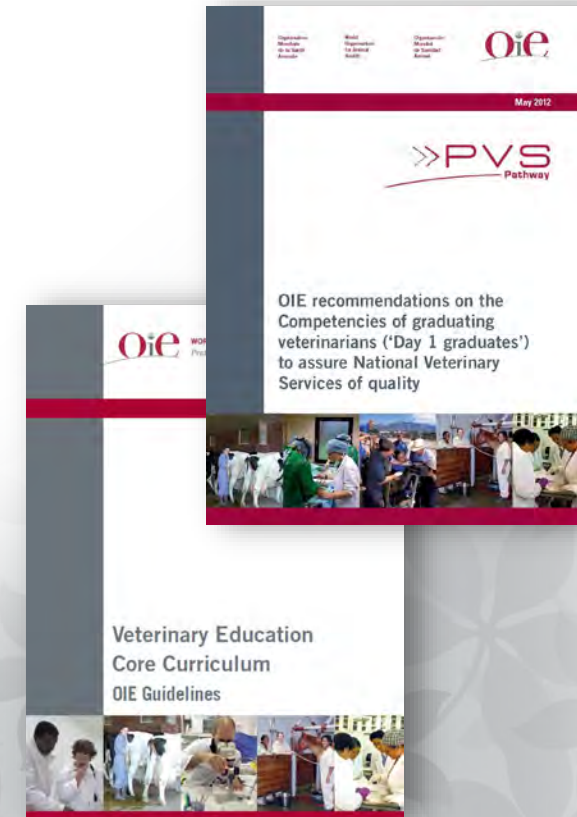
**Armando E. Hoet, DVM, PhD, DACVPM
Director, Veterinary Public Health Program**



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Points to Cover:

- **Assessment and Implementation of OIE Day 1 Competencies: AID-1C model**
- **Assessment Timeline**





**What is the Main Goal
of this process?**



Main Goal:

To evaluate and harmonize the Veterinary Curriculum to the OIE Day 1 Competencies and Veterinary Core Curriculum to graduate highly proficient veterinarians...



Main Goal:

To evaluate and harmonize the Veterinary Curriculum to the OIE Day 1 Competencies and Veterinary Core Curriculum to graduate highly proficient veterinarians with “... the required knowledge, skills, attitudes and aptitudes to understand and be able to perform entry-level national veterinary service tasks that relate to the promotion of animal and public health.”OIE



OIE recommendations on the Competencies of graduating veterinarians ('Day 1 graduates') to assure National Veterinary Services of quality



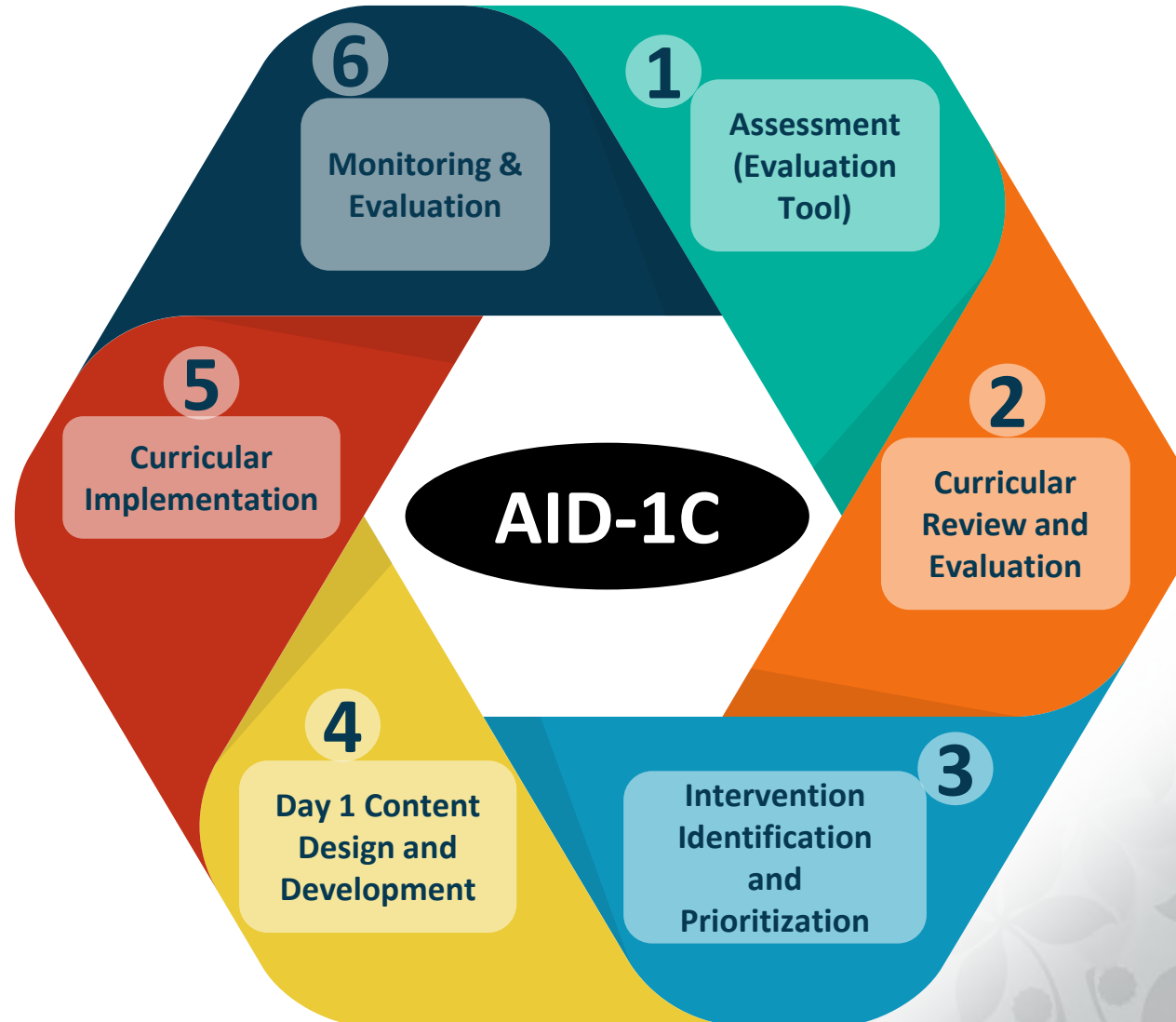


So, where to start and how to move forward?



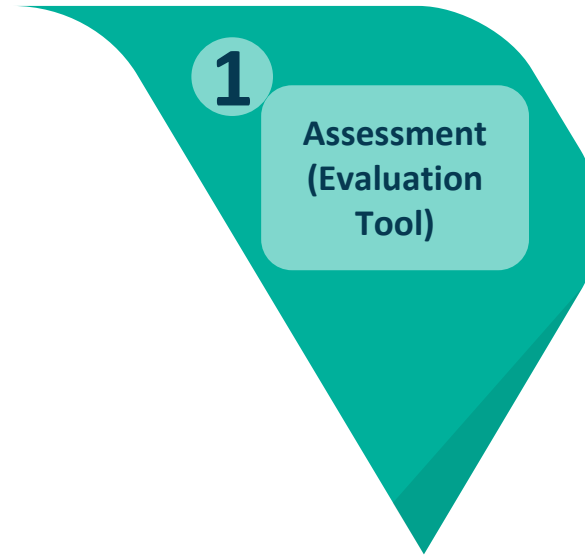
Assessment and Implementation of OIE Day 1 Competencies

AID-1C model



Assessment and Implementation of OIE Day 1 Competencies

AID-1C model



Assessment and Implementation of OIE Day 1 Competencies AID-1C model

Paper-based

University of Gondar-The Ohio State University
OIE Veterinary Education Twinning Program

Evaluation Tool for OIE Day 1 Graduating Veterinarian Competencies

Evaluation of OIE Day 1 Competencies
Session 1: Epidemiology and Food Hygiene

Day 1 Competency: 2.1 Epidemiology

a.) General Principles of Descriptive Epidemiology

- Measuring Disease
- Measuring Occurrence

Is the average Day 1 DVM graduate able to:	Not a Competency	Highly Competent	Modestly Competent	Insufficiently Competent	Not Competent	Not Sure	Comments
Measure and describe disease? (i.e. calculate morbidity and mortality rates, attack rates, etc.)							
Calculate and describe disease occurrence? (i.e. incidence and prevalence)							
Describe the difference between the various temporal and spatial distributions of disease? (i.e. endemic, sporadic, and epidemic)							

Faculty

Competency	H	M	I	NC	NA
Measure and describe disease?	22%	53%	20%	1%	0%

Students

Competency	H	M	I	NC	NA
Measure and describe disease?	17%	70%	13%	0%	0%

Stakeholders

Competency	H	M	I	NC	NA
Measure and describe disease?	22%	67%	11%	0%	0%

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OIE Specific Competencies

The next section covers OIE Specific Competencies, which include:

- OIE 2.1: Epidemiology
- OIE 2.2: Transboundary Animal Diseases

SAMSUNG

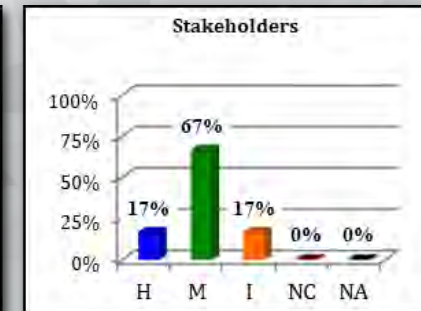
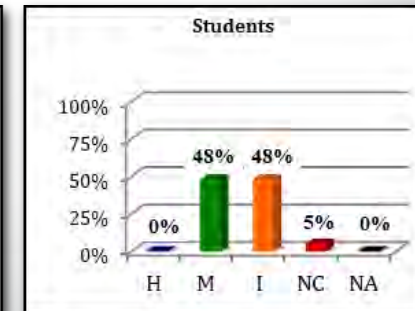
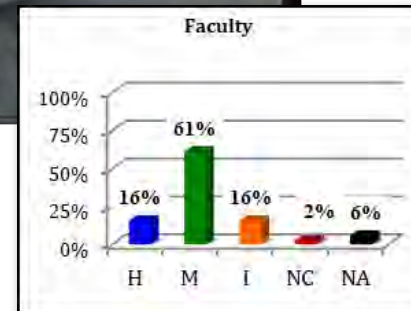
Assessment and Implementation of OIE Day 1 Competencies

AID-1C model

1
Assessment
(Evaluation
Tool)

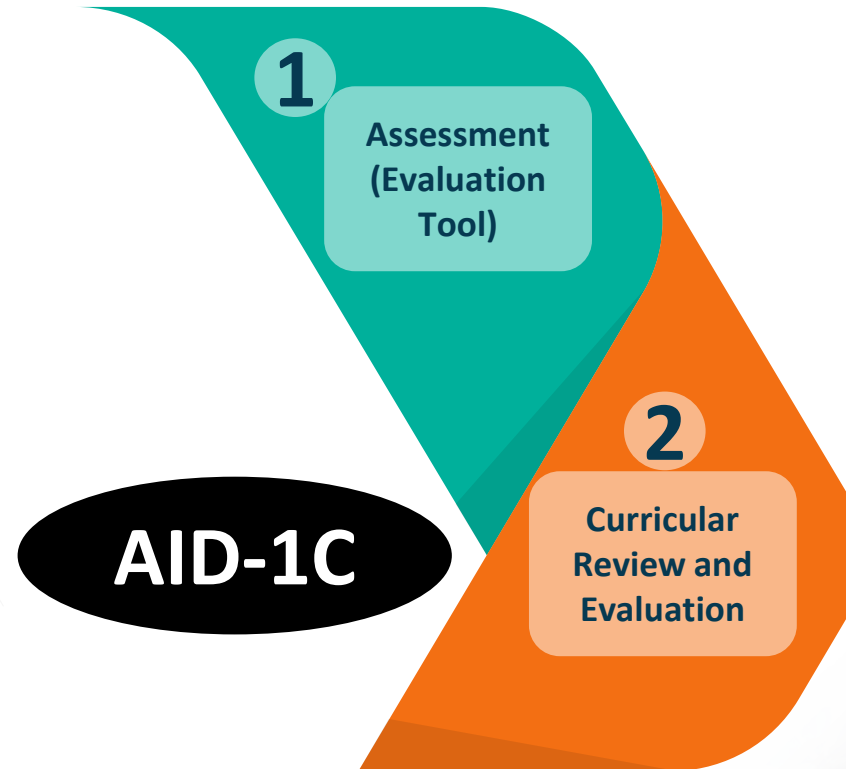


Overall Assessment of **2.2 Transboundary Animal Diseases (TADs) Competency** ranked from High [H], Moderate [M], Insufficient [I], Not-Competent [NC], or Not in the Curriculum [NA] by faculty, students and stakeholders



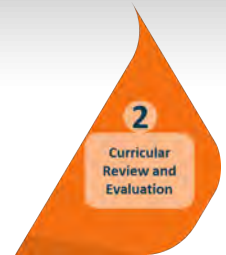
Assessment and Implementation of OIE Day 1 Competencies

AID-1C model



Assessment and Implementation of OIE Day 1 Competencies

AID-1C model



Ten Lowest Rated Topics

Topics	Overall % Perceived H + M*
1. Aware of the concept of translational research. (3.6- Research)	18%
2. Acquainted with the WTO Sanitary and Phytosanitary Measures. (3.7- International Trade Framework)	24%
3. Appropriately complete health certificates and other transport or mobilization paperwork based on national regulations. (2.10- General Certification Procedures)	27%
4. Perform residue testing to ensure that animal products are free of adulterants such as antimicrobials, pesticides, hormones, and metals that would pose risk to human health if consumed. (3.4- Advanced Food Hygiene)	27%
5. Able to research current and reliable information regarding international trade. (3.7- International Trade Framework)	27%
6. Identify Up-to date information regarding changes in local, national, and international standards and regulations. (2.8- Animal Welfare)	31%
7. Recognize the OIE PVS Tol used to evaluate National Veterinary Services. (2.9- Veterinary Legislation and Ethics)	31%
8. Appropriately complete health certificates and related paperwork based on international or national standards and regulations. (3.2- Inspection and Certification Procedures for Exportation)	31%
9. Able to find up-to-date and reliable information on risk analysis. (Application of Risk Analysis)	31%
10. Aware with the Codex Alimentarius Commission (CAC) in developing science-based regulations governing international trade in food products of animal origin. (3.7- International Trade Framework)	31%

CURRICULAR MAPPING

Table 1: Coverage of Specific OIE Competencies in the UoG Veterinary Curriculum

OIE Day 1 Competencies that should be Covered	OIE Day 1 Competencies Actually Covered in UoG Curriculum
Epidemiology (2.1)	Yes
Transboundary Diseases (2.2)	Yes
Zoonoses (2.3)	Yes
Emerging and Re-emerging Diseases (2.4)	Yes
Disease Prevention and Control Programs (2.5)	Yes
Food Hygiene (2.6)	Yes
Veterinary Products (2.7)	Yes
Animal Welfare (2.8)	Yes
Veterinary Legislation and Ethics (2.9)	Yes
General Certification Procedures (2.10)	No
Communication Skills (2.11)	Yes

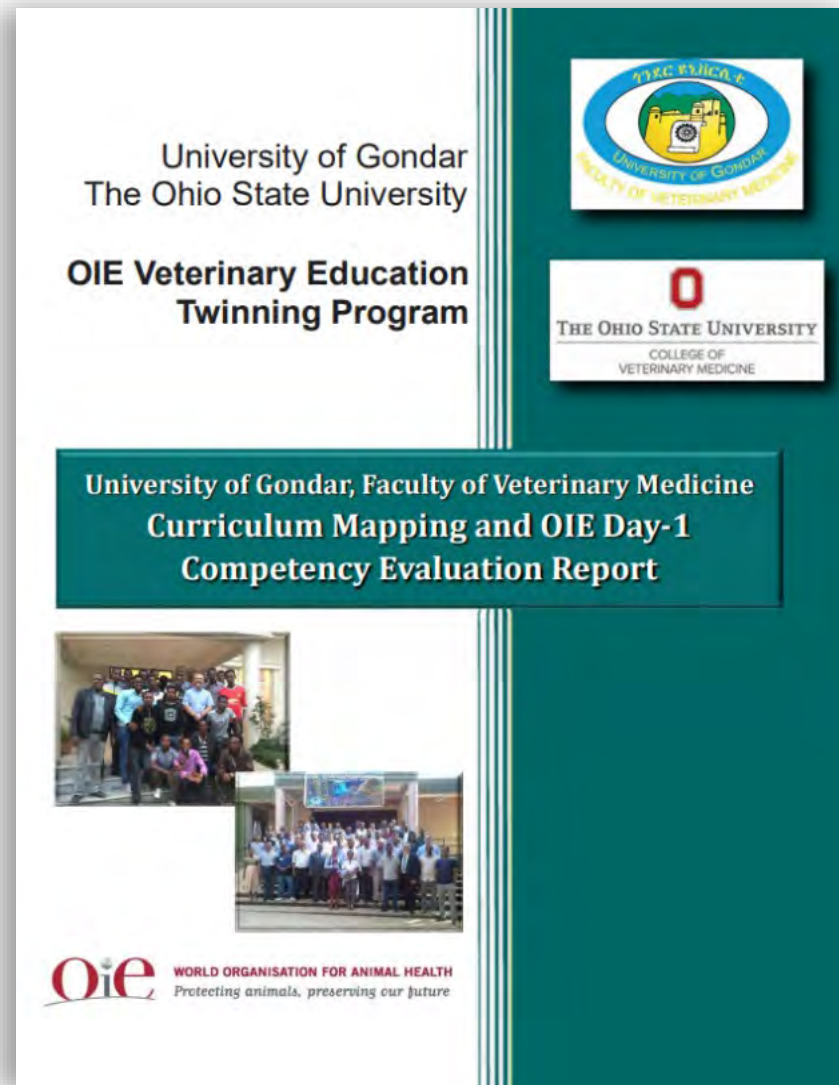
Table 2: Coverage of Advance OIE Competencies in the UoG Curriculum

OIE Day 1 Competencies that should be Covered	OIE Day 1 Competencies Actually Covered in UoG Curriculum
Organization of Veterinary Services (3.1)	Yes
Inspection and Certification Procedures (3.2)	No
Management of Contagious Diseases (3.3)	Yes
Food Hygiene (3.4)	Yes
Application of Risk Analysis (3.5)	Yes
Research (3.6)	Yes
International Trade Framework (3.7)	No
Administration and Management (3.8)	Yes

Assessment and Implementation of OIE Day 1 Competencies AID-1C model

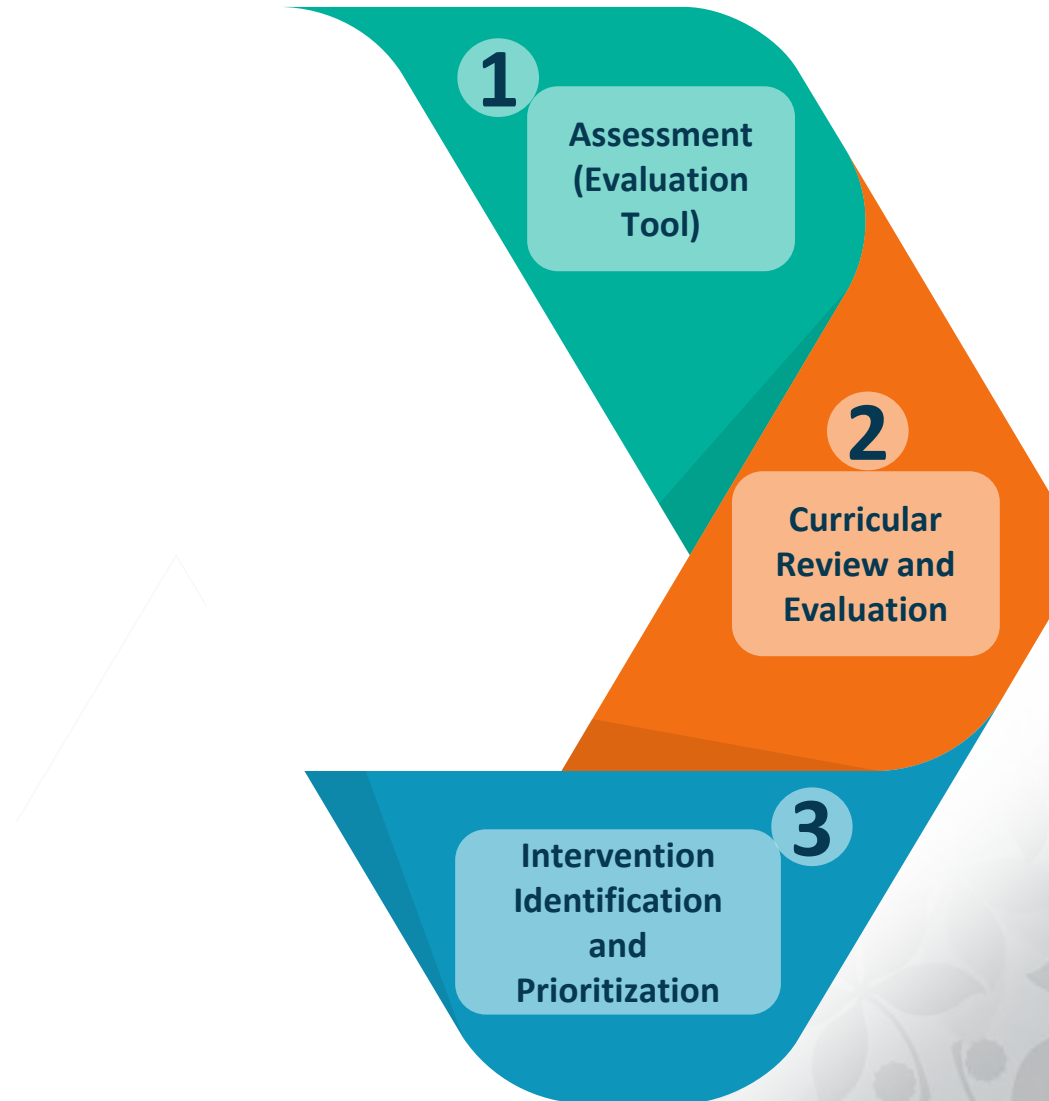
2

Curricular
Review and
Evaluation



Assessment and Implementation of OIE Day 1 Competencies

AID-1C model



Assessment and Implementation of OIE Day 1 Competencies

AID-1C model

FOCUS FORWARD

Methodology



Day 1



Day 2



Assessment and Implementation of OIE Day 1 Competencies

AID-1C model

FOCUS FORWARD

Methodology



Day 1

- Presentation of identified problems
- Working Groups:
 - Guided Discussions on Possible Causes
 - Brainstorming Possible Innovated Solutions

Day 2



Assessment and Implementation of OIE Day 1 Competencies

AID-1C model

FOCUS FORWARD Methodology



Day 1

- Presentation of identified problems
- Working Groups:
 - Guided Discussions on Possible Causes
 - Brainstorming Possible Innovated Solutions

Day 2

- PRIORITIZATION:
 - Presentation of results from day 1
 - Vote to prioritize possible solutions



Assessment and Implementation of OIE Day 1 Competencies

AID-1C model

FOCUS FORWARD

Methodology

Intervention
Identification
and
Prioritization

3

SESSION 1: CURRICULAR MAPPING

TOPIC 1: MISSING COMPETENCIES

- **GAP:** Three OIE Competencies Missing in the UoG Veterinary Curriculum
 - General Certification Procedures (2.10)
 - Inspection and Certification Procedures (3.2)
 - International Trade Framework (3.7)

TOPIC 2: OIE MISSING CONTENT

- **GAP:** Major OIE Missing Content in the UoG Veterinary Curriculum
 - Risk analysis
 - Drug withdrawal times and drug residues (including testing and impact)
 - Environmental health and biological waste management
 - Outbreak investigation and outbreak management

TOPIC 3: COURSE MISALIGNMENT

- **GAP:** Courses are taught in a different sequence than proposed
 - Animal Welfare (currently in the 5th year => ideally 1st or 2nd year)
 - Biostatistics (currently in the 5th year => ideally 1st or 2nd year)
 - English (Communications) (currently in the 1st year => ideally 2nd year)

SESSION 2: OIE SPECIFIC COMPETENCIES

TOPIC 1: INFECTIOUS DISEASES RELATED COMPETENCIES

- **GAP:** Low levels of confidence and proficiency across Transboundary Animal Diseases (2.2), Emerging and Re-emerging Diseases (2.4), Zoonotic Diseases (2.3) and Disease Prevention and Control Programs (2.5) in regard to:
 - How to identify or recognize infectious diseases, especially Transboundary Animal Diseases (TADs) and Emerging Diseases (EDs).
 - How to select the proper diagnostic technique(s) and how to interpret its(their) results.
 - How to identify proper therapeutic approaches and interventions to manage outbreaks by TAD and ED.

TOPIC 2: REGULATORY MEDICINE RELATED COMPETENCIES

- **GAP:** The average graduate is not sufficiently competent in regard to General Certification Procedures (2.10) to determine if an animal is healthy and how to generate a health certificate.
- **GAP:** The average graduate is also unsure of the proper authorities to report an incident event or outbreak of a TAD/ED to, as well as the proper chain of reporting.

TOPIC 3: GENERAL COMPETENCIES

- **GAP:** The students and recent graduates did not feel competent managing animal welfare related issues in common or routine situations.
- **GAP:** The recent graduates were also identified as insufficient or not competent in:
 - Proper use of veterinary products, especially in regard to withdrawal times,
 - Drug residue testing,
 - Issuing of Health Certificates,
 - Mobilization permits.
- **GAP:** Identifying up-to-date information regarding subjects related to OIE Competencies.

SESSION 3: OIE ADVANCED COMPETENCIES

TOPIC 1: ORGANIZATION OF VETERINARY SERVICES

- **GAP:** The average graduate is not sufficiently competent in Organization of Veterinary Services (3.1), specifically as it relates to the organization of veterinary services in Ethiopia.

TOPIC 2: MANAGEMENT OF CONTAGIOUS DISEASE

- **GAP:** The average graduate is not sufficiently competent in regulatory components related to Management of Contagious Disease (3.3), specifically in how to respond to outbreaks of contagious diseases (including TADs and EDs), such as:
 - Movement Control and Quarantine,
 - Traceability,
 - Humane Euthanasia,
 - Carcass Disposal,
 - Disinfection and Sanitization,
 - Zoning and Compartmentalization Principles.

TOPIC 3: INTERNATIONAL TRADE FRAMEWORK

- **GAP:** The average graduate is not sufficiently competent in laws and regulations for international trade of animals and animal products.
- **GAP:** The average graduate is not sufficiently competent in regard to international intergovernmental agencies and their roles and responsibilities.

SESSION 4: HUMAN FACTOR AND INFRASTRUCTURE

TOPIC 1: STUDENTS

- **GAP:** Lack of motivation, proactiveness, and confidence were described by the students as major road blocks in their education. Some of the reasons provided were:
 - Students are assigned to the DVM degree although this is not their professional passion (veterinary medicine was not their first or second choice).
 - There are no clear career paths post-graduation – they have difficulty identifying relevant career options.
 - Presence of a strong hierarchical teaching structure, which discourages student participation.

TOPIC 2: TEACHING

- **GAP:** Some of the issues identified, by both students and faculty, that are interfering with an effective teaching and learning environment are:
 - Pedagogy or instructional method problems (from course design to class delivery and evaluation).
 - Teaching methods are heavily classroom-based.
 - Insufficient experience (especially by young faculty) in certain subjects.
 - Unenthusiastic students with little motivation to learn.

TOPIC 3: INFRASTRUCTURE

- **GAP:** Many of the OIE Competencies are primarily theory-based teaching, especially those with a clinical component. Some of the reasons listed are:
 - There are no diagnostic or service laboratories at the university and the teaching laboratories are largely didactic due to limited resources.
 - There are no (or are very limited) field diagnostic tests (i.e. CMT) for practice and teaching purposes, as well as limited supplies and materials for field training (i.e. sample collection).
- **GAP:** One recognized gap that was present across the majority of competencies was insufficient or lack of competency among new graduates' capacity to identify updated national and international sources of information relevant to Day-1 Competency subjects.

Assessment and Implementation of OIE Day 1 Competencies

AID-1C model

FOCUS FORWARD

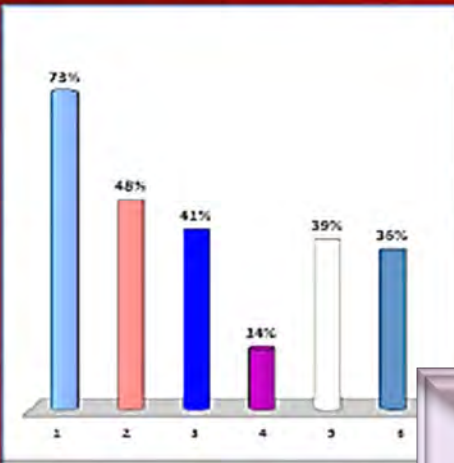
Methodology

Intervention
Identification
and
Prioritization

3

What should be done to improve students ability to recognize, diagnosis and manage TAD and ED? (Pick up to 3)

1. Add practical components to current classes
2. Increase collaboration with local district veterinarians
3. ID Key diagnostic techniques (TAD/ED/Zoo) to develop lab capacity
4. Have a specific core rotation off-site
5. Insert in the curriculum case-based outbreak scenarios
6. Create Video-Library of TAD/ED



Assessment and Implementation of OIE Day 1 Competencies

AID-1C model

FOCUS FORWARD

Methodology

UoG-OSU Twinning ACTION PLAN	
Action Item	Description
☐ 3. Revise current courses to incorporate missing Day-1 Competency (3.7) International and Trade Framework to an existing class(es).	Theory concepts will be incorporated into 4 th year Animal Health Economics (Vetm5234) course.
Comments:	
OIE Missing Content	
► GAP: Significant content from the OIE Veterinary Education Core Curriculum were identified as missing during the UoG College of Veterinary Medicine curricular mapping, among them: • Risk analysis. • Drug withdrawals times and drug residues (including testing and impact). • Environmental health and biological waste management. • Outbreak investigation and outbreak management.	
Action Item	Description
☐ 4. Incorporate Risk Analysis through expanding content already in the UoG Veterinary Curriculum and add a practical oriented teaching component.	Two main approaches will be utilized: A. Theory concepts will be incorporated into the 5 th year Veterinary Epidemiology (Vetm5232) course. B. Practical portions will be incorporated in the same course via assignments which could include: case based scenarios, group homework assignments, and/or risk analysis exercises.
Comments:	

Create an **ACTION PLAN** to address identified deficiencies in regards to OIE Day-1 Competencies



University of Gondar
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OIE Veterinary Education Twinning Program



UoG FOCUS FORWARD EVENT Twinning Action Plan



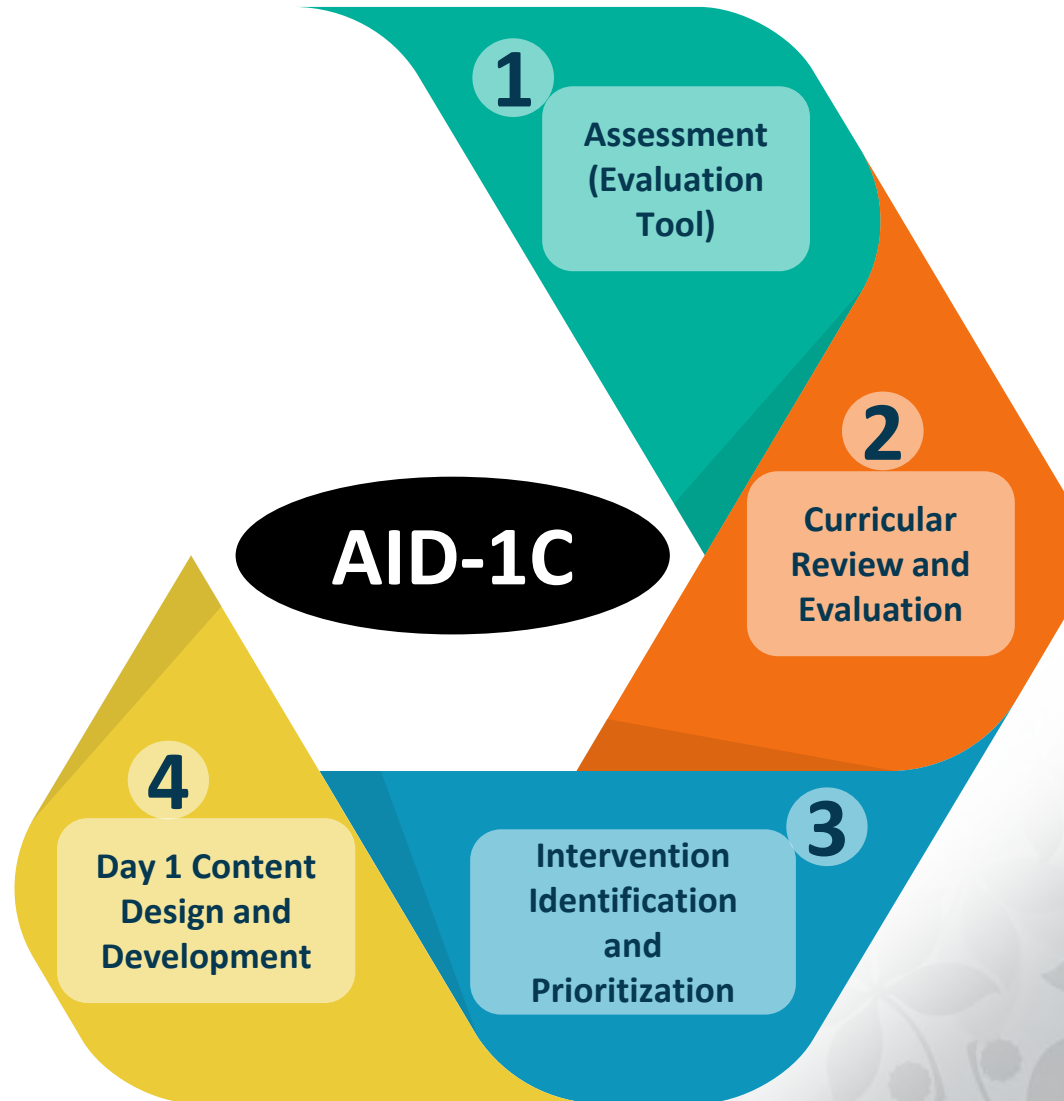


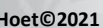

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July 2017

Assessment and Implementation of OIE Day 1 Competencies

AID-1C model

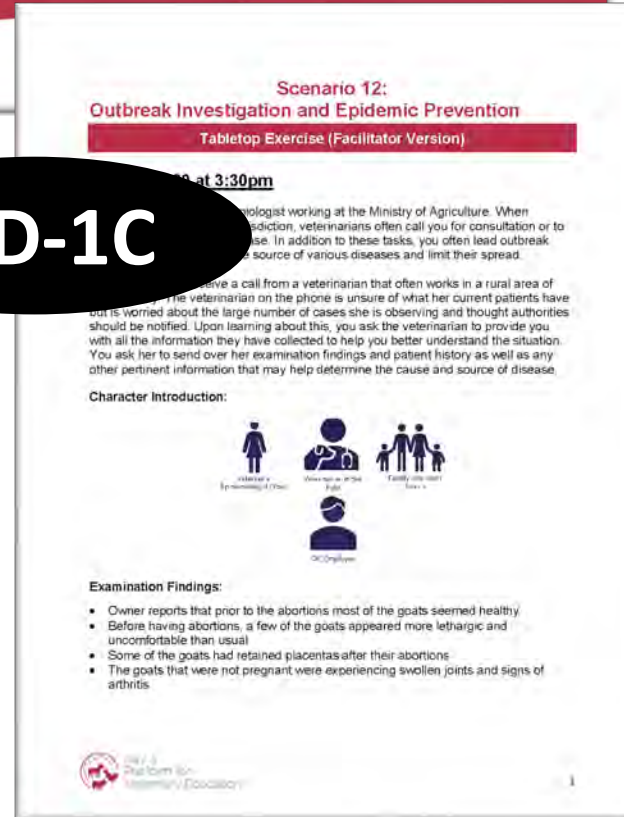
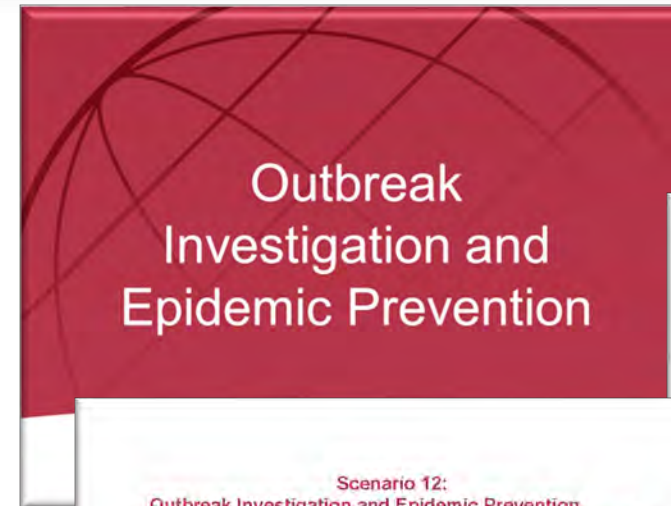




Assessment and Implementation of OIE Day 1 Competencies AID-1C model



AID-1C



4

Day 1 Content
Design and
Development

Scenario 12: Outbreak Investigation and Epidemic Response Curriculum Guide

Curriculum information

Scenario Description: In this scenario, students will work with their groups through an outbreak investigation, using their knowledge of biosecurity, epidemiology, and diagnostics to help address the issue. During this scenario, students will evaluate the prevalence of a zoonotic disease, use their knowledge of disease to form a biosecurity plan, advise clients on how to control the outbreak, and suggest a type of surveillance plan that would be used for future detection. Each student is meant to contribute their own "expertise" to the scenario as certain questions arise. The goal is for students to see the outbreak from their assigned stakeholders' perspective to help them better understand the complexity of such situations.

Learning Objectives:

Students will be able to:

1. Apply steps of a disease outbreak investigation
2. Apply descriptive epidemiology concepts, including calculating measures of disease frequency and risk
3. Apply analytic epidemiology concepts to determine disease risk factors
4. Recommend effective disease control and prevention measures to protect human and animal health during a realistic scenario
5. Perform effective and gender-sensitive risk communication to diverse stakeholders

OIE Competency Met:

- OIE 2.1 (Epidemiology)
- OIE 2.4 (Emerging and Re-Emerging Diseases)
- OIE 2.5 (Disease Prevention and Control Programs)

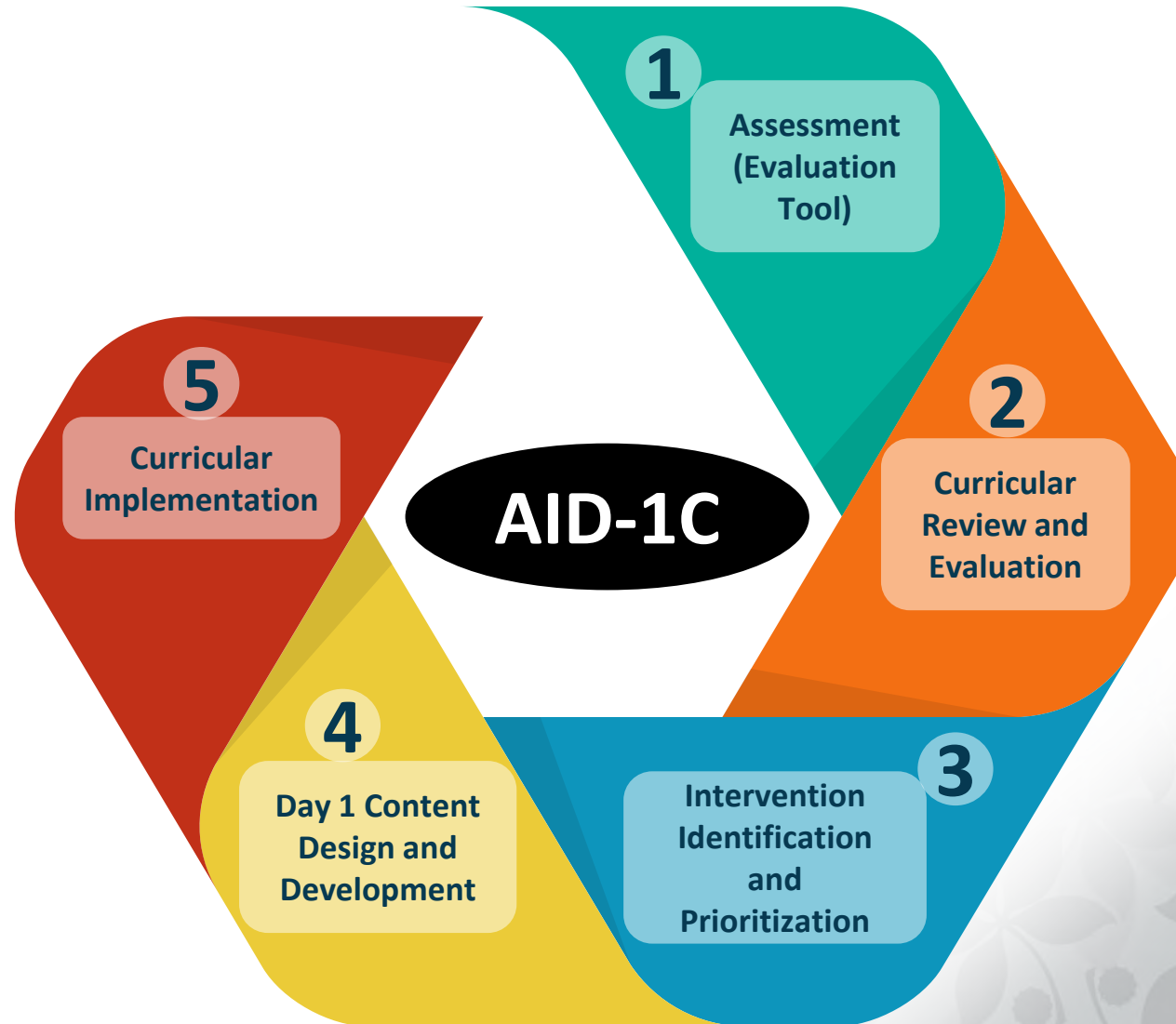
Required Resources Available on the Day-1 Platform:

Facilitator Resources:

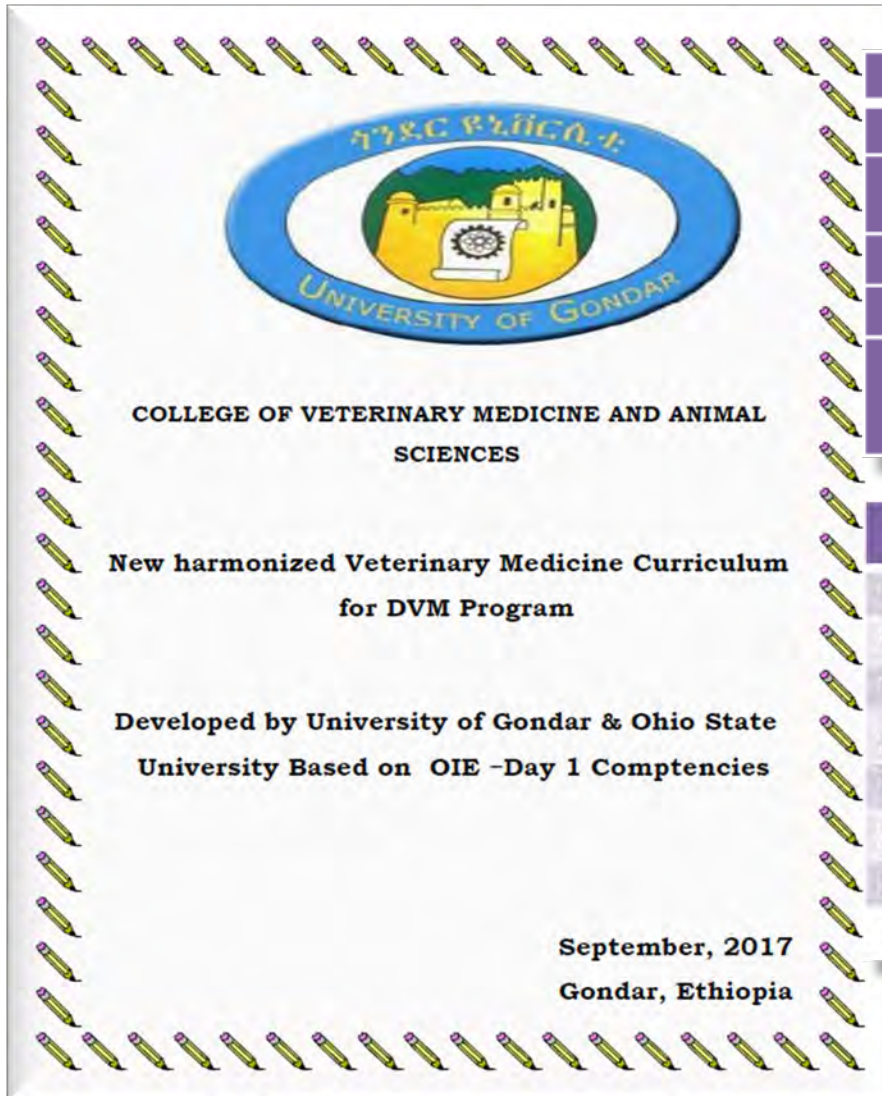
- Curriculum Guide (this document)
- Facilitator PowerPoint Presentation
- Tabletop Exercise (Facilitator Version)
- Foundational PowerPoints: Gender
- Foundational PowerPoints: Infectious Disease Epidemiology

Assessment and Implementation of OIE Day 1 Competencies

AID-1C model



Assessment and Implementation of OIE Day 1 Competencies AID-1C model

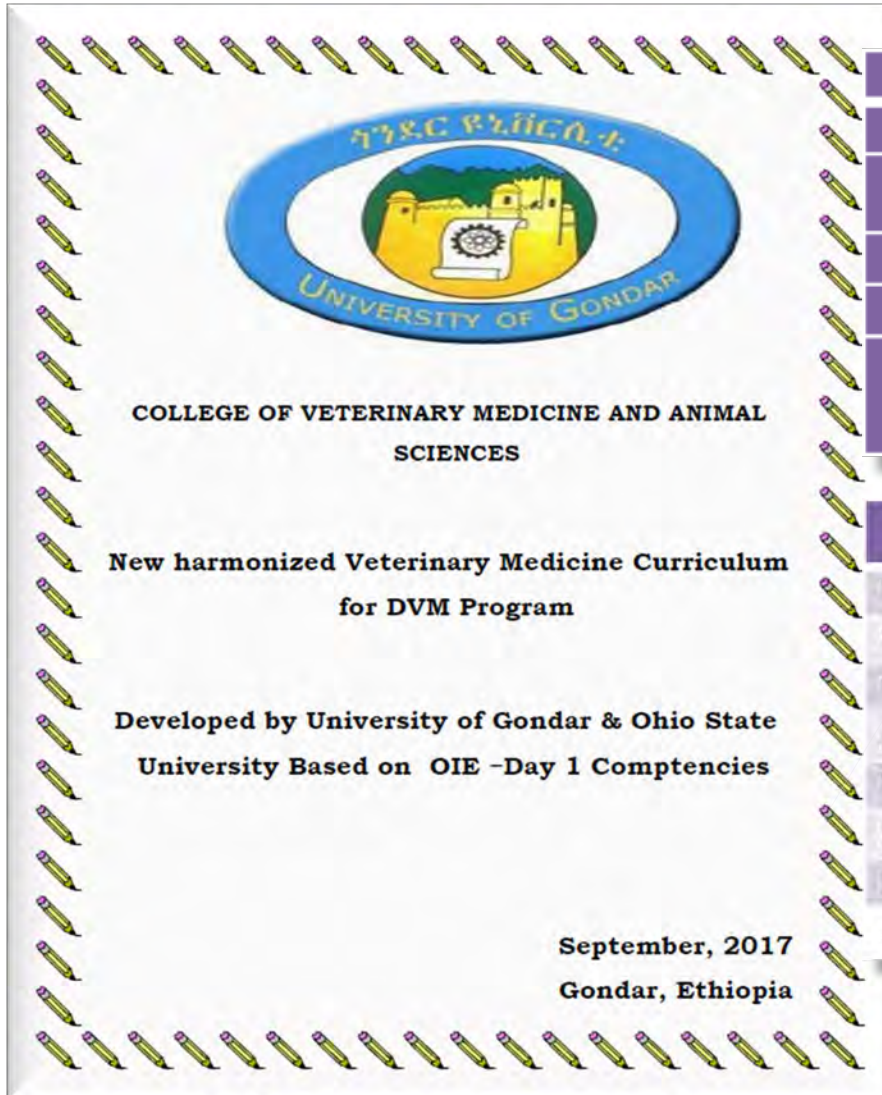


Course	Previous Location	New Location
Animal Welfare	5 th Year	3 rd Year
Introduction to Statistics	5 th Year	2 nd Year
General Pathology	3 rd Year	2 nd Year
Systemic Pathology	3 rd Year	2 nd Year
Communication and Writing skills in English	1 st Year	These skills were incorporated in multiple courses in the curriculum

Modified Courses in the new OIE Harmonized UoG Veterinary Curriculum	
Veterinary Preventive Medicine **	Veterinary Ethics and Jurisprudence
Veterinary Public Health- I **	Animal Welfare and Behavior **
Veterinary Public Health – II **	Clinical Practices-I
Animal Health Economics	Clinical Practices-II
Veterinary Epidemiology **	Clinical Practices III
Pharmacology and Therapeutics – I	Clinical Practices- IV
Pharmacology and Therapeutics - II	

** Courses that have gone through significant redesign and update

Assessment and Implementation of OIE Day 1 Competencies AID-1C model



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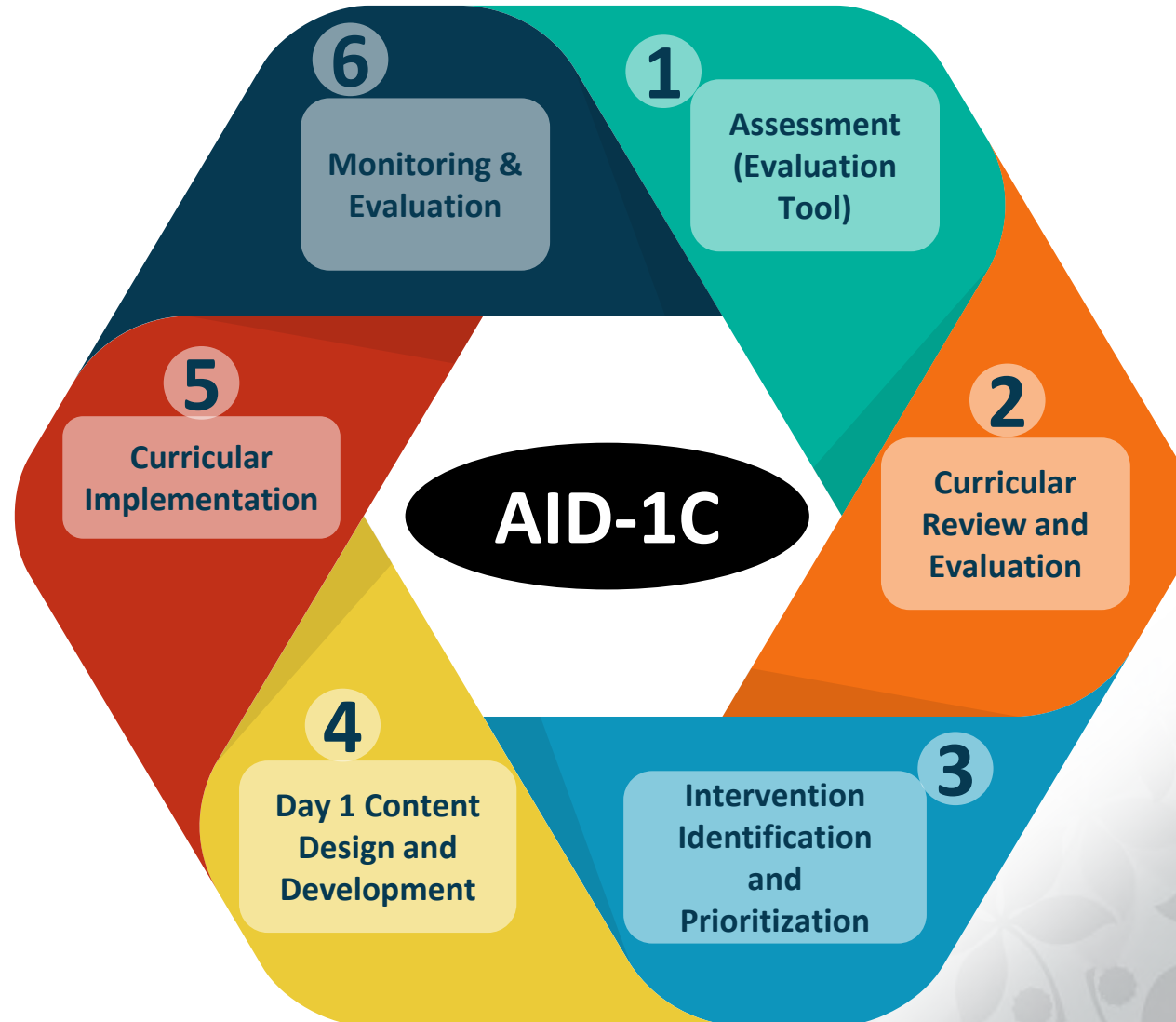
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Pharmacology and Therapeutics – I	Clinical Practices- IV
Pharmacology and Therapeutics - II	

** Courses that have gone through significant redesign and update

Simple but Scalable

Assessment and Implementation of OIE Day 1 Competencies

AID-1C model



Assessment and Implementation of OIE Day 1 Competencies AID-1C model

6

Monitoring & Evaluation

University of Gondar
The Ohio State University

OIE Veterinary Education
Twinning Program

University of Gondar, Faculty of Veterinary Medicine
OIE Day-1 Competency Evaluation Report:
4 year Mid-Program Analysis (2019)

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OIE Day-1 Competency	Year		
Specific Competencies	2015 (N=76)	2019 (N=45)	Change from 2015 to 2019
Epidemiology (2.1)	P	P	=
TAD (2.2)	P	NP	↓
Zoonosis (2.3)	P	P	=
Emerging and Re-emerging Disease (2.4)	P	NP	↓
Disease Prevention and Control Programs (2.5)	P	NP	↓
Food Hygiene (2.6)	P	P	
Veterinary Products (2.7)	P	NP	↓
Animal Welfare (2.8)	NP	NP	=
Veterinary Public Health (2.9)	NP	NP	=
Genetics (2.10)	P	NP	↓
Biotechnology (2.11)	NP	NP	=
Advanced Competencies	2015 (N=76)	2019 (N=45)	Change from 2015 to 2019
Organization of Veterinary Services (3.1)	NP	NP	
Inspection and Certification of Procedures for Exportation (3.2)	NP	NP	
Management of Contagious Disease (3.3)	NP	NP	
Advanced Food Hygiene (3.4)	NP	NP	
Application of Risk Analysis (3.5)	NP	NP	
Research (3.6)	NP	NP	
International Trade Framework (3.7)	NP	NP	
Good Management Practices (3.8)	P	NP	

NP = Not proficient & P= Proficient

AID-1C





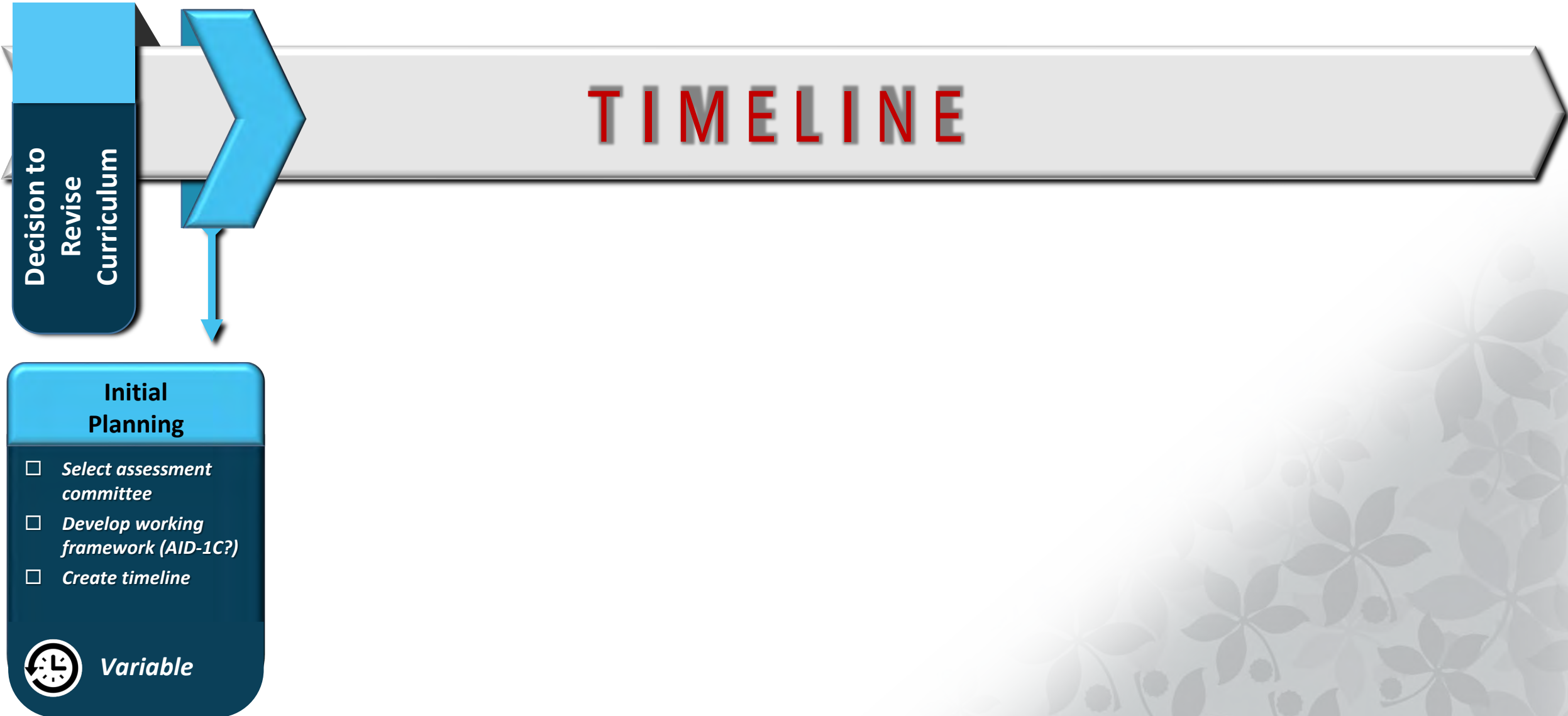
How long does it take?



AID-1C model



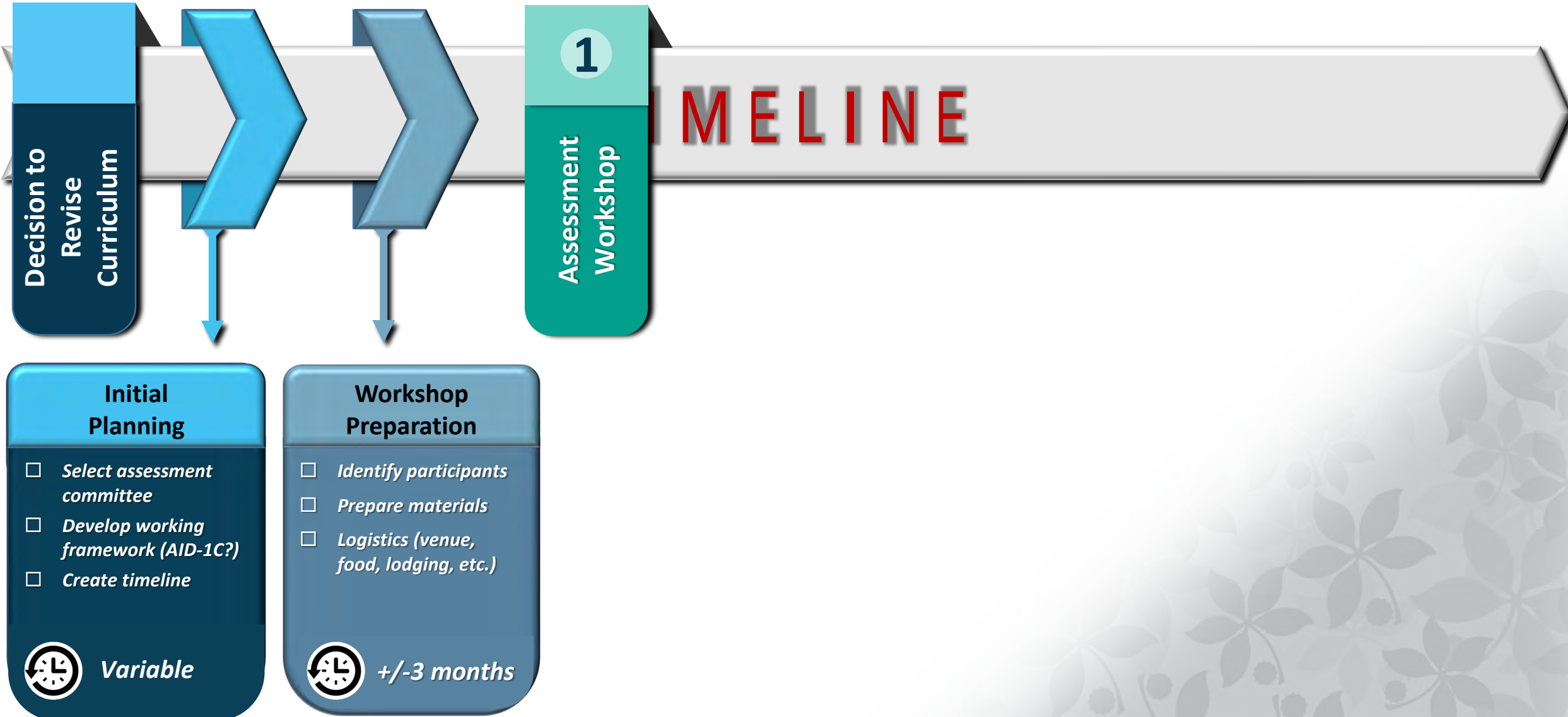
AID-1C model



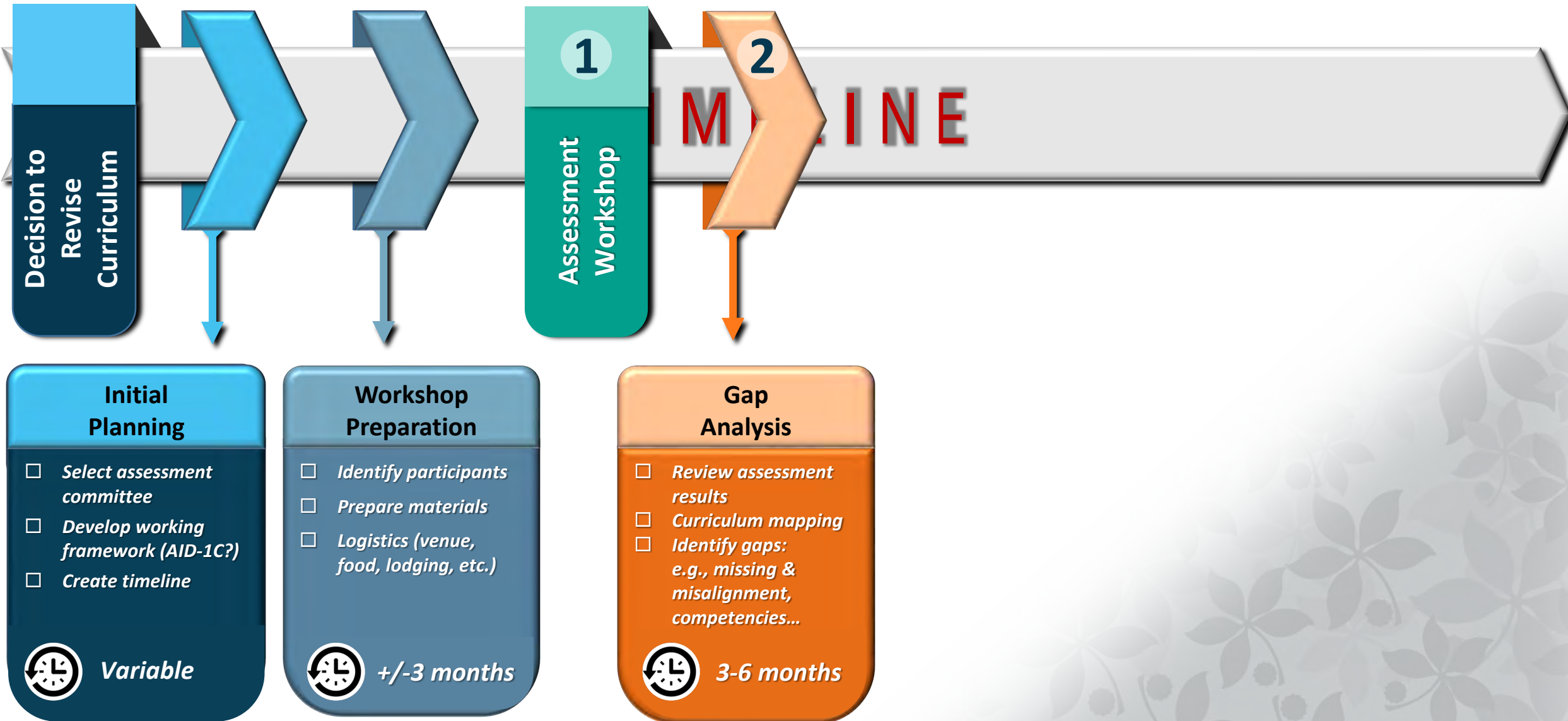
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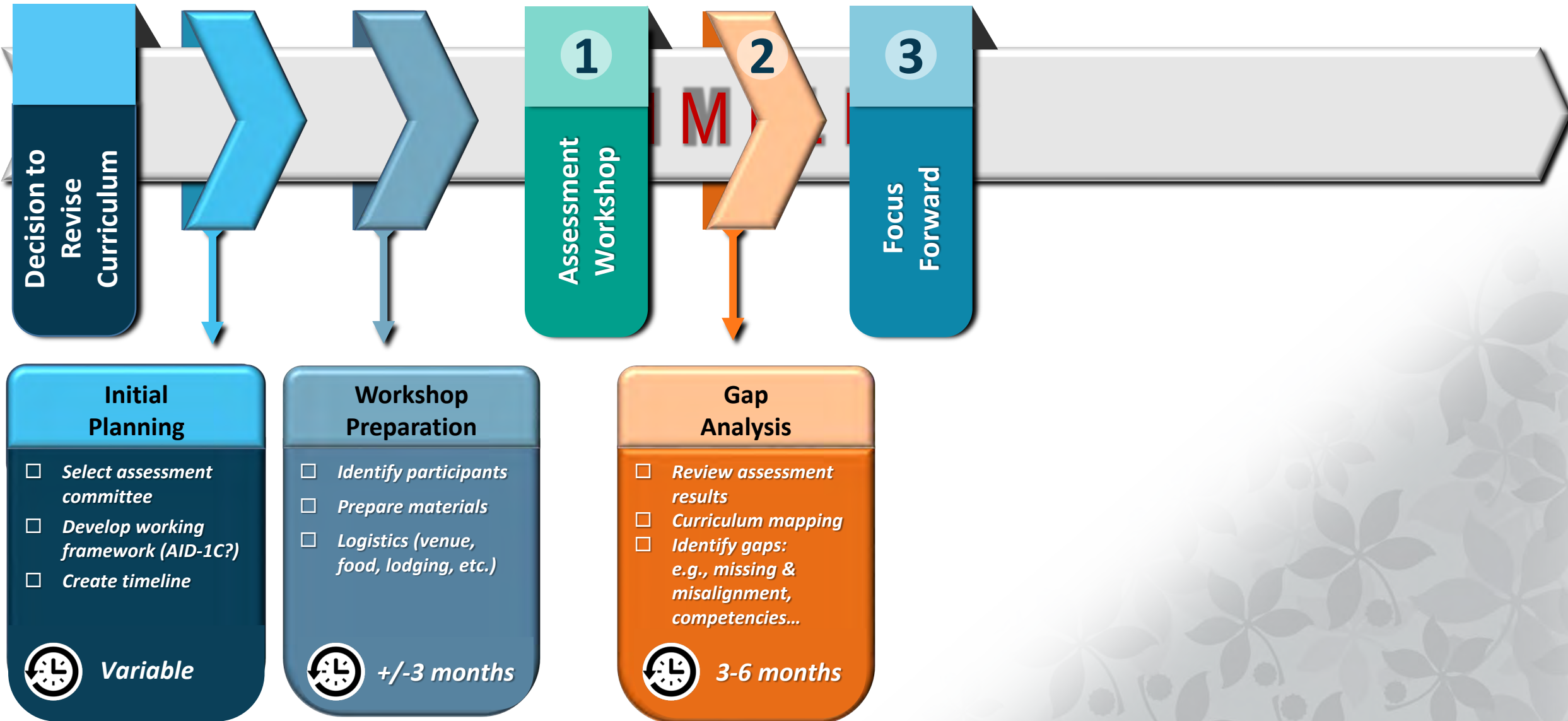
AID-1C model



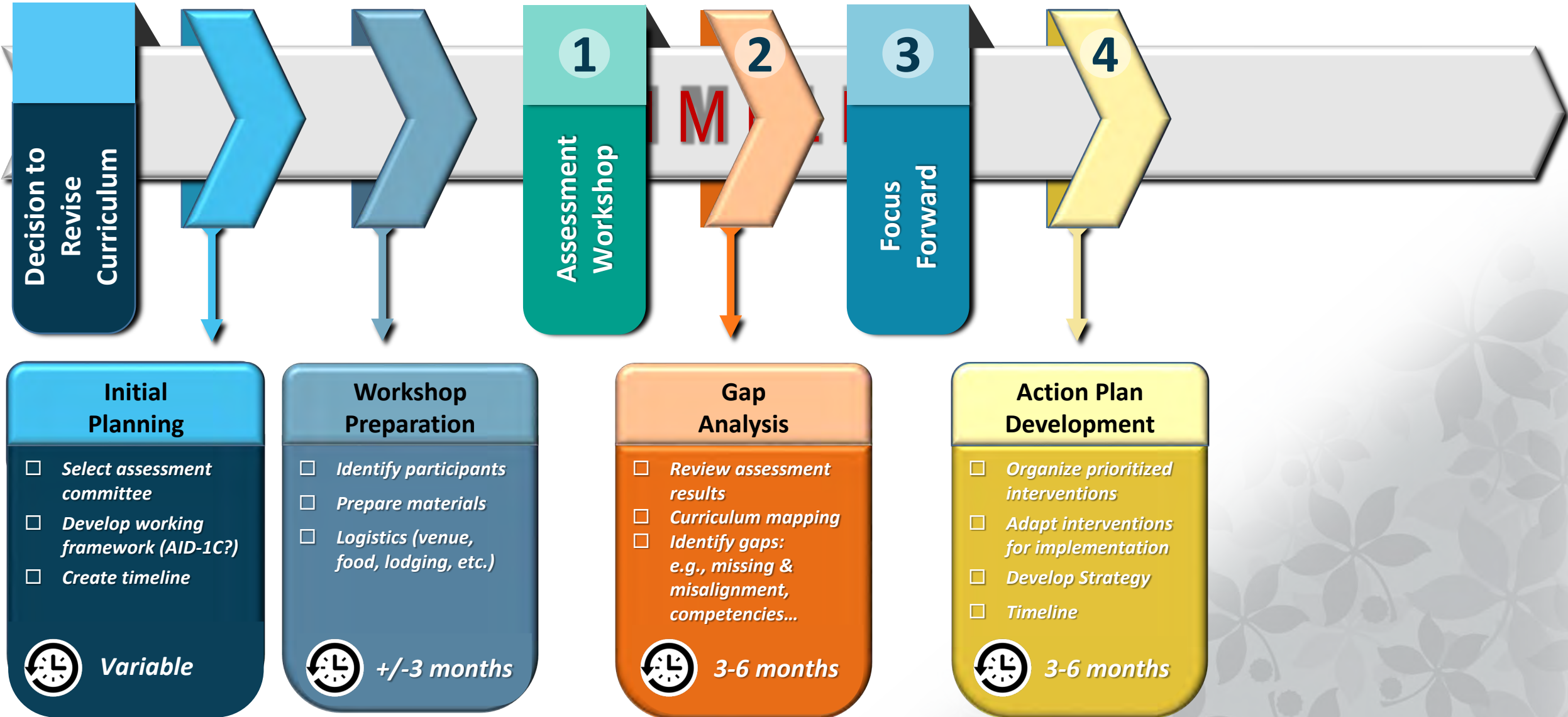
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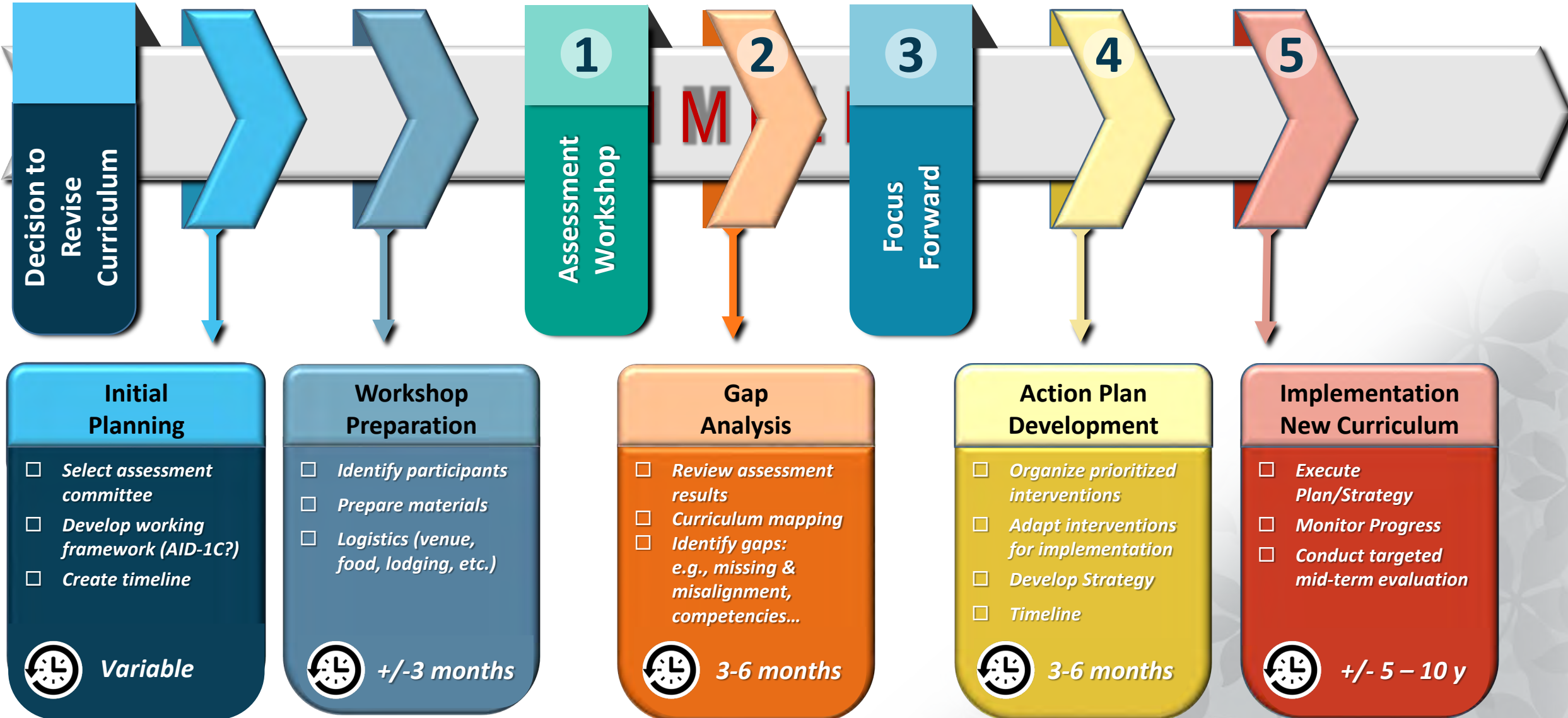
AID-1C model



AID-1C model



AID-1C model





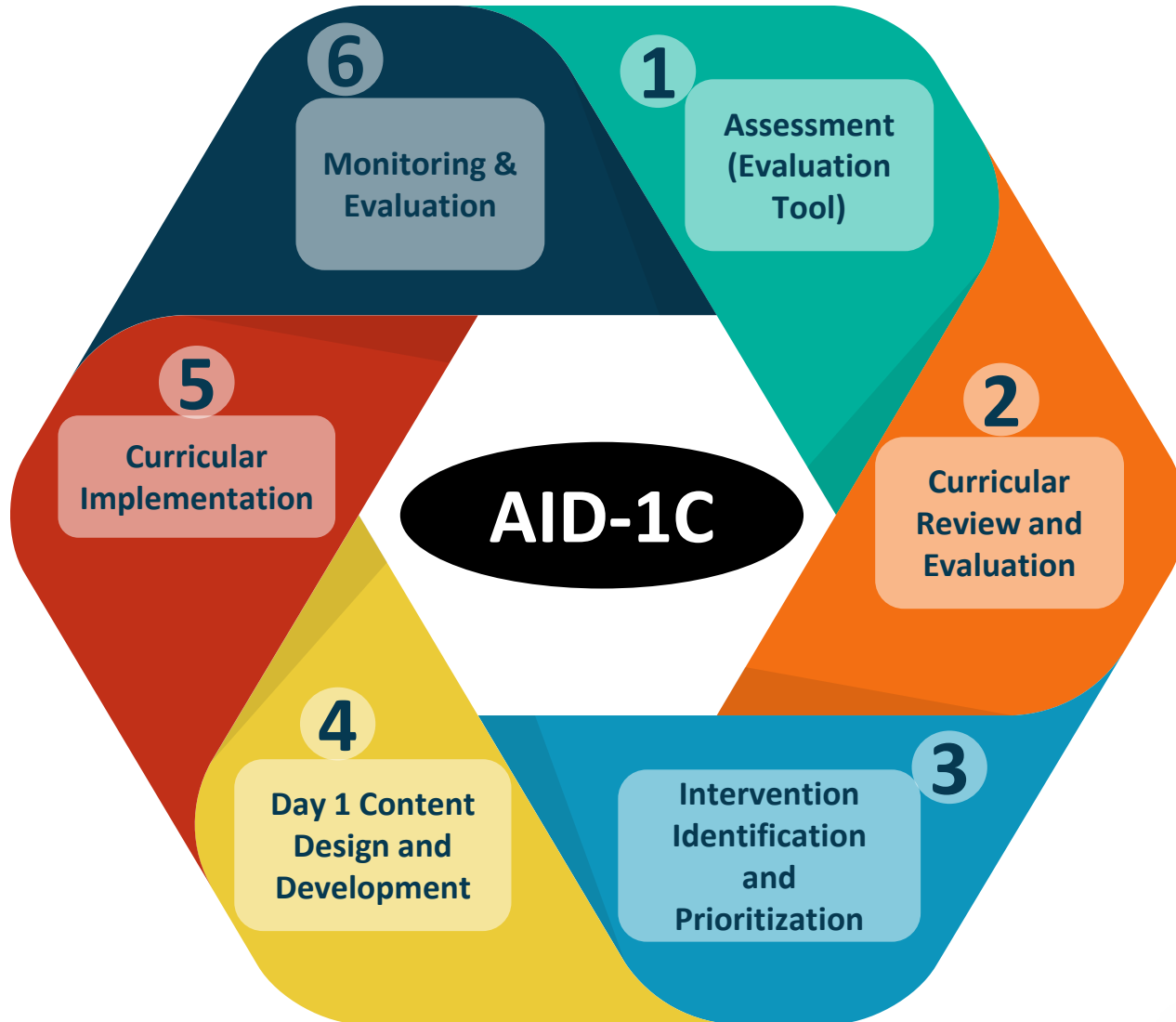


In Conclusion



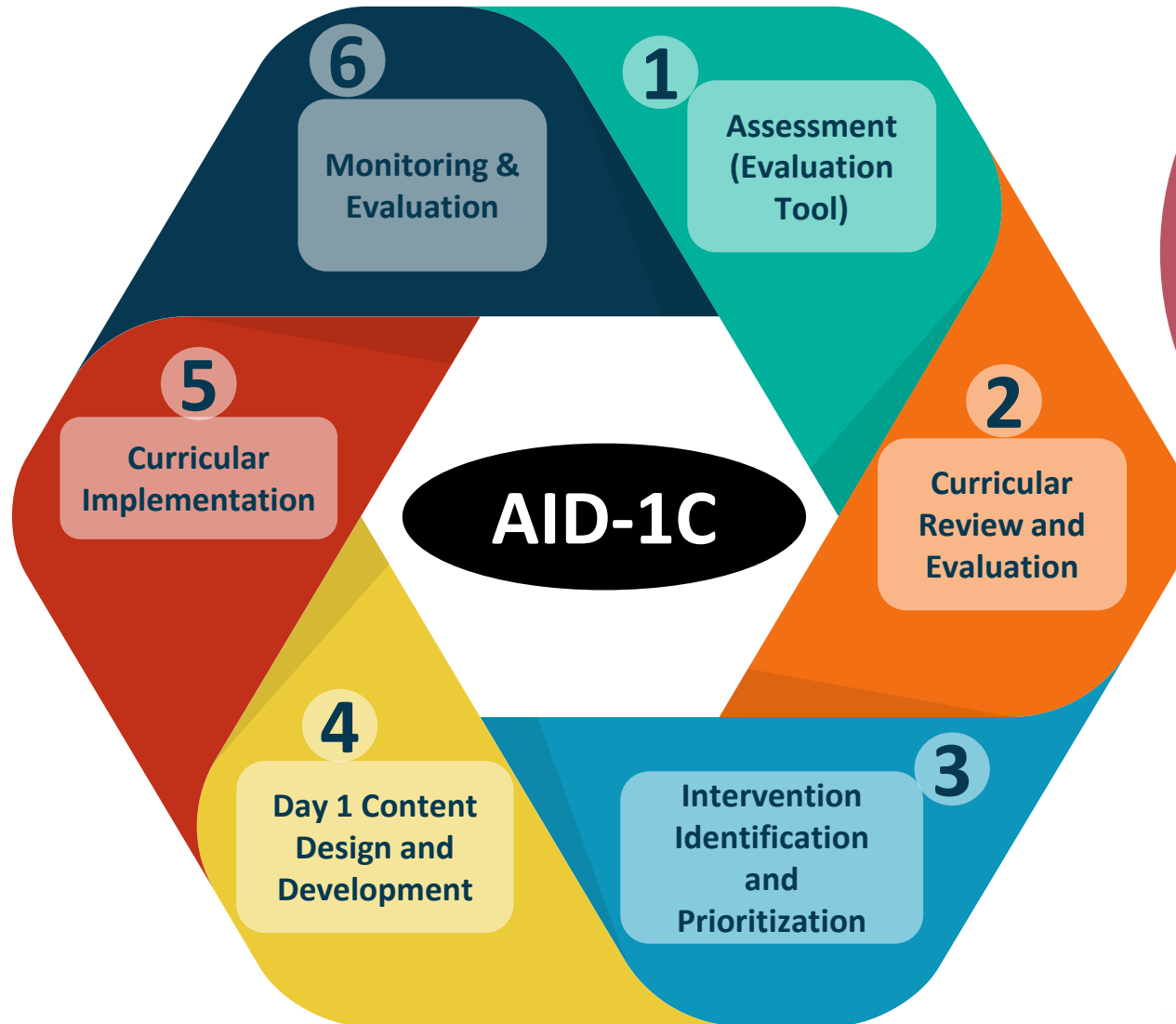
Assessment and Implementation of OIE Day 1 Competencies

AID-1C model



Assessment and Implementation of OIE Day 1 Competencies

AID-1C model



Guidance and **recommendations** on how to transform your **results** into an action plan that you can implement at your institution

Harmonize your **curriculum** to adequately address each of the **OIE Day 1 Competencies** in your **professional program**

Assessment and Implementation of OIE Day 1 Competencies

AID-1C model

Main Goal:

To evaluate and harmonize the Veterinary Curriculum to the OIE Day 1 Competencies and Veterinary Core Curriculum to graduate high proficient veterinarians with “... the required knowledge, skills, attitudes and aptitudes to understand and be able to perform entry-level national veterinary service tasks that relate to the promotion of animal and public health.”^{OIE}

Guidance and recommendations on how to transform your **results** into an action plan that you can implement at your institution

Harmonize your **curriculum** to adequately address each of the **OIE Day 1 Competencies** in your **professional program**

Questions????

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