Program lifecycles: Programs mature as part of an ongoing trial-and-error learning process, through multiple implementations. Any given program might move forward and backward through and between the lifecycle phases as needed. Not all programs survive through all the lifecycle phases, many times a program is discontinued or dramatically revised because it does not show evidence of affecting outcomes.

Programs in different life-cycle phases have different needs from evaluation, thereby implying parallel life-cycle phases for evaluation*. In the ideal, program development and program evaluation are a symbiotic co-evolutionary relationship, where evaluation changes as the program matures.

Evaluation systems must be engineered in such a way that each stakeholder group’s incentive to participate in the evaluation is well understood.

Phase appropriate evaluation encourages growth and maturation of the program.

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**Alignment of Program Lifecycles and Evaluation Lifecycles**

- **Program Phase I: Initiation**
  - Conceptualization through piloting.
  - Have procedures that tend to change from one implementation to the next.
  - Issues of initiation include: identifying and training program staff, localizing to context, reacting to the unanticipated problems.

- **Phase I A Programs**
  - In their initial implementation(s) either as a newly conceived program or as an existing program adapted from another context or from basic research.

- **Phase I B Programs**
  - New programs that have been revised or being re-implemented.

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**Program Phase II: Development**

- Consistent implementation
- Empirical evidence of changes in outcomes
- Maybe standardized procedures or protocols.

- **Phase IIA Programs**
  - Implemented accurately with model consistent over multiple implementations.
  - Adapted to local context
  - Participant experience relatively standardized.

- **Phase IIB Programs**
  - Formalized written procedures (e.g., preliminary protocol or implementation plan).

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**Program Phase III: Maturity**

- Evidence-based programs.
- Not significantly changing.
- Few implementation surprises.
- Relatively few programs reach this level.

- **Phase III A**
  - Consistent change in outcomes.
  - Aware of similar program.

- **Phase III B**
  - Shown to be effective when compared with an alternative program or no program.

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**Program Phase IV: Evaluation**

- Self-report lifecycle alignment

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**Phases of Clinical Trials**

*Evaluation Lifecycles are drawn from traditional medical clinical trials.

Phase I clinical trials are small sample exploratory studies that look at early evidence of effectiveness and dosage levels, implementation difficulties and potential side-effects of treatment. May use healthy participants.

Phase II trials are somewhat larger trials and use actual patients. The trials test efficacy - examining whether treatment yields measurable changes - and look for relationships among observed outcomes. “Blinded” randomized trials may begin here. About one-third of experimental drugs successfully complete both Phase I and Phase II studies.

In Phase III trials large-scale testing provides a more thorough understanding of the effectiveness of the treatment, the benefits and the range of possible adverse reactions. Most (70% to 90%) drugs that enter Phase III studies successfully complete this phase of testing.

Phase IV trials are concerned with fidelity of transfer and implementation of treatments in uncontrolled real-world contexts. The trial is used to compare a drug with other drugs already in the market, to monitor a drug’s long-term effectiveness and impact on quality of life; and to examine its cost effectiveness. Researchers gather information to evaluate the overall benefit-risk relationship of the treatment and identify limitations of indicators for use.

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**Evaluation Lifecycle**

- **Evaluation Phase I: Process and Response**
  - Reliability and dynamic aspects of the implementation and process assessment.
  - Rapid feedback
  - Informal observations

- **Phase IA Evaluations**
  - Use post-only participant feedback and satisfaction.
  - Staff monitoring and observation.

- **Phase IB Evaluations**
  - Use post-only assessments.
  - Focus on substantive outcomes.
  - Assessment of internal consistency (reliability) of outcome measures.

- **Evaluation Phase II: Change**
  - Co-related assessment of changes in outcomes (e.g., knowledge, skills, attitude, behavior, performance).
  - Design of observational procedures and measures.
  - Assessing the consistency and construct validity of the implementation.
  - Pre-post differences among different contexts.

- **Phase IIA Evaluations**
  - Use unmatched posttest of outcomes.
  - Vary reliability and validity of measurement.
  - Assessment of consistency (reliability) and validity of measurement.

- **Phase IIB Evaluations**
  - Use matched pretest and posttest.
  - Verify reliability and validity of change.
  - Human subjects review and protection (informed consent, anonymity or confidentiality) is increasingly formalized.

- **Evaluation Phase III: Comparison and Control**
  - Focuses on the causation and effectiveness.
  - Use comparison groups or variables and statistical controls for adjusting for uncontrolled factors.
  - Realm of experimental and quasi-experimental designs.
  - Assessment of internal consistency (reliability) of outcome measures.

- **Phase III A Evaluations**
  - Use of design and statistical controls and comparisons.
  - Use of control groups or control variables or statistical controls.

- **Phase III B Evaluations**
  - Assessing the consistency and construct validity of the implementation.
  - Compare with standard expectation of performance or with outcomes of people who participate in alternative programs or no programs at all.

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**Evaluation Lifecycle**

- **Evaluation Phase IV: Generalizability and Synthesis**
  - Concerned with generalizability or external validity.
  - Examine consistency of outcomes across different contexts.
  - Realm of secondary and meta-analysis or of program review approaches.

- **Phase IVA Evaluations**
  - Multi-site integrated assessments yielding large data sets over multiple waves of program implementation.

- **Phase IVB Evaluations**
  - Formal assessment across multiple program implementations that enable general assertions over diverse contexts (e.g., meta-analysis).

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**Notes**

- Program Phase III: Maturity
  - Program stability.
  - Collecting supporting data, strong program.

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*(This diagram is an abstraction of the evaluation process and phases, intended to illustrate the complexity and diversity of evaluation methods and approaches.)*

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