What is the adoption of the policy or intervention?
Adoption has been defined as the absolute number, proportion and representativeness of settings (contexts) and intervention agents (implementers) that are willing to initiate a programme (policy or intervention).

Different contexts (e.g. worksites, medical offices, schools, communities, etc.) and implementers (e.g. health practitioners, policy-makers, government staff, researchers, etc.) can differ in their adoption of a policy or intervention, as this is affected by the availability of resources, the level of expertise and the commitment to programmes. Researchers seldom report on issues of adoption, but understanding how adoption varies among different contexts and implementers is critical to the impact of a policy or intervention.

What is the fidelity of the policy or intervention?
Implementation fidelity refers to the extent to which a policy or intervention is delivered as intended by its developers and in line with the programme model. Evaluation of implementation fidelity is important because it may affect the relationship between an intervention and its outcomes.

What are the moderators of the implementation of the policy or intervention?
As already mentioned, the interplay between a policy or intervention and the context within which it is implemented is complex. Various moderating factors – moderators – can affect the fidelity with which a policy or intervention is implemented; the effect can be positive or negative. Moreover, these moderators interact with each other, and the effect of one moderator on fidelity might be influenced by another moderator.

Factors identified as potential moderators of effective programme implementation include: complexity of the intervention, facilitation strategies, quality of delivery, consumer characteristics and responsiveness as well as individual practitioner characteristics, organizational supports for innovation and implementation support strategies. Active and integrated approaches by those developing/supporting the implementation process and the broader context may also influence implementation. Therefore, social systems, inter-organizational linkages and historical/concurrent events should be taken into account when assessing programme implementation.

Implementation strategies
Implementation strategies can be defined as methods to enhance the adoption, implementation and sustainability of a policy or intervention. For example, they can include methods for training implementers, intervention-specific toolkits, checklists and algorithms as well as formal practice protocols and guidelines.
It is crucial that implementation strategy-related efforts are assessed when evaluating implementation. For example, the training of healthcare workers may be an implementation support strategy when implementing a community-based intervention to control hypertension; in this case the evaluation protocol would assess the training provided (e.g. its frequency, duration, perceived quality), its effect on workers’ knowledge and skills, and other contextual factors such as pre-existing skills.

How effective is the policy or intervention?
Indicators used to assess the effectiveness of a policy or intervention are determined by the anticipated health outcome. For example, effectiveness of a diabetes prevention intervention is determined by assessing diabetes incidence in the population of interest, while the effectiveness of a new policy to encourage physical activity in schools may be determined by assessing the levels of high intensity exercise carried out by students.

Note that effectiveness is affected by implementation. Therefore, when assessing the effectiveness of a policy or intervention we are not assessing the intervention’s absolute effectiveness – but are only assessing its effectiveness as implemented. As such, it is inadequate to conclude that a policy or intervention is effective per se without providing information about its implementation; the same policy or intervention could be implemented elsewhere with very different health outcomes.

How do you assess costs associated with implementation?
Economic evaluation within healthcare generally compares two or more intervention options in relation to their cost and consequences. Commonly used methods include cost effectiveness, cost-utility and cost benefit analysis.

An implementation strategy generally comes with additional costs. Therefore, the key economic question is whether the relative costs associated with the implementation strategy lead to a justifiable level of enhanced outcome as compared to usual/routine methods. If enhanced implementation can be shown to lead to improved service delivery and also result in improved client outcomes, then these may be more cost effective than usual care. Such information is crucial for policy- and decision-makers, managers and service providers.

\[
\text{Implementation cost effectiveness ratio} = \frac{\text{Cost (implementation strategy)} - \text{Cost (usual strategy)}}{\text{Outcome (implementation strategy)} - \text{Outcome (usual strategy)}}
\]

‘Cost’ may include:

* direct labour costs – costs associated with consumer- or implementer- contact (e.g. the time cost of having a clinician coach a consumer through a new health app or deliver a training programme to service delivery staff);
* indirect labour costs – additional costs associated with the consumers and implementers which do not require direct contact (e.g. developing resources or planning for the intervention);
* non-labour costs – additional overheads and resource costs associated with the intervention (e.g. building space, printing of resources, etc.).

‘Outcome’ may include:

* consumer-level health outcomes;
* implementer-level outcomes – associated with the intervention (e.g. enhanced communication, collaboration and/or service delivery).

How to improve sustainability
In order to maximize the health impact of NCD research, effective policies and interventions must be well implemented and well sustained. Too often, effective policies or interventions suffer from a so called innovation-evaporation effect – where they are not sustained after the initial implementation period.

The following are all factors for failure to sustain a policy or intervention:

* not adapting intervention approaches to the local context
* resisting the introduction of new practices due to capacity constraints
* a lack of human resources
* intervention costs (and other economic factors)
* insufficient investment in implementation infrastructure (including in training, monitoring and evaluation systems)
* staff recruitment and staff turnover
* lack of political will


Compiled by:
Dr. Shilanthi Seneviratne
Epidemiology unit / Ministry of Health / Colombo
Table 1: Selected notifiable diseases reported by Medical Officers of Health 21st - 27th July 2018 (30th Week)

<table>
<thead>
<tr>
<th>Division</th>
<th>Dengue Fever</th>
<th>Leishmaniasis</th>
<th>Meningitis</th>
<th>Chikungunya</th>
<th>Encephalitis</th>
<th>Enteric Fever</th>
<th>Leptospirosis</th>
<th>Chickenpox</th>
<th>Human Rabies</th>
<th>Hepatitis</th>
<th>Typhus Fever</th>
<th>Acute Food Poisoning</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>B</td>
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<td>C</td>
<td>C</td>
<td>C</td>
</tr>
</tbody>
</table>

**Notes:**
- **A** = Cases reported during the current week.
- **B** = Cumulative cases for the year.
- **C** = Cumulative cases for the year.
- **T** = Total number of reporting units.
- **C** = Completeness

*Timeliness refers to returns received on or before 27th July, 2018. Total number of reporting units 353. Number of reporting units data provided for the current week: 351.

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## Table 2: Vaccine-Preventable Diseases & AFP

<table>
<thead>
<tr>
<th>Disease</th>
<th>No. of Cases by Province</th>
<th>Number of cases during current week in 2018</th>
<th>Number of cases during same week in 2017</th>
<th>Total num-ber of cases to date in 2018</th>
<th>Total num-ber of cases to date in 2017</th>
<th>Difference between the number of cases to date in 2018 &amp; 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AFP</strong>*</td>
<td>W: 00 C: 01 S: 00 N: 00 E: 00 NW: 00 NC: 00 U: 00 Sab: 01</td>
<td>00 00 00 00 00 00 00 00 01 00</td>
<td>38</td>
<td>41</td>
<td>- 7.3 %</td>
<td></td>
</tr>
<tr>
<td>Diphtheria</td>
<td>W: 00 C: 00 S: 00 N: 00 E: 00 NW: 00 NC: 00 U: 00 Sab: 00</td>
<td>00 00 00 00 00 00 00 00 00 00</td>
<td>00</td>
<td>00</td>
<td>0 %</td>
<td></td>
</tr>
<tr>
<td>Mumps</td>
<td>W: 04 C: 00 S: 00 N: 00 E: 01 NW: 01 NC: 01 U: 03 Sab: 06</td>
<td>04 01 00 00 00 00 00 00 04 04</td>
<td>77</td>
<td>145</td>
<td>- 46.8 %</td>
<td></td>
</tr>
<tr>
<td>Measles</td>
<td>W: 00 C: 00 S: 00 N: 00 E: 00 NW: 00 NC: 00 U: 04 Sab: 00</td>
<td>00 00 00 00 00 00 00 00 00 00</td>
<td>00</td>
<td>04</td>
<td>05</td>
<td>- 20 %</td>
</tr>
<tr>
<td>Rubella</td>
<td>W: 00 C: 00 S: 00 N: 00 E: 00 NW: 00 NC: 00 U: 00 Sab: 00</td>
<td>00 00 00 00 00 00 00 00 00 00</td>
<td>00</td>
<td>04</td>
<td>05</td>
<td>- 20 %</td>
</tr>
<tr>
<td>CRS**</td>
<td>W: 00 C: 00 S: 00 N: 00 E: 00 NW: 00 NC: 00 U: 00 Sab: 00</td>
<td>00 00 00 00 00 00 00 00 00 00</td>
<td>00</td>
<td>00</td>
<td>01</td>
<td>0 %</td>
</tr>
<tr>
<td>Tuberculosis</td>
<td>W: 00 C: 00 S: 00 N: 00 E: 00 NW: 00 NC: 00 U: 00 Sab: 00</td>
<td>00 00 00 00 00 00 00 00 00 00</td>
<td>00</td>
<td>15</td>
<td>11</td>
<td>36.3 %</td>
</tr>
<tr>
<td>Neonatal Tetanus</td>
<td>W: 00 C: 00 S: 00 N: 00 E: 00 NW: 00 NC: 00 U: 00 Sab: 00</td>
<td>00 00 00 00 00 00 00 00 00 00</td>
<td>00</td>
<td>00</td>
<td>00</td>
<td>0 %</td>
</tr>
<tr>
<td>Japanese Encephalitis</td>
<td>W: 00 C: 00 S: 00 N: 00 E: 00 NW: 00 NC: 00 U: 00 Sab: 00</td>
<td>00 00 00 00 00 00 00 00 00 00</td>
<td>00</td>
<td>18</td>
<td>21</td>
<td>- 14.2 %</td>
</tr>
<tr>
<td>Whooping Cough</td>
<td>W: 00 C: 00 S: 00 N: 00 E: 00 NW: 00 NC: 00 U: 00 Sab: 00</td>
<td>00 00 00 00 00 00 00 00 00 00</td>
<td>00</td>
<td>34</td>
<td>10</td>
<td>240 %</td>
</tr>
<tr>
<td>Tuberculosis</td>
<td>W: 35 C: 05 S: 06 N: 00 E: 10 NW: 05 NC: 00 U: 01 Sab: 19</td>
<td>35 05 06 00 10 05 00 01 19 81</td>
<td>273</td>
<td>4834</td>
<td>4936</td>
<td>- 2 %</td>
</tr>
</tbody>
</table>

### Key to Table 1 & 2

**Provinces:**
- **W:** Western, **C:** Central, **S:** Southern, **N:** North, **E:** East, **NC:** North Central, **NW:** North Western, **U:** Uva, **Sab:** Sabaragamuwa.
- **RDHS Divisions:**
  - **CB:** Colombo, **GM:** Gampaha, **KL:** Kelaniya, **K:** Kandy, **ML:** Matale, **NE:** Nuwara Eliya, **GL:** Galle, **HB:** Hambantota, **MT:** Matara, **JF:** Jaffna,
  - **KN:** Kollonchchi, **MN:** Mannar, **VA:** Vavuniya, **MU:** Mullaitivu, **BT:** Batticaloa, **AM:** Ampara, **TR:** Trincomalee, **KM:** Kalmunai, **KR:** Kurunegala, **PU:** Puttalam, **AP:** Anuradhapura, **BD:** Badulla, **MO:** Moneragala, **RF:** Ratnapura, **KG:** Kegalle.

**Data Sources:**
- **Weekly Return of Communicable Diseases:** Diphtheria, Measles, Tetanus, Neonatal Tetanus, Whooping Cough, Chickenpox, Meningitis, Mumps., Rubella, CRS,
- **Special Surveillance:** AFP* (Acute Flacid Paralysis ), Japanese Encephalitis
- **CRS** = Congenital Rubella Syndrome
- **NA** = Not Available

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**Dengue Prevention and Control Health Messages**

**Look for plants such as bamboo, bohemia, rampe and banana in your surroundings and maintain them free of water collection.**

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**ON STATE SERVICE**

**Dr. S.A.R. Dissanayake**

CHIEF EPIDEMIOLOGIST

EPIDEMIOLOGY UNIT

231, DE SARAM PLACE

COLOMBO 10