

Supplement to: Yahner M, Muriuki A, Mangieri A, Nitu S, Shafinaz S, Sarriot E. Designing for impact and institutionalization: applying systems thinking to sustainable postpartum family planning approaches for first-time mothers in Bangladesh. *Glob Health Sci Pract.* 2022;10(5):e2200023.
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Supplement 3. Practical Application of Systems Thinking in Program Intervention Design: The Intervention Viability Assessment Tool

AIM

The purpose of this tool is to support designers and practitioners in assessing a potential program intervention to identify:

- its fit with the health system
- deal-breakers, pitfalls, and other issues for further discussion
- potential for impact

SECTION 1 – INTERVENTION DESCRIPTION

Purpose of table: to understand how the intervention will be implemented, by whom, where, how and the target client’s journey from identification to referral.

- Entry point: where a service provider will interact with the client (e.g., household, facility) to provide information and/or services.
- Referral point: where a service provider may send the client for additional services related to the intervention (e.g., referral to a facility for postpartum family planning (PPFP) services after a household visit, referral for treatment of malnutrition from an immunization unit)

1. What is the proposed intervention? (<i>briefly explain the intervention</i>)	
2. What outcome does the intervention aim to achieve? (<i>state the intended outcome of the intervention</i>)	
3. Who is the target client of this intervention? (<i>state intended target client</i>)	
4. Is this intervention supported by existing evidence?	<input type="checkbox"/> Yes Briefly explain: <input type="checkbox"/> No Briefly explain:
5. If this intervention is not supported by existing evidence, is it designed to generate evidence?	<input type="checkbox"/> Yes Briefly explain: <input type="checkbox"/> No Briefly explain:
6. What tools will need to be developed or adapted for the implementation of this intervention (counselling, job aids, checklists etc.)? (<i>list the key tools, if no new tools are needed indicate N/A</i>)	1. 2. 3. 4.

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7. Does the intervention have additional data collection needs for monitoring beyond what is available in the national MoH health information system?	<input type="checkbox"/> Yes Explain if yes: <input type="checkbox"/> No
ENTRY POINT	
8. What is the primary entry point for this intervention where most target clients can be reached? (<i>specify unit within the facility</i>)	<input type="checkbox"/> Household <input type="checkbox"/> Primary health facility <input type="checkbox"/> Secondary health facility <input type="checkbox"/> Tertiary health facility <input type="checkbox"/> Other – Explain
9. Is this the lowest possible level where the intervention can be implemented without compromising quality?	<input type="checkbox"/> Yes <input type="checkbox"/> No
10. How will the target clients be identified for specific focus at this entry point? (<i>briefly explain</i>)	
11. What service(s), if any, related to the intervention, are already being provided to the target client at this entry point? (<i>list services related to the intended outcome</i>)	1. 2. 3. 4.
12. Who will provide the service(s) proposed in this intervention, to the target client, at the entry point? (<i>name service provider(s)</i>)	1. 2. 3. 4.
13. What capacity development will the service provider(s) at the entry point require to implement the intervention? (<i>list 4 key capacity building needs, if none is needed indicate N/A</i>)	1. 2. 3. 4.
14. Will these services proposed in the intervention affect the workload of the provider(s) at the entry point (e.g., new tasks, more clients, longer consultation time, etc.)?	<input type="checkbox"/> Yes <input type="checkbox"/> No Briefly explain:
15. Will the services proposed in the intervention affect client flow (e.g., confusion, longer waiting times, longer consultation times etc.)?	<input type="checkbox"/> Yes <input type="checkbox"/> No Briefly explain:
REFERRAL POINT	

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<p>16. Will the intervention require the target client to be sent from the primary entry point to a referral point for provision of the services? <i>(If yes, please specify the unit within the referral point(s). If no, skip to section 2)</i></p>	<input type="checkbox"/> Household <input type="checkbox"/> Primary health facility <input type="checkbox"/> Secondary health facility <input type="checkbox"/> Tertiary health facility <input type="checkbox"/> Other – Explain
<p>17. What service(s), related to the intervention, will be provided to the target client this referral point? <i>(list services to be provided)</i></p>	<p>1. 2. 3. 4.</p>
<p>18. Who will provide the service(s) proposed in this intervention, to the target client, at the referral point? <i>(name service provider(s))</i></p>	<p>1. 2. 3. 4.</p>
<p>19. What capacity development will the service provider(s) at the entry point require to implement the intervention? <i>(list 4 key capacity building needs, if none is needed indicate N/A)</i></p>	<p>1. 2. 3. 4.</p>
<p>20. Will these services proposed in the intervention affect the workload of the provider at the referral point (e.g., new tasks, more clients, longer consultation time, etc.)?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No Briefly explain:
<p>21. Will the services proposed in the intervention affect client flow (e.g., confusion, longer waiting times, longer consultation time etc.)?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No Briefly explain:

SECTION 2 – MANAGEMENT SYSTEMS

Purpose of table: To assess the viability of the intervention within the service delivery point by examining the essential elements required to provide the services required.

Essential Service Delivery Operations	
<p>1. If the intervention is introduced, there are enough providers with the skills needed to conduct the activity(ies) and provide the service(s) proposed. <i>(check one)</i></p>	
<p>Entry point</p> <input type="checkbox"/> Totally agree <input type="checkbox"/> Agree <input type="checkbox"/> Disagree <input type="checkbox"/> Totally disagree	<p>Referral point</p> <input type="checkbox"/> Totally agree <input type="checkbox"/> Agree <input type="checkbox"/> Disagree <input type="checkbox"/> Totally disagree

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2. If the intervention is introduced, the current supply of essential supplies and commodities is sufficient to meet any increase in use of services. (<i>check one</i>)	
Entry point <input type="checkbox"/> Totally agree <input type="checkbox"/> Agree <input type="checkbox"/> Disagree <input type="checkbox"/> Totally disagree <input type="checkbox"/> N/A	Referral point <input type="checkbox"/> Totally agree <input type="checkbox"/> Agree <input type="checkbox"/> Disagree <input type="checkbox"/> Totally disagree <input type="checkbox"/> N/A
3. The manager (or person in charge) of the service delivery point has all the required resources, information, and decision-making power to support the introduction and implementation of the intervention. (<i>Check one</i>)	
Entry point <input type="checkbox"/> Totally agree <input type="checkbox"/> Agree <input type="checkbox"/> Disagree <input type="checkbox"/> Totally disagree	Referral point <input type="checkbox"/> Totally agree <input type="checkbox"/> Agree <input type="checkbox"/> Disagree <input type="checkbox"/> Totally disagree
Integration and coordination of services	
4. Currently, the service providers where this intervention will be implemented only provide one unique type of service e.g. only provide immunization, only provide nutrition screening and referral. (<i>check one</i>)	
Entry point <input type="checkbox"/> Totally agree (they provide only one service) <input type="checkbox"/> Agree (they occasionally provide other service(s)) <input type="checkbox"/> Disagree (they often provide other service(s)) <input type="checkbox"/> Totally disagree (they already provide highly integrated services)	Entry point <input type="checkbox"/> Totally agree (they provide only one service) <input type="checkbox"/> Agree (they occasionally provide other service(s)) <input type="checkbox"/> Disagree (they often provide other service(s)) <input type="checkbox"/> Totally disagree (they already provide highly integrated services)
5. If they provide only one type of service , substantial service reorganization (change in client flow, infrastructure, number of staff, roles of staff etc.) is required to integrate the proposed intervention (<i>check one, explain your answer</i>)	

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<p>Entry point</p> <p><input type="checkbox"/>Totally agree</p> <p><input type="checkbox"/>Agree</p> <p><input type="checkbox"/>Disagree</p> <p><input type="checkbox"/>Totally disagree</p> <p>Explain:</p>	<p>Referral point</p> <p><input type="checkbox"/>Totally agree</p> <p><input type="checkbox"/>Agree</p> <p><input type="checkbox"/>Disagree</p> <p><input type="checkbox"/>Totally disagree</p> <p>Explain:</p>
<p><i>Skip to the next section (Immediate Oversight of Service Delivery) if all services are provided at a single entry point, with no possible need for referral.</i></p> <p>6. If it may be necessary to send the client from the entry point to a referral point for provision of services, how well does coordination between providers in the two touchpoints work in order to support continuity of services? (<i>check one, explain your answer</i>)</p>	<p><input type="checkbox"/>Good, little confusion for providers and clients</p> <p><input type="checkbox"/>Fair, some confusion for providers and clients</p> <p><input type="checkbox"/>Poor, lots of confusion for providers and clients</p> <p><input type="checkbox"/>There is currently no coordination between these two touch points</p> <p>Explain:</p>
<p>7. What mechanisms are in place to improve coordination between the entry and referral points? (<i>list examples such as interdepartmental meetings, scheduling tools, supervision meetings between providers and community volunteers</i>)</p>	
<p>IMMEDIATE OVERSIGHT OF SERVICE DELIVERY</p>	
<p>Performance management, resource allocation and control</p>	
<p>1. Who is the designated manager immediately overseeing service delivery (in-charge)? (<i>provide title and where she/he is located</i>)</p>	<p>Entry point</p> <p>Referral point</p>
<p>2. If a service intervention is introduced, who will be responsible for giving service providers new and clear standard operating procedures for their work?</p>	<p>Entry point</p> <p>Referral point</p>
<p>3. How often is the performance of providers and units reviewed and evaluated? (<i>e.g. monthly, quarterly, never</i>)</p>	<p>Entry point</p> <p>Referral point</p>
<p>4. Who provides clinical supervision for providers responsible for the implementation of services and the intervention? (<i>provide title</i>)</p>	<p>Entry point</p> <p>Referral point</p>
<p>5. How often is supportive supervision conducted? (<i>e.g. monthly, quarterly, never</i>)</p>	<p>Entry point</p> <p>Referral point</p>
<p>Planning ahead and Setting Rules and Policies</p>	

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6. Who is responsible for ensuring that staff capacity is developed/are trained and updated on new guidelines and protocols? (<i>provide title</i>)	Entry point Referral point
7. Who ensures that service staff have a clear plan for the weeks, months, and quarters ahead?	Entry point Referral point
SYSTEMS TO SUPPORT SERVICE DELIVERY	
1 The management of commodities and supplies, for the intervention, is well-coordinated.	Entry point: <input type="checkbox"/> Yes <input type="checkbox"/> No Referral point: <input type="checkbox"/> Yes <input type="checkbox"/> No
2 There is a system for assessing and evaluating how well commodities and supplies, needed for the intervention, are managed.	Entry point: <input type="checkbox"/> Yes <input type="checkbox"/> No Referral point: <input type="checkbox"/> Yes <input type="checkbox"/> No
3 The management of information for decision making is well coordinated.	Entry point: <input type="checkbox"/> Yes <input type="checkbox"/> No Referral point: <input type="checkbox"/> Yes <input type="checkbox"/> No

SECTION 3 – PROGRAMMATIC DECISIONS

Purpose of table: To make decisions based on the information provided in the sections above

1. What activities do you propose to strengthen management systems under the following areas: (<i>list 4 activities under each area</i>)	
Improving availability of staff, commodities, and supplies	1. 2. 3. 4.
Improving the provision of services	1. 2. 3. 4.
Improving coordination between entry and referral points	1. 2. 3. 4.
Improving supervision and support for health providers and units	1. 2. 3. 4.
2. What is currently being done (by the MoH, other partners) strengthen management systems under the areas mentioned above?	
3. What are the potential deal-breakers, or critical elements that would need to be in place for the intervention to work and are currently missing or weak?	

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4. Based on the assessment, this intervention can be introduced into the health system and scaled up in this context. (<i>Explain your answer</i>)	<input type="checkbox"/> Totally agree <input type="checkbox"/> Agree <input type="checkbox"/> Disagree <input type="checkbox"/> Totally disagree

Do you have any overall questions or concerns about this intervention that were not addressed in the questions above? Please note them here.