Integration of (parallel) supply chain management for nutrition products

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Objective of the study

To consolidate key findings of recent country nutrition products supply chain studies and experiences in order to inform broader policy and strategic guidance to UNICEF Country Offices (CO), partners and relevant national ministries.
Purpose of the study

• Review nutrition/RUTF supply chain studies and make comparative analysis

• Identify key partner studies

• Identify internal and external bottlenecks causing delay in implementation of proposed recommendations

• Provide recommendation and guidance on key supply chain issues, summarise parallel partner supply chain initiatives and provide milestone-based suggestions on how UNICEF can leverage these
Methodology

Data collection
Analysis of the UNICEF country studies, interviews with stakeholders, literature review and e-survey

Data analysis
Development of conceptual framework linking supply chain with other health system building blocks

Study was conducted between March and September 2015
Conceptual framework

1. Leadership and governance
2. Health care financing
3. Health workforce
4. Information and research
5. Medical products and technologies (or supply chain)
6. Service delivery

Supply chain components
WHO building blocks of country health systems
Products involved

Product description

<table>
<thead>
<tr>
<th>Product description</th>
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<tbody>
<tr>
<td>Ready to use therapeutic food (RUTF), sachet 92g</td>
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<tr>
<td>F75 Therapeutic milk, sachet 102.5g</td>
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<tr>
<td>F100 Therapeutic milk, sachet 114g</td>
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<td>ReSoMal, sachet 42g</td>
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**RUTF is used as tracer product**
## UNICEF country studies involved

<table>
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<tr>
<th>ESARO</th>
<th>WCARO</th>
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| Mozambique     | 1. Optimisation (2013)  
|                |                                            |         | 2. Integration (foreseen) |
| Kenya          | Integration (2014)                         |         |                         |

Notes:
- Different methodologies were applied
- Most studies used mainly qualitative methods
- Different understandings of supply chain management (SCM)
- Not all country studies looked at all SCM elements
UNICEF country studies – key findings

- Nutrition programme, including SCM, is often not put in larger health system context
- In most countries some level of (opportunistic) integration already exists, especially downstream
- Recommendations related to further integration /optimisation link directly to health systems strengthening
- Common view on national SCM is needed for integration processes to succeed
## UNICEF country studies – enablers and bottlenecks for implementation of recommendations

<table>
<thead>
<tr>
<th>Key enablers</th>
<th>Key bottlenecks</th>
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<tr>
<td>• Government commitment</td>
<td>• Lack of government commitment</td>
</tr>
<tr>
<td>• Dedicated UNICEF CO involvement &amp; support: champion</td>
<td>• Rotation of champion staff</td>
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<tr>
<td>• Functional nutrition coordination mechanism</td>
<td>• No institutional integration position or policy</td>
</tr>
<tr>
<td>• True partnership between MoH and main stakeholders</td>
<td>• Lack of long-term health systems strengthening funds</td>
</tr>
<tr>
<td>• Functioning public sector supply agency</td>
<td>• Difficulty to find a balance between operational mode and health systems</td>
</tr>
<tr>
<td>• Full-time technical staff to coordinate implementation of study recommendations</td>
<td>strengthening mode</td>
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Nutrition product supply chain landscape

• Integration of Community-Based Management of Acute Malnutrition (CMAM) programme in primary health care packages
  – Accomplished through use of short-term funding and intense collaboration between governments and development partners

• This ‘normalisation’ allows:
  – donors to move towards medium- to long(er)-term funding
  – implementing partners to move away from service delivery to programme support

• Increased integration of the parallel nutrition product supply chain – currently mainly run by UNICEF CO - seems a logical next step
Parallel systems

- RUTF allowed for massive scale-up of treatment programmes for severe acute malnutrition (SAM)
- Parallel supply chains established to respond to quickly increasing needs for RUTF
- Parallel supply chains criticised for increased operational and threat to the regular supply chain
Parallel systems and their integration

- Serious investments are taking place to improve regular supply chains
  - Time-consuming processes
  - Substantial funding and long-term commitment required
  - Lack of long term strategic development plan for regular supply chain

- Most major funders support integration initiatives and are willing to invest in health systems strengthening

- New strategies are changing regular supply chain and offer opportunities for integration
  - Rendering Central Medical Stores more independent from governments
  - Outsourcing of (elements of the) supply chain to private sector

- Expected that Central Medical Stores continue to play key role in SCM of medicines and health products in the public sector
Overall conclusions

• Nutrition products seen as ‘external’ products
  – UNICEF-managed nutrition supply chain should gradually integrate in regular supply chain

• Integration processes lead to health systems strengthening

• All SCM elements have to be considered

• No ‘one size fits all’ approach for integration of nutrition products SCM

• Integration done incrementally, element-per-element, pre-conditions are:
  – Existence of a (potentially) strong enough regular supply chain
  – Existence of national SCM strategy

• Integration should not be pursued at any cost
## Recommendations

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<th>Entity</th>
<th>Recommendation</th>
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| General         | • Learn from past integration processes  
                   • Use the process and technical element guidelines presented as part of report (Volume 2)  
                   • ‘Normalise’ nutrition products                                                                                                           |
| Countries       | • Develop vision and long-term SCM strategic plan and invest in government leadership  
                   • Ensure all relevant nutrition (and other health)-related proposals have links to health systems strengthening |
| Development partners | • Support developing overall SCM strategy  
                         • Work towards longer-term funding  
                         • Ensure proposals include health systems strengthening activities  
                         • Ensure linkages between parallel and regular supply chains in funding proposals  
                         • Evaluate SCM context before investing in parallel chains                                |
## Recommendations - UNICEF

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<th>Recommendation</th>
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| **Global**           | • Advocate to put nutrition products SCM on global policy agenda  
                          • Work towards international regulated standards for nutrition products  
                          • Make integration of nutrition products SCM corporate priority  
                          • Ensure UNICEF CO supply section has advisory role to support SCM |
| **Supply Division**  | • Develop laboratory protocols for quality control of nutrition products  
                          • Support procuring entities to procure from certified suppliers  
                          • Increase awareness of strategic and technical assistance that SD can offer for integration processes |
| **Regional Offices** | • Promote inclusion of supply integration in funding proposals  
                          • Harmonise ToR for studies on nutrition product SCM  
                          • Encourage CO to use MQAS tools when assessing national supply systems |
| **Country Offices**  | • Support countries improving the nutrition product SCM  
                          • Support governments to integrate nutrition products NEML  
                          • Support governments to consider including management of nutrition products in PBF schemes  
                          • Ensure availability of full-time staff to coordinate integration processes  
                          • Include SCM interventions in funding proposals |
Copenhagen Nutrition Supply Chain Consensus

1. In the context of SDG 2, 3 and 17, commitments made as part of the Scaling Up Nutrition (SUN) Movement, the Framework for Action (International Conference on Nutrition, 2014), UN Decade of Action, the Paris Declaration and the Accra Declaration on Aid Effectiveness and related emphasis on resilience, sustainability and national system strengthening, we, as partners participating at the Nutrition Supply Chain Practitioners Forum in Copenhagen 21-23 June 2016, recognize and highlight the following key principles on nutrition supply chain:

2. The effects of maternal and child undernutrition on child survival, health and development, and on macroeconomic development are now well-documented and understood. The focus on combatting undernutrition continues to grow with an increasing number of organisations and alliances addressing undernutrition through a multi-sectoral approach. This, in turn, calls for coordination and alignment between partners and sectors to ensure maximum impact of interventions to prevent and treat undernutrition.

3. Specific high impact interventions to address undernutrition are often implemented through the health service delivery platforms. The scale-up of such interventions to prevent, manage and treat undernutrition, including acute malnutrition and micronutrient deficiencies, has been followed by significant progress in making nutrition services people-centred and an integral part of the primary health care basic services package. Integration of the corresponding supply chain system into the national central supply chain is pending in most countries. We, as partners committed to investing in nutrition, recognize that
Thank You
### Key facts: current status of nutrition

<table>
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<tr>
<th>Condition</th>
<th>Fact</th>
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<tbody>
<tr>
<td>Stunting</td>
<td>• 159 million children under 5 are stunted</td>
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<tr>
<td>Wasting</td>
<td>• 50 million children under 5 are wasted</td>
</tr>
<tr>
<td></td>
<td>• 16 million are severely wasted</td>
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<tr>
<td>Micronutrient deficiencies</td>
<td>• About 2 billion people are deficient in key vitamins &amp; minerals (women and children are most vulnerable)</td>
</tr>
<tr>
<td>Overweight/obesity</td>
<td>• 41 million children under 5 are overweight/obese</td>
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Why The World Needs Better Nutrition:

**SCHOOLING:** Early nutrition programs can increase school completion by one year

**EARNINGS:** Early nutrition programs can raise adult wages by 5-50%

**POVERTY:** Children who escape stunting are 33% more likely to escape poverty as adults

**ECONOMY:** Reductions in stunting can increase GDP by 4-11% in Asia & Africa

## Nutrition-specific interventions across the lifecycle

### Adolescence → pregnancy
- Food fortification, including salt iodization
- Iron and folic acid or multiple micronutrient supplementation for pregnant women
- Intermittent (weekly) iron and folic acid supplementation for reproductive-age women
- Fortified food supplements for undernourished mothers
- Nutrition counselling for improved dietary intake during pregnancy

### Birth
- Delayed cord clamping
- Initiation of breastfeeding within one hour (including colostrum)
- Appropriate infant feeding practices and anti-retroviral therapy for HIV-exposed infants
- Vitamin A supplementation in first 8 weeks after delivery
- Use of fortified foods, micronutrients supplementation and home fortification with multiple micronutrients for undernourished women
- Nutrition counselling for improved dietary intake during lactation
- Communication for behavioural and social change

### 0–5 months
- Exclusive breastfeeding – counselling and lay support on breastfeeding through community-based and facility-based contacts
- Control of the marketing of breast milk substitutes
- Appropriate infant feeding practices and anti-retroviral therapy for HIV-exposed infants
- Micronutrient supplementation, including vitamin A, zinc treatment for diarrhea
- Management of SAM
- Food fortification, including salt iodization
- Zinc supplementation with oral rehydration salts for diarrhea treatment and management

### 6–23 months
- Timely, adequate, safe & appropriate complementary feeding
- Continued breastfeeding
- Control of the marketing of breast milk substitutes
- Appropriate infant feeding practices and anti-retroviral therapy for HIV-exposed infants
- Management of SAM
- Food fortification, including salt iodization
- Zinc supplementation with oral rehydration salts for diarrhea treatment and management

### 24–59 months
- Counselling and nutrition advice to women of reproductive age/adults
- Communication for behavioural and social change to prevent childhood obesity
- Vitamin A supplementation
- Management of SAM (and moderate acute malnutrition)
- Food fortification, including salt iodization
- Zinc supplementation with oral rehydration salts for diarrhea treatment and management

Red refers to interventions of women of reproductive age and mothers.
Blue refers to interventions for young children.

Source: UNICEF, 2013