Towards country-led Delivery Science & Implementation Research in the GFF context

GFF Country Implementation Workshop
Tanzania, 16-21 September 2018
Session outline

- Presentations by GFF Secretariat, Liberia and Cameroon (40 mins)
- Q&A (10 mins)
- Group work with guiding questions (30 mins)
- Discussion on issues arising from group work (10 mins)
Presentation Overview

• Recap of GFF’s value proposition
• What is Delivery Science/Implementation Research?
• How can DeSIRe support the GFF value proposition?
  o Country examples
• Conducting DeSIRe
  o Why? When? How? With whom?
• Expected outcomes, vision and conclusion
GFF supports countries to get on a trajectory to reach the SDGs and UHC through three related approaches:

- Identifying priority investments to achieve RMNCAH outcomes
- Identifying priority health financing reforms
- Getting more results from existing resources and increasing financing from:
  - Domestic government resources
  - IDA/IBRD financing
  - Aligned external financing
  - Private sector resources
- Strengthening systems to track progress, learn, and course-correct
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Delivery Science & Implementation Research Research (DeSIRe)

Delivery Science & Implementation Research Research is the application and creation of knowledge to improve the implementation of health policies, programmes and practices.

Source: Theobald S et al. Lancet, 2018; forthcoming

DeSIRe has the basic intent to understand what is and isn’t working, how and why implementation is going right or wrong and to test approaches to improve implementation.

Source: Implementation Research in Health, a practical guide; AHPSR WHO, 2013
What is delivery science/implementation research?

Draws on various research traditions

- Operational research
- Implementation research
- Health policy/systems research
- Action research (problem driven)
- Participatory action research
- Monitoring and evaluation

Part of a research continuum

Source: Theobald S et al. *Lancet, 2018; forthcoming*

What is delivery science/implementation research?

Part of a planning-implementation continuum

1. Baseline/impact assessment of health outcomes
2. Determine long & short-term health outcome impact / goals & existing bottlenecks
3. Determine funding available
4. Develop prioritization of interventions and the IC
5. Develop monitoring strategy & results framework
6. Implement programs with continuous data-driven corrective action
7. Review routine data (process & outcome indicators)

Implementation phase

Planning phase
The relationship between Evaluation, Monitoring and DeSIRe

Evaluation is usually done at predetermined periods, and can indicate whether and how well a policy, programme or practice works (or not), and whether objectives are achieved (or not).

Monitoring is ideally done on a continuous basis, and can indicate whether a policy, programme or practice is going in the right direction (or not), and whether targets are being achieved (or not).

DeSIRe can be done at short, near-real time intervals, and can indicate how and why a policy, programme or practice went right (or wrong), and what to do to course correct.
Achieving RMNCAH-N results depends on a cascade of health system building blocks.

**Determinants of Health**
- Socioeconomic and demographic factors
- Environmental and behavioural risk factors

**Health system**
- **Inputs** (programme efforts)
  - Policies
  - Health workforce
  - Costs & financing
  - Logistics/supplies

- **Outputs**
  - Information to families
  - Availability of services
  - Access to services
  - Quality of services

- **Outcomes** ("coverage")
  - Proportion of target population who received interventions

**Health status** ("impact")
- Mortality
- Morbidity
- Disability
- Growth
- Development
- Well-being

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LIBERIA
Nelson Dunbar
Director of Research
Ministry of Health
Health context and Investment Case priorities

29% of population walks >5km to PHC facility (2015)
8,052 community health volunteers (2013)
Over 3,727 general community health volunteers recruited and trained by MOH supported by partners
Minimum support (equipment, supplies (2013)

**IC community based interventions**
- Community based RMNCAH promotion
- Demand creation
- Capacity building of community structures
- Strengthen social support networks

IC Priority Counties
Focus counties: Gbarpolu, Grand Bassa, Grand Kru, Rivercess, River Gee, Sinoe

**IC objectives for Priority Regions**
1. Improve adolescent health
2. Improve quality of EmONC
3. Ensure sustainability of community engagement
4. Strengthen surveillance
5. Strengthen CRVS

Source: Investment Case (2016-2020)
Policy context and research prioritization

- Ministry of Health is transitioning from a fragmented community health model to a standardized national community health workforce within public sector health workforce
- Liberia’s Health Sector and Recovery Plan, Health Workforce Program and National Community Health Services Policy have set targets for investment in community health, and, specifically, RMNCAH priorities
- Community Health Policy calls for creation of formal cadre of incentivized Community Health Assistants (CHAs); National Community Assistant Health Program was developed as part of Community Health Roadmap 2016
- Recruited and trained 990 CHAs (1 CHA:350 people) and 129 CHSS in six focus counties earmarked for the Investment Case
- Assessment of implementation of CHA Program in two counties (Gbarpolu and Grand Cape Mount)
Research timeframe, methods, and results

Timeframe: April 1-8, 2018

Methods: Assessment in all four districts of two counties:
- focus group discussions with 24 key informants;
- 30 structured interviews for CHAs

Results
- Average CHA age was 40 years; only 11% were female
- All CHAs were trained and obtained requisite knowledge & skills
- Challenges: Limited supervision, performance monitoring, effective and timely reporting, timely payment and type of incentives, effective referral, lack of supplies; CHT and DHT management capacity; weak facility-community links; sustainability
Conclusions

- CHAs are essential human resources for health to improve access to and utilization of RMNCAH-N services
- CHAs have limited effectiveness under current health system constraints
- Financial sustainability of CHAs is a major concern
Policy recommendations

System-wide

• Improve (planning for) financing of CHAs, including with partners
• Address health system constraints that impede CHA effectiveness (e.g. supervision, supplies, reporting)
• Strengthen facility-community linkages (e.g. Referral, reporting, Feedback)

Technical

• Strengthen capacity and involvement of CHTs, DHTs
• Strengthen CHA performance monitoring and rewarding
Thank You!
CAMEROON
Jean Claude Taptue Fotso
Health Specialist
WBG
Health context and Investment Case priorities

MMR 782/100,000 LB (2011)
NMR 28/1,000 LB (2014)
Stunting prevalence 14.8%

**Adolescent/youth health**

- Mistimed or unwanted pregnancies (>30%, DHS 2011)
- 41% condom use, 6% SARC use <1% LARC use (DHS 2011)

**STIs**

- Sexual violence

**Priority interventions after EQUIST**

- **Family planning**
  - SBA and EmONC
  - ANC and PNC
  - IMCI
  - Girls’ school retention

Source: Investment Case (2017-2020)

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**Priority Regions**

**IC objectives for Priority Regions**

1. Increase service utilization
2. Increase service availability
3. **Strengthen service capacity**
4. Strengthen management for high impact interventions in 80% of facilities (in 10 Regions)
Process of research prioritization

• **Two year collaboration** between study team and counterparts
  - Literature review and 3 workshops to identify policy problems, interventions, design, study region

• **Formative qualitative work, discussions** with health sector actors, and **multidisciplinary working groups** revealed the following **barriers against FP uptake**:
  - **Supply side barriers**: lack of formal FP training, poor FP service quality, and provider bias against recommending LARC to adolescents, unmarried and/or nulliparous women.
  - **Demand side barriers**: negative experiences with FP services, and cost of FP services, wait times
Study focus and questions

- **Focus:** the team decided to **tackle the supply side issues first**, since follow up services also require good quality of FP services

- **Q1:** Is improving the quality of FP service effective to increase uptake of more reliable methods of contraception (MC) among adolescent females?

- **Q2:** Are increased payments to clinics for the provision of LARC to adolescents effective to increase uptake?

- **Q3:** Should FP services be free for adolescents?
Study design and interventions

- **Randomised Controlled Trial** in PBF supported health facilities (total 200 HFs) in East Region of Cameroon

  - **Control**: no training on MCs (*business as usual*) (65 HFs)
  - **S1**: nurses training using a new curriculum on MCs (65 HFs)
  - **S2**: S1 plus the introduction of a tablet-based decision support tool for nurses to counsel female clients (65 HFs)

- **Three levels of PBF payments for LARCs** will be provided to facilities, thus increasing LARC/SARC ratio from 1.5 to 4 on 1

- **50% HF will be free to set their own prices, 50% HFs will provide LARC for free**
Study outcomes, timeline and costs

- **Primary Outcome 1**: total # of MCs administered to clients per quarter (with 33.8 baseline from PBF portal)
- **Primary Outcome 2**: total # of LARCs administered to clients per quarter (with 8.5 baseline from PBF portal)

- **Timeline**: preparations from 2016 onwards; start intervention 1 January 2019; data collection until 31 March 2020; dissemination to decision makers 31 May 2020; final report 30 June 2020; public dissemination 30 September 2020

- **Costs**: US$ 280,000
Expected policy relevance

1. Free provision of MCs to adolescents vs provider-determined prices

2. Standardisation of nurses training on MCs through government designed, state-of the art training program

3. Streamlined counselling sessions through use of decision support tool

4. Machine learning in field experiments tested
Thank You!
Summary of presented studies

Liberia example
Problem: human resource gap to deliver RMNCAH-N services
DeSIRe: assess effectiveness/sustainability of CHA program
Policy change: CHAs are crucial; require more system support

Cameroon example
Problems: low FP service quality, uncertainty about optimal prices for most effective MC, low demand for MC
DeSIRe: explore supply side improvements
Policy change: results not yet available
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Why invest in DeSIRe?

• A large body of evidence (e.g. *Lancet* series) suggests **what to do** to achieve RMNCAH-N results

• Less evidence exists on **how to implement** proven RMNCAH-N interventions at scale in specific country contexts

• **Investing in DeSIRe is effective**: with greater focus on DeSIRe, U5MR can be reduced by 66% while research focused on development of new interventions is estimated to reduce U5MR by 22%

• DeSIRe can provide **quick answers to complex problems**, support the development of **evidence-based policies, programmes and practice**, and often **only requires a small investment**

• Investing in DeSIRe is **efficient** as it complements and accelerates results from routine monitoring and evaluation
East Nigeria, 1966; Guinea, 2015:

**Policy goal:** global smallpox eradication
- Global eradication target through mass vaccination (>80% vaccination coverage)

**Problems:** Outbreak occurred in East Nigeria, vaccination coverage 35%
- Realisation that supplies were insufficient for mass vaccination
- High population mobility to purchase and sell food and goods
- People unaware of being infected with smallpox moved around

**Intervention:** What to do to contain outbreak?
- Step 1. vaccinate outbreak-affected villages
- Step 2. map out local transportation routes and major markets
- Step 3. build rings of resistance where outbreaks could occur

**Results** of this surveillance-containment strategy:
- Outbreaks were shut down in 5 months in East Nigeria
- 750,000 out of 12 million people vaccinated, a vaccination coverage of only 6%

**Scale up**
- Success was repeated in 20 African countries and in Tamil Nadu, India (41 million)
- Adoption of strategy as part of global eradication campaign
- WHO declared global eradication of smallpox in 1979

**Learning:** surveillance containment strategy was used during Ebola in Guinea, 2015
**When to do DeSIRe?**

**Investment Case**

**Implementation phase:**
- 16 countries

**Development phase:**
- 11 countries

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**IR for systematic identification of system barriers**

Better, targeted investments to overcome system barriers and achieve results

Course correct, achieve set goals

Service delivery
- Supplies
- Information systems
- Financing
- Human resources
- Policies

IR to overcome system barriers that prevent achieving set goals (identified thru M&E)
How? DeSIRe in 10 steps

1. Understand and describe the context
2. Understand and describe implementation approaches
3. Determine the policy question to be answered
   • Identify available information to answer the policy question
   • Identify new information needed
4. Determine objectives, research questions and funding for DeSIRe
5. Identify stakeholders supporting DeSIRe
6. Develop research methods, study protocol, seek ethical clearance
7. Conduct studies
8. Review research findings and identify recommendations with all DeSIRe stakeholders
9. Use results for policy, programme and/or service improvements
10. Document change, monitor, identify other needs for improvement

Adapted from: GF et al. Framework for Operations and Implementation Research in Health and Disease Control Programs, 2009
## How? Objectives, implementation questions, methods

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Implementation question</th>
<th>Research method and data collection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explore</td>
<td>What possible factors are responsible for good implementation, enhancing or expanding a health intervention?</td>
<td>Qualitative – key informant interviews, focus groups, case studies, narrative approaches... Quantitative – network analyses, cross-sectional surveys Mixed methods – Q+Q</td>
</tr>
<tr>
<td>Describe</td>
<td>What is the implementation context? What are the main factors influencing implementation?</td>
<td>Quantitative – same as above Qualitative – same as above Mixed methods – Q+Q</td>
</tr>
<tr>
<td>Adequacy</td>
<td>Is intervention coverage changing?</td>
<td>Before-after, time series in intervention area Participatory action research</td>
</tr>
<tr>
<td>Plausibility</td>
<td>Is health status change plausibly due to intervention?</td>
<td>Before-after, cross sectional study in intervention recipients and non-recipients Typical quality improvement studies</td>
</tr>
<tr>
<td>Explain</td>
<td>How and why does intervention implementation lead to effects on health behavior, services or health status?</td>
<td>Mixed methods – Q+Q Quantitative – effectiveness-implementation hybrids (with assessment of implementation strategy and outcomes) Qualitative – same as above Participatory action research (with study subjects themselves)</td>
</tr>
<tr>
<td>Predict</td>
<td>What is the likely course of future intervention implementation?</td>
<td>Quantitative – modelling, sensitivity analyses Qualitative – scenario building, Delphi</td>
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</table>
With whom?

• **Led** by country-level PHC practitioners, including policy makers, programme managers and service providers

• **Supported** by local research institutes

• **If needed supported** by International Coalition on DeSIRe (e.g. DDCF, GFF, UNICEF, USAID, WHO, World Bank)
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Expected outcomes of a DeSIRe approach in GFF countries

• GFF country **policy makers, managers and service providers**
  • **take charge of their own implementation challenges**, using data and research findings at two distinct stages of the Investment Case
    o prioritise key health system barriers for their Investment Cases
    o course correct while implementing their Investment Cases
  • are **supported by local and global researchers** to improve RMNCAH-N policies, programmes and service delivery through DeSIRe (and M&E)

• **understand the added value of DeSIRe** (and M&E) for evidence based policy setting, systems strengthening, service delivery

• **gain capacity in planning for and conducting DeSIRe** as part of routine RMNCAH-N programming

• **invest in DeSIRe** (and M&E) to achieve RMNCAH-N results

• learn from and support other countries in **applying best practices in DSIR and RMNCAH-N programmes**
Emerging vision and goals for DeSIRe in GFF context

**Vision**
- Data and research findings are translated into *changes in policies, programmes and service practice* that lead to *better RMNCAH-N results* in GFF countries (and beyond)

**Goals**
- To **accelerate the GFF value proposition**: supporting PHC practitioners in summarising, generating, disseminating, and using evidence to overcome health systems bottlenecks, and accelerate the introduction, scale up and sustained use and financing of proven RMNCAH-N interventions
- To **build in-country capacity** in conducting, planning for, and financing DeSIRe as part of routine RMNCAH-N programming
- To **establish partnerships of PHC practitioners and researchers** at country and global level for enhanced learning on DeSIRe across countries
Conclusion

- More evidence is available on what interventions are needed to improve RMNCAH-N results than on **how these proven interventions might be implemented** at scale in different contexts.

- **By addressing this how question**, Delivery Science and Implementation Research (DeSIRe) has great potential to accelerate the GFF value proposition.

- Countries are urged to **invest in DeSIRe** as part of routine programming, as current investments are not commensurate with its impact potential.

- The GFF, supported by local and international DeSIRe experts, aims to develop a **country-led, PHC practitioner-driven DeSIRe agenda** to:
  - help set DeSIRe priorities for the Investment Case
  - course correct and overcome health system bottlenecks; and
  - build in-country DeSIRe capacity.
Discussion format

• Working Groups - countries discuss questions, and report on worksheet (30 minutes)

• Plenary – discussion on issues arising from Working Groups (10 minutes)

• Please summarize your discussions on the worksheet and send to
  o Supriya Madhavan smadhavan1@worldbank.org and
  o Robert Scherpbier rscherpbier@worldbank.org
Questions for discussion

• Which **three implementation challenges** are facing your country?

• To what extent has your country used **Delivery Science & Implementation Research** to accelerate or course-correct the Investment Case results and/or Theory of Change?
  - On what themes?
  - Which themes are missing?

• Which **three research priorities** do you think Delivery Science & Implementation Research should address in your country?