

DSO STRATEGY REPRODUCTIVE HEALTH COMMODITIES

Study report

Final version Volume II: Annexes

June 2020

Tel +32 3 844 59 30 www.hera.eu hera@hera.eu

Laarstraat 43 B-2840 Reet Belgium







DSO strategy in relation to Reproductive Health Commoditie	DSO strategy in	relation to	Reproductive	Health	Commodities
--	-----------------	-------------	--------------	--------	-------------

i

TABLE OF CONTENTS

Annexes	1
1 Approach applied for the literature review	1
1.1 Search strategy	1
1.2 Document selection	3
1.3 Data extraction and analysis	4
2 Key informants interviewed	5
3 Interview guide	6
4 Overview stakeholders	8
5 Product specific information	20
5.1 Dapivirine vaginal ring	20
5.2 Sayana Press® (DMPA-SC)	20
5.3 Contraceptive implant	21
5.4 Progestogen vaginal ring	21
5.5 Heat stable carbetocin	22
5.6 Tranexamic acid	23
5.7 Combipack Misoprostol-mifepristone	23
6 Overview of key interventions	24
7 Overview of tools for procurement related topics	30
8 Suggestions from interviewees for interventions to be supported by the Netherlands	34
9 Documents reviewed and websites searched	35
9.1 Grey literature	35
9.2 Peer-reviwed articles	39
9.3 Websites	45

ABBREVIATIONS

3PL Third Party Logistics

ACAME Association Africaine des Centrales d'Achats de Médicaments Essentiels (African

Association of Procurement Centres)

AFD Agence Française de Développement

AMA African Medicines Agency

AMRH African Medicines Regulatory Harmonisation

ANDA Abbreviated New Drug Application
API Active Pharmaceutical Ingredient

ARC African Resource Centre

ARV Antiretroviral

BFM Bridge Funding Mechanism

BMGF Bill & Melinda Gates Foundation

CBD Community Based Distribution

CCP Central Contraceptive Procurement

CGA Commodity Gap Analysis

CGD Centre for Global Development
CHAI Clinton Health Access Initiative
CIP Costed Implementation Plan

CMS Central Medical Stores

CRT Commodity Requirement Tool
CSO Civil Society Organisation
CSP Coordinated Supply Planning
CYP Couple Years of Protection

DFID Department for International Development

DHIS District Health Information Software

DRC Democratic Republic of Congo
DRM Domestic Resource Mobilisation
DSO Directorate Social Development

EAC – MRH East African Community Medicines Regulatory
ECOWAS Economic Community of West African States

eLMIS electronic Logistic Management Information Systems

EML Essential Medicines List
EOI Expression of Interest
ERP External Review Panel

FDA Food and Drug Administration

FP2020 Family Planning 2020

FPET Family Planning Estimation Tool

FY Financial Year

GBV Gender-Based Violence GFF Global Financing Facility

GHSC-PSM Global Health Supply Chain Program – Procurement and Supply Management

DSO strategy in relation to Reproductive Health Commodities

Global FP Global Family Planning Visibility and Analytics Network

VAN

GMP Good Manufacturing Practices

HIP High Impact Practices
HPV Human Papilloma Virus

HRP Human Reproduction Programme

HSC heat stable carbetocin
IAP Implant Access Program

ICPD International Conference on Population and Development

IPM Informed Push Model

IPPF International Planned Parenthood Federation

IUD Intra-Uterine Device

JSI John Snow Inc

KII Key Informant Interview

L-MIC Lower Middle-Income Country

LAPM Long Acting and Permanent Method

LARC Long Acting Reversible Contraceptive

LMD Last Mile Distribution

LMIC low- and Middle-Income countries

LMIS Logistic Management Information Systems

LNG-IUS Levonorgestrel Intra-Uterine System

MHRA Medicines and Healthcare products Regulatory Agency

MOF Ministry of Finance
MOH Ministry of Health

MPT Multipurpose Prevention Technology
MSH Management Sciences for Health

MSI Marie Stopes International MVA Manual Vacuum Aspiration

NDA New Drug Application

NEML National Essential Medicines List

NEPAD The New Partnership for Africa's Development is the development agency of the African

Union

NGO Non-Governmental Organisation
NHIS National Health Insurance Scheme

NMRA National Medicines Regulatory Authority

NRA National Regulatory Authority

OOP Out of Pocket

OP Ouagadougou Partnership
P4P Payment for Performance

PATH Program for Appropriate Technology in Health

PPH Post-Partum Haemorrhage

PPIUD Postpartum Intra-Uterine Device
PPM Pooled Procurement Mechanism

PPMR Procurement Planning and Monitoring Report

DSO strategy in relation to Reproductive Health Commodities

PSB Procurement Services Branch
PSI Population Services International

PVR Progesterone Vaginal Ring
R&D Research and Development
RFM Regional Financing Mechanism
RHC Reproductive Health Commodity
RHI Reproductive Health Interchange

RHSC Reproductive Health Supplies Coalition

RMNCAH Reproductive Maternal Newborn, Child and Adolescent Health

RMNCAH-N Reproductive, Maternal, Newborn, Child and Adolescent Health and Nutrition

RMNCH Reproductive, Maternal, Newborn and Child Health

SC Subcutaneous

SCM Supply Chain Management
SDG Sustainable Development Goal

SECONAF Forum pour la Sécurité Contraceptive en Afrique Francophone

SMO Social Marketing Organisation
SRA Stringent Regulatory Authority
SRH Sexual and Reproductive Health

SRHR Sexual and Reproductive Health and Rights

STM Short Term Method

SWEDD Sahel Women's Empowerment and Demographic Dividend
The Global The Global Fund to Fight Aids, Tuberculosis and Malaria

Fund

TMA Total Market Approach
TOR Terms of Reference

TPP Third Party Procurement

U-MIC Upper Middle-Income Country
UAV Unmanned Aerial Vehicle
UHC Universal Health Coverage

UNFPA United National Population Fund

US United States

USFDA US Food and Drug Administration
WAHO West African Health Organisation
WASH Water, Sanitation and Hygiene

WB World Bank

WHO World Health Organisation

WISH Women's Integrated Sexual Health

ANNEXES

1 APPROACH APPLIED FOR THE LITERATURE REVIEW

1.1 SEARCH STRATEGY

The search strategy comprised both published peer-reviewed literature and grey literature from relevant organisations working in reproductive health.

For peer-reviewed literature, the online Pubmed database was searched using standardised search terms. The search strategy was developed per study question. The search strategy was based on the following key words, including their synonyms: reproductive health commodities, availability, intervention, (private) market, procurement, supply chain, last mile distribution, resource mobilisation, West Africa, equity. The actual search strings and number of references can be found in the table below. Further studies including peer-reviewed papers and grey literature were identified using a snowball technique from the reference lists of already identified articles. We extended our search to include specialised journals in reproductive health.

Search strings

((innovation[Title/Abstract]) OR (novelty[Title/Abstract]) OR (novel[Title/Abstract]) OR (development[Title/Abstract])) AND ((reproductive health[Title/Abstract]) OR (SRH[Title/Abstract])) AND ((intervention[Title/Abstract])) OR (program[Title/Abstract]))

(((availability[Title/Abstract]) AND ((reproductive health[Title/Abstract]) OR (SRH[Title/Abstract])) AND ((commodit*[Title/Abstract]) OR (drug*[Title/Abstract]) OR (product* [Title/Abstract]) OR (RHC?[Title/Abstract])) AND ((intervention[Title/Abstract]) OR (program[Title/Abstract]))

(((reproductive health [Title/Abstract] OR RH[Title/Abstract] OR SRH[Title/Abstract] OR family planning[Title/Abstract])) AND (commodity[Title/Abstract] OR product[Title/Abstract] OR item[Title/Abstract] OR good[Title/Abstract])) AND (last mile[Title/Abstract] OR community[Title/Abstract] OR point of care[Title/Abstract] OR clinic[Title/Abstract])) AND (innovat*[Title/Abstract] OR new[Title/Abstract] OR recent[Title/Abstract] OR latest[Title/Abstract])

((((availab*[Title/Abstract] OR access*[Title/Abstract] OR obtain*[Title/Abstract])) AND (reproductive health[Title/Abstract] OR family planning[Title/Abstract] OR RH[Title/Abstract] OR SRH[Title/Abstract] OR FP[Title/Abstract])) AND (commodities[Title/Abstract] OR supplies[Title/Abstract] OR contraceptives[Title/Abstract] OR abortion[Title/Abstract])) AND global*

(((((availability[Title/Abstract] OR access[Title/Abstract] OR equity[Title/Abstract])) AND (Family planning[Title/Abstract] OR modern contraceptives[Title/Abstract] OR emergency contraception[Title/Abstract] OR injectable contracept*[Title/Abstract] OR condom[Title/Abstract] OR contracept*)) AND (Safe deliveries[Title/Abstract] OR Safe abortion[Title/Abstract] OR post-abortion[Title/Abstract])) AND (review[Title/Abstract] OR report[Title/Abstract] OR overview[Title/Abstract]))

((((availab*[Title/Abstract] OR access*[Title/Abstract] OR obtain*[Title/Abstract])) AND (Reproductive Health Commodit*[Title/Abstract] OR Family Planning commodit*[Title/Abstract] OR contracept*[Title/Abstract])) AND (intervention[Title/Abstract] OR policy[Title/Abstract] OR strateg*[Title/Abstract] OR plan[Title/Abstract])) AND (impact[Title/Abstract] OR change[Title/Abstract] OR trend[Title/Abstract])

((((mapping[Title/Abstract] OR review[Title/Abstract] OR evidence[Title/Abstract])) AND (impact[Title/Abstract] OR trend[Title/Abstract] OR chang*[Title/Abstract] OR increas*[Title/Abstract])) AND availability[Title/Abstract]) AND (Reproductive Health Commodit* OR Family Planning commodit* OR contracept*)

((((support*[Title/Abstract] OR sustain*[Title/Abstract] OR enabl*[Title/Abstract] OR facilitat*[Title/Abstract]))
AND (innovation[Title/Abstract] OR research[Title/Abstract] OR development[Title/Abstract])) AND (reproductive health[Title/Abstract] OR sexual health[Title/Abstract] OR family planning[Title/Abstract])) AND (policy[Title/Abstract] OR policies[Title/Abstract] OR approach[Title/Abstract] OR intervention[Title/Abstract])

Search strings

((((evidence[Title/Abstract] OR impact[Title/Abstract]) AND availability[Title/Abstract]) AND (reproductive health[Title/Abstract] OR sexual health[Title/Abstract] OR family planning[Title/Abstract])) AND (financing[Title/Abstract] OR domestic resource mobilisation[Title/Abstract] OR mobilisation[Title/Abstract] OR funds[Title/Abstract] OR funding[Title/Abstract])

(((access[Title/Abstract] OR availability[Title/Abstract])) AND (reproductive health[Title/Abstract] OR sexual health[Title/Abstract] OR family planning[Title/Abstract] OR contracepti*[Title/Abstract])) AND (equit* OR vulnerable group OR key populations OR vulnerability)

((Reproductive Health[Title/Abstract] OR Reproductive Health Commodit*[Title/Abstract] OR Family Planning commodit*[Title/Abstract] OR Family planning[Title/Abstract])) AND (Domestic Resource Mobilisation[Title/Abstract] OR funding[Title/Abstract] OR funds[Title/Abstract] OR financing[Title/Abstract] OR sustainab*[Title/Abstract])

((((reproductive health[Title/Abstract] OR reproductive health commodit*[Title/Abstract] OR family planning[Title/Abstract] OR family planning commodit*[Title/Abstract] OR sexual health commodit*[Title/Abstract] OR resource*[Title/Abstract] OR funds[Title/Abstract] OR funds[Title/Abstract] OR funding[Title/Abstract] OR financing[Title/Abstract] OR domestic financing[Title/Abstract] OR domestic resource[Title/Abstract])) AND (intervention[Title/Abstract] OR program*[Title/Abstract] OR polic*[Title/Abstract] OR strategies[Title/Abstract])) AND (increase[Title/Abstract] OR support[Title/Abstract] OR stimulate[Title/Abstract] OR sustain*[Title/Abstract])

(((((((reproductive health[Title/Abstract] OR reproductive health commodit*[Title/Abstract] OR family planning[Title/Abstract] OR family planning commodit*[Title/Abstract] OR sexual health commodit*[Title/Abstract]) AND (resource allocation[Title/Abstract] OR resource*[Title/Abstract] OR funds[Title/Abstract] OR funding[Title/Abstract] OR financing[Title/Abstract] OR domestic financing[Title/Abstract] OR domestic resource[Title/Abstract])) AND (intervention[Title/Abstract] OR program*[Title/Abstract] OR polic*[Title/Abstract] OR approach[Title/Abstract] OR strategy[Title/Abstract] OR strategies[Title/Abstract])) AND (increase[Title/Abstract] OR support[Title/Abstract] OR stimulate[Title/Abstract] OR sustain*[Title/Abstract])) AND "last 5 years"[PDat] AND Humans[Mesh])) AND (west africa[Title/Abstract] OR africa[Title/Abstract] OR low income[Title/Abstract] OR LMIC[Title/Abstract])

((reproductive health[Title/Abstract] OR reproductive health commodit*[Title/Abstract] OR family planning commodit*[Title/Abstract] OR contracept*[Title/Abstract] OR reproductive health servic*[Title/Abstract] OR family planning servic*[Title/Abstract])) AND (international NGO[Title/Abstract] OR INGO[Title/Abstract] OR PSI[Title/Abstract] OR IPPF[Title/Abstract])

(((reproductive health[Title/Abstract] OR reproductive health commodit*[Title/Abstract] OR family planning[Title/Abstract] OR family planning commodit*[Title/Abstract] OR contraceptive*[Title/Abstract] OR abortion[Title/Abstract] OR contraceptive method OR)) AND (international[Title/Abstract] OR INGO[Title/Abstract] OR nonprofit[Title/Abstract])) AND (support[Title/Abstract] OR intervention[Title/Abstract] OR availability[Title/Abstract] OR innovation[Title/Abstract] OR contribution[Title/Abstract] OR access[Title/Abstract] OR equity[Title/Abstract])

(((reproductive health[Title/Abstract] OR reproductive health commodit*[Title/Abstract] OR family planning[Title/Abstract] OR family planning commodit*[Title/Abstract] OR contracept*[Title/Abstract] OR abortion[Title/Abstract])) AND (intervention[Title/Abstract] OR social marketing[Title/Abstract] OR cash transfer[Title/Abstract] OR voucher[Title/Abstract] OR school-based)) AND (impact[Title/Abstract] OR availability[Title/Abstract] OR access[Title/Abstract])

(((reproductive health[Title/Abstract] OR reproductive health commodit*[Title/Abstract] OR family planning[Title/Abstract] OR contracept*[Title/Abstract] OR abortion[Title/Abstract] OR LARC[Title/Abstract])) AND (private market[Title/Abstract] OR private provider[Title/Abstract] OR private[Title/Abstract] OR for profit[Title/Abstract])) AND (barrier*[Title/Abstract] OR bottleneck[Title/Abstract] OR vulnerabilit*[Title/Abstract] OR risk*[Title/Abstract])

Search strings

((((reproductive health[Title/Abstract] OR reproductive[Title/Abstract] OR sexual[Title/Abstract] OR sexual health[Title/Abstract] OR family planning[Title/Abstract] OR contraceptive[Title/Abstract] OR abortion[Title/Abstract] OR pregnancy[Title/Abstract] OR delivery[Title/Abstract]) AND (procurement[Title/Abstract] OR procurement supply chain[Title/Abstract] OR supply[Title/Abstract] OR distribution[Title/Abstract] OR delivery[Title/Abstract] OR wholesale[Title/Abstract] OR retail[Title/Abstract])) AND (pharmaceutical[Title/Abstract] OR manufacturer[Title/Abstract] OR manufacturing[Title/Abstract])) AND (access[Title/Abstract] OR equity[Title/Abstract])

(((((reproductive[Title/Abstract] OR sexual[Title/Abstract] OR family planning[Title/Abstract] OR SRHR[Title/Abstract] OR commodities[Title/Abstract])) AND (support[Title/Abstract] OR technical assistance[Title/Abstract] OR strengthening[Title/Abstract])) AND "last 5 years"[PDat] AND Humans[Mesh])) AND (converge[Title/Abstract] OR align[Title/Abstract] OR coordination[Title/Abstract] OR complement[Title/Abstract])

((reproductive health[Title/Abstract] OR family planning[Title/Abstract] OR SRH[Title/Abstract] OR commodities[Title/Abstract])) AND (priority interventions[Title/Abstract] OR private sector[Title/Abstract] OR pharma[Title/Abstract])

For grey literature, a search was performed in the websites of key organisations and stakeholders working in the field of RHCs: U.S. Agency for International Development (USAID), United Nations Population Fund (UNFPA), UNFPA Supplies, Management Science for Health (MSH), Population Service International (PSI), John Snow Inc. (JSI), Marie Stopes International (MSI), Bill and Melinda Gates Foundation (BMGF), RHSC publications database, DFID, DSO, Concept Foundation, WHO Human Reproduction Program, DKT International, PATH, FP2020, Track20, Shops Plus, and the Guttmacher Institute. The organisations' publication pages were checked manually for potentially eligible documents published during the last 5 years, with a focus on sub-Saharan African countries.

1.2 DOCUMENT SELECTION

Queries for the study questions in Pubmed resulted in 2 633 references published in the last 5 years. ¹ After removing duplicates, 1 653 references were imported into the Mendeley software. These studies were first screened for inclusion by title and abstract, later further screened by full text. We included the articles that met the following criteria:

- Outcomes met the review objectives: present information on availability of RHCs;
- Published between 1 January 2017 and the present day;
- Language of the publication was English or French;
- LMIC setting in sub-Saharan African countries (defined using the latest World Bank data http://data.worldbank.org/about/country-and-lending-groups);
- Published peer-reviewed articles or grey literature. Grey literature was considered for inclusion if a study was reported in sufficient detail to extract data, and if there was an evaluation element for intervention studies.
- Articles related to reproductive health services in general, were meant to be excluded; however, during the screening it became evident that there were almost no results of studies purely assessing availability of RHCs. As a consequence, articles that measured availability of reproductive health

¹ The timeframe was initially for the last 5 years, but the team decided to reduce it later to the last 2 years. See inclusion and exclusion criteria. hera / DSO – Study report - Final version Volume II: Annexes/ June 2020

services in general, with a mention to availability and supply of commodities were then considered for inclusion.

The following exclusion criteria were also applied:

- Articles related to access/use/uptake/demand generation of RHCs, as these topics, although linked, were not related to the objectives of this study;
- Articles with data collected in high income countries;
- In line with the TOR, articles referring to RHCs not belonging to any of the following categories: family planning, safe abortion, safe delivery and dapivirine vaginal ring.
- Clinical trials
- Publication date prior to January 2017: although the study team had initially planned to include all
 publications from 2015, it was decided to narrow down the timeframe, starting in 2017, in order to
 limit our results to the latest information available on the topic.

In the case of the grey literature, the same timeframe criteria were applied in order to restrict the findings to the most recent published data.

1.3 DATA EXTRACTION AND ANALYSIS

All selected full text articles were imported to MAXQDA and coded following the method of thematic synthesis. Results were summarised narratively.

2 KEY INFORMANTS INTERVIEWED

	Name	Contact person
1	Abdrahamane Tounkara	Abdrahamane Tounkara
2	ACAME	Tahina Andrianjafy
3	Association of Support in the Development of Activities of Population	Ousmane Traoré
4	Bill and Melinda Gates Foundation	Lester Coutinho
5	Clinton Health Access Initiative	Mindy Scibilia
6	Clinton Health Access Initiative	Eleni Han
7	Clinton Health Access Initiative	Caitlin Glover
8	DFID	James Droop
9	DFID	Magalie Rouschmeyer
10	Dutch Embassy Ethiopia	Marco Gerritsen
11	Dutch Embassy Mali	Noortje Verhart
12	Dutch Embassy Mali	Mariam Namogo
13	Dutch Embassy Uganda	Judith Adokorach
14	Family Planning 2020	Martyn Smith
15	Global Financing Facility	Brendan Hayes
16	i+ solutions	Frank Roijmans
17	Global Healthcare Supply Chain Expert / Independent consultant	Frederiek Chatfield
18	MSD	Ruud Grootenhuis
19	NORAD	Nina Strom
20	Ouagadougou Partnership Coordination Unit	Norbert Coulibaly
21	Population Services International	Doug Call
22	Pregna International Limited- Managing Director	Mukul Taparia
23	Reproductive Health Supplies Coalition	John Skibiak
24	United Nations Population Fund Supplies	Ayman Abdelmohsen
25	West African Health Organisation	Cletus Adohinzin
26	William Davidson Institute	Andrea Bare

3 INTERVIEW GUIDE

Details about the interview	
Date of the interview	
Time and duration of the interview	
Name of the interviewee	
Organisation and role of the interviewee	
Contact details	
Country/region of work	
Interviewer 1	
Interviewer 2 (note taker)	

Warm-up questions

1. Can you tell us about your involvement in (name organisation) and how it relates to the area of Reproductive Health Commodities?

Topic 1: RHCs availability

- 2. What are the trends and developments regarding RHCs within your institution?
- 3. What can be learned about the availability of RHCs from the recent strategic review processes undertaken by your institution and others (RHCs, FP2020, BMGF...)?

Topic 2: Role of the Netherlands in RHCs

- 4. How do you see the involvement and impact (or what are your views on the role) of the Netherlands in ensuring availability of RHCs, at global level and local level?
- 5. In your opinion, what should be taken into account by the Netherlands MoFa when taking decisions to support priority interventions?
- 6. In general, do you consider there is an alignment of initiatives aimed to increase RHCs availability, or rather a duplication of efforts?

Topic 3: Priority interventions

- 7. From your knowledge and experience, what are the most effective strategies or interventions to increase availability of RHCs?
- 8. What is the impact of interventions implemented by INGOs on the availability of RHCs?

Innovation at product level

We are also interested in exploring which interventions have brought innovation at different levels; this innovation could refer to new and creative ideas, or to better solutions to existing challenges or needs.

9. What interventions, strategies and programs did you implement, or do you know of, that facilitated innovation at product level, in products related to reproductive health?

Innovation for LMD

10. What interventions, strategies or programs did you implement, or do you know, to facilitate innovation for last mile distribution?

Stimulation of domestic resource mobilisation

11. What interventions, strategies and programs did you implement, or do you know, to stimulate domestic resource mobilisation?

Topic 4: Private sector

- 12. What do you consider as important barriers, risks and vulnerabilities of the private sector for RHCs?
- 13. How could these be overcome?
- 14. What could the Netherlands do to support the development of the private sector?

Topic 5: Main players in procurement and technical assistance

- 15. Which players do you consider most important for procurement of RHCs?
- 16. Which players do you consider most important for technical assistance in the area of RHCs?
- 17. Which of these organisations are best positioned to align interests of the private sector (this concerns global manufacturers, local wholesalers, and importers of RHCs)?
- 18. Which organisations can facilitate increased availability of RHCs, quality assurance, including registration processes globally and in the Netherlands priority countries?

CONCLUSIONS

Thank you very much for your time and for sharing your experiences with us.

- Do you have any additional comments or insights about the topics that we have discussed?
- Is there anyone else you know that I should speak with about these topics, who may have some additional ideas?
- Do you have any relevant documents on the topic that you could share with us?
- Do you have any questions for us?

4 OVERVIEW STAKEHOLDERS

Name	Туре	Description	Countries of	Working in West	Relevan		udy qu Netherla		/ focus	Relevance for policy options
	. , , , ,		focus	Africa	Research	SCM	LMD	DRM	Private sector	options proposed
ACAME - African Association of Procurement Centres (Association Africaine des Centrales d'Achats de Médicaments Essentiels)	Regional organisation	ACAME is a membership organisation operating from Burkina Faso with 10 partners, 22 member countries and serving 350 million inhabitants in the region. Its mission is to contribute to better performance of its member central medical stores in order to improve the availability of affordable quality assured medicines and health commodities.	22 countries in West Africa	٧		٧	٧	٧		3, 4
Bill and Melinda Gates Foundation (BMGF)	Foundation	Supports national governments that have committed to the goals of FP2020 by leading the development and implementation of their own country-specific plans. Works to increase funding and improve policies for family planning, and to develop innovative and affordable contraceptive technologies.	Global	٧	٧		٧	٧	٧	NA
Centre for Global Development (CGD)	Research institute	CGD aims to reduce poverty and improve lives through innovative economic research that drives better policy and practice by the world's top decision makers. Main topics CGD works on: global health policy; education; migration, displacement and humanitarian policy; sustainable development finance; technology and development; government and development.	Global	Unknown	٧					5, 6, 8

Name	Туре	Description	Countries of	Working in West	Relevan		udy quo letherla		/ focus	Relevance for policy
Traine	.,,,,	2-5501-p-16-11	focus	Africa	Research	SCM	LMD	DRM	Private sector	options proposed
Clinton Health Access Initiative (CHAI)	INGO	Organisation focused on health education and provision of affordable contraceptive methods for adolescents and women. It works with manufacturers to increase access by promoting affordability, and with governments to improve national supply chains and service delivery systems.	20 countries	٧		٧	٧		٧	7, 10
Concept Foundation	INGO	Assists partners with manufacturing, quality certification, registration and market introduction of pharmaceutical products. It supported Shanghai Dahua Pharmaceutical Co. Ltd with the prequalification of Levoplant, a long-acting, reversible contraceptive implant also known as Sinoimplant (II).	Global	Unknown					٧	14
CONRAD	INGO	Focuses on development of new, safe and effective microbicides, contraceptives, and multipurpose prevention technologies.	Global	Unknown					٧	NA
Coordinated Assistance for Reproductive health supplies (CARhs) group	Partnership	Partnership of donors collaborating to promote country ownership of supply management through increased supply chain visibility and coordination in order to prevent and resolve contraceptive supply crises.	Global	٧		٧				NA

Name	Туре	Description	Countries of in West Relevance to study questions / focus areas Netherlands *				/ focus	Relevance for policy		
	,,	·	focus	Africa	Research	SCM	LMD	DRM	Private sector	options proposed
Coordinated Supply Planning Group (CSP)	Working group	Working group of the RHSC coordinating donor procurement of family planning supplies for the public sector, fostering dialogue and mutual trust between supply chain participants and facilitating adjustments to prevent stock-outs and/or over-supply.	Global	٧		٧				NA
Countdown 2030 Europe	Consortium of NGOs	Consortium of 15 NGOs in 12 European countries working to hold European donor governments and institutions to account for their policy and funding commitments on sexual and reproductive health and family planning	Global	٧				٧		NA
DKT International	INGO that operates as a social enterprise	One of the world's largest providers of family planning and safe abortion products and services.	West Africa and globally	٧		٧	٧		٧	13
Family Planning 2020 (FP2020)	Partnership	Aims to ensure that every woman and girl has the ability to control her own fertility and decide for herself whether and when to get pregnant. Agreed by 69 countries.	69 LMICs	٧		٧	٧	٧	٧	NA
FHI 360	INGO	Works to improve the health and well-being of people in the United States and around the world. Plays an important role in quality assurance related topics mainly for USAID.	Global	٧		٧			٧	NA

Name	Туре	Description	Countries of	Working in West	Relevan		udy qu Netherla		/ focus	Relevance for policy options
. Hame	.,,,,		focus	Africa	Research	SCM	LMD	DRM	Private sector	options proposed
Forum pour la Sécurité Contraceptive en Afrique Francophone (SECONAF)	Partnership	SECONAF is an international partnership established by the RHSC in 2011. Its vision is all people in Francophone Africa can choose, access and use affordable, quality products to ensure good sexual and reproductive health. The forum is set up to facilitate access to funding for SECONAF members organisations.	Francophone countries	٧				٧		NA
Global Financing Facility (GFF)	Multilateral organisation	The GFF was established in 2015 to close the financing gap for reproductive, maternal, newborn, child and adolescent health and nutrition (RMNCAH-N). The GFF secretariat is based at the WB. GFF leverages domestic government resources, WB financing as well as other external funding, and resources from the private sector.	Global	٧		٧	٧	٧	٧	GFF is currently supported by the Netherlands
Global Health Supply Chain Program – Procurement and Supply Management (GHSC-PSM) (Chemonics)	Implementing agency/project	GHSC-PSM, a project under the USAID Global Health Supply Chain Programme, provides services for commodity procurement, supply, and systems strengthening technical assistance in 4 main areas including family planning and reproductive health. Its main funding comes from USAID. The project focuses on procurement, technical support on health systems, and global collaboration.	65 countries worldwide	٧	٧	٧	٧		٧	NA

Name	Туре	Description	Countries of	Working in West	Relevan		udy qu letherla		/ focus	Relevance for policy options
	.,,,-		focus	Africa	Research	SCM	LMD	DRM	Private sector	options proposed
Guttmacher Institute	Research and policy organisation	Produces a wide range of resources on topics pertaining to sexual and reproductive health and publishes two peer-reviewed journals and one public policy journal.	Global	٧	٧					5, 7
Human Reproductive Programme (HRP)	Research institute	HRP is the UNDP/UNFPA/UNICEF/WHO/World Bank Special Programme of Research, Development and Research Training in Human Reproduction. HRP, based at the WHO headquarters, plays a key role in research at global level by conducting research, disseminating results through different channels and support LMIC to conduct high quality research.	Global	٧	٧					5, 7
i+ Solutions	NGO	Provides services that support the procurement and distribution of essential medicines, supporting governments and organisations in their quest for creating sustainable access to medicines and health products.	Global	٧		٧	٧		٧	10
International Planned Parenthood Federation (IPPF)	Civil Society Organisation	Works to ensure people are free to make choices about their sexuality and wellbeing, with a special focus on women and girls, youth, humanitarian crisis and poor and vulnerable populations. IPPF is also involved in procurement of RCHs.	Ethiopia, Nigeria, Niger, Cameroon, Mali, Ghana, Guinea, Burkina, Togo,	٧		٧	٧		٧	NA

Name	Type Description	Countries of	Working in West	Relevan		udy qu Netherla		/ focus	Relevance for policy options	
	.,,,-		focus	Africa	Research	SCM	LMD	DRM	Private sector	options proposed
			Liberia, Mali, Côte d'Ivoire							
John Snow Inc (JSI)	INGO	Works on public health management through consulting and research with the aim to improve the health of people across the world. Work of JSI includes various areas of interest for DSO, including health systems strengthening, health supply chain management, and family planning & reproductive health.	40 international offices	٧		٧	٧		٧	10
Latin American and Caribbean Forum on Reproductive Health Commodity Security (ForoLac)	RHSC working group	Working group from the RHSC with the objectives to support the exchange of experiences, analysis of common barriers among partners in the region, and to jointly seek and implement technical solutions adapted to the region's specific challenges.	Latin America	X		٧	٧	٧	٧	NA
Marie Stopes International (MSI)	INGO/Social marketing organisation	Organisation providing personalised contraception and safe abortion (where legally permitted) to women and girls	Global (37 countries)	٧		٧	٧		٧	4
MSH	INGO	MSH is an international not for profit organisation focusing on health systems, including the main pillars global health security, financing health services, leadership, management and governance,	Global	٧		٧	٧		٧	10, 14

Name	Туре	Description	Working in West	Relevan	ce to st areas N			/ focus	Relevance for policy	
	- //		focus	Africa	Research	SCM	LMD	DRM	Private sector	options proposed
		and pharmaceutical management MSH currently implements the USAID funded Medicines technologies, and pharmaceutical services program (MTAPS) that has as main objectives to strengthen pharmaceutical sector governance and increase institution and human resource capacity for pharmaceutical manage including regulation of medical projects.								
Ouagadougou Partnership	Coalition of government officials, religious leaders, civil society members, and youth representatives	Launched in February 2011 by the nine governments of Francophone West African countries and their technical and financial partners to accelerate progress in the use of family planning services. The Ouagadougou Partnership does not fund procurement but supports coordination in this area.	Francophone West African countries	٧				٧	٧	NA
РАТН	INGO	PATH works to produce evidence on the best technologies and program approaches for women's needs, with a focus on engaging the user for input as they conduct research. PATH hosts the Secretariat of RHSC	Global	٧	٧				٧	NA
Pathfinder	INGO	Works to increase access to sexual and reproductive health and rights and promote healthy pregnancies.	Global	٧		٧	٧		٧	NA

Name	Туре	Description	Countries of	Working in West	Relevan	Relevance for policy				
	.,,,,		focus	Africa	Research	SCM	LMD	DRM	Private sector	options proposed
Population Services International (PSI)	INGO/Social marketing organisation	Promotes access to contraceptives through social franchise networks and public sector strengthening in 43 countries	Senegal, Guinea, Cote d'Ivoire, Burkina Faso, Benin, Mali, Niger	٧	٧	٧	٧		٧	13
QUAMED	Membership organisation	Contributes to improving access to quality medicines. Its members are organisations involved in the supply of medicines and health commodities, including NGOs, international organisations and purchasing centres. Provides a range of services (e.g., audits of suppliers, assessments of local markets, technical assistance, development of quality assurance systems, review of product files, evaluation of sources and supplies, and training).	Global	٧		٧				NA

Name	Type Description	Description	Countries of	Working in West	areas Netherlands *					Relevance for policy
Name	Туре	Description	focus	Africa	Research	SCM	LMD	DRM	Private sector	options proposed
Reproductive Health Supplies Coalition (RHSC)	Public-private partnership	The largest and most established global partnership focused on influencing market dynamics for RHCs. Formed by over 480 members including bilateral and multilateral agencies, private sector manufacturers, local NGOs, and governments. The Coordinated Supply Planning (CSP) group of the RHSC was formed in 2012 to improve supply chain coordination for family planning commodities among two key procurers, USAID and UNFPA. Working groups include the Market Development Approaches Working Group, the Manufacturers Working group and the New/Underused RH Technologies Caucus e Advocacy and Accountability Working Group (A&AWG) links global and country level advocacy, in the areas of policy, finance and programs, to create an environment favourable for scaling up equitable access to a wide range of affordable and high-quality RH commodities.	Global	٧	V	٧	٧	٧	٧	2, 7

Name	Type Description Countries of in West		Working in West	areas Netherlands *					Relevance for policy	
	. , , , ,	2-3-3-1-p-13-11	focus	Africa	Research	SCM	LMD	DRM	Private sector	options proposed
The Global Fund to Fight AIDS, Tuberculosis and Malaria	Multilateral donor	The Global Fund, established in 2002, is the largest donor of HIV, TB and malaria treatment and care. Programs are implemented by in-country partners, the Global Fund with support from the Local Fund Agents monitor the programs. The Global Fund is a large player in procurement of condoms, for which the program implementers can make use of the online platform Wambo.org developed by the Fund.	Global	٧		٧	٧	٧	٧	NA
UK Department for International Development (DFID)	International development government agency	Concentrates in RHCs funding, and -together with public, private and NGO partners - works to accelerate the rollout of new RH commodities, reduce prices and support the transition of RH commodity funding to countries themselves.	Global	٧		٧	٧	٧	٧	NA
UNFPA	UN agency	Calls for the realisation of reproductive rights for all and supports access to a wide range of sexual and reproductive health services — including voluntary family planning, maternal health care and comprehensive sexuality education.	Global	٧		٧	٧	٧	٧	NA
UNFPA Supplies	UN thematic programme	Dedicated to helping countries to strengthen their supply chains of contraceptives and providing support for reproductive health services in humanitarian crises.	Global	٧		٧	٧	٧	٧	1

Name	Туре	pe Description	Countries of	Working in West		Relevance to study questions / focus areas Netherlands *				Relevance for policy
Ivallic	Туре		focus	Africa	Research	SCM	LMD	DRM	Private sector	options proposed
UNICEF	UN agency	UNICEF Supply Division in Copenhagen/Denmark and the UNICEF Country Offices support countries with supply chain related issues, particularly on vaccines and nutrition commodities to treat Acute Severe Malnutrition. UNICEF Supply Division also provides procurement services on behalf of governments.	Global	٧		٧	٧		٧	NA
US Agency for International Development (USAID)	International development government agency	One of the two main public procurers of RHCs	Global	٧		٧	٧		٧	NA
Village Reach	INGO	The work of Village Reach focuses on reaching the last mile through system innovation. Areas of work include supply chain & logistics and private sector engagement.	Mainly in Sub Saharan Africa	٧		٧	٧		٧	10
WCG	INGO	Supports women and girls to make informed decisions about their reproductive and sexual health, and provides support to manufacturers to register their products though their Global Regulatory Affairs Department.	Global	Yes (Niger)	Private sector					14

Name	Туре	Description	Countries of	Working in West	Relevance to study questions / focus areas Netherlands *					Relevance for policy
	.,,,,		focus	Africa	Research	SCM	LMD	DRM	Private sector	options proposed
West African Health Organisation (WAHO)	Regional agency	Regional agency charged with the responsibility of safeguarding the health of the peoples in the sub-region through the initiation and harmonisation of the policies of (ECOWAS) Member States, pooling of resources, and cooperation with one another and with others for a collective and strategic combat against the health problems of the sub-region.	ECOWAS countries	٧		٧	٧		٧	3, 4, 12
William Davidson Institute	Non-profit / research and educational centre	An independent non-profit research and educational organisation at the University of Michigan. In 2015, WDI was contracted by the Concept Foundation to develop a global demand forecast for DMPA IM to better understand its current and future global market prospects, primarily in LICs and MICs, and to determine manufacturers' ability and capacity to meet demand over time. This project was supported by the BMGF as part of a larger effort by the Concept Foundation to support manufacturers of generic DMPA IM.	Global	٧	٧					5, 7
World Bank (WB)	International financial institution	Source of financial (grants, loans and credits) and technical assistance (policy advice, research and analysis, among others) to developing countries.	Global	٧				٧		NA

^{* 2} areas were added to the 4 as identified by DSO: research and supply chain management (SCM)

5 PRODUCT SPECIFIC INFORMATION

Except for implants, products selected for this section are either new RH products, products with new indications or improved versions of existing products. Implants are included because of their relatively recent uptake in LMICs.

5.1 DAPIVIRINE VAGINAL RING

The dapivirine vaginal ring is a flexible silicone vaginal ring that can be inserted by women themselves, and provides a sustained release of dapivirine, an antiretroviral (ARV) drug, locally to the site of potential infection during vaginal sex and with minimal systemic absorption. The ring is effective for one month. It is the first woman-centred, long-acting HIV prevention method, designed to provide women with a discreet and long-acting HIV prevention option.

Developed by the non-profit International Partnership for Microbicides, the ring is undergoing regulatory review by the European Medicines Agency, and regulatory submissions are planned to the US Food and Drug Administration, the South African Health Products Regulatory Authority, and other regulating bodies in southern and eastern Africa, where women face the highest risk and burden of HIV.

The International Partnership for Microbicides holds an exclusive worldwide license for dapivirine from Janssen Pharmaceutical Company, with a focus on guaranteeing the affordability of the product once it will be in the market; the cost of the ring is expected to be USD 6 - USD 8 per ring, or USD 72 – USD 96 per year².

As part of its innovation programs, the Partnership is also developing a three-month dapivirine ring, and a Multipurpose Contraceptive Technology: a three-month dapivirine+contraceptive ring to simultaneously offer HIV prevention and contraception. Both products are still in Phase I clinical trials.

5.2 SAYANA PRESS® (DMPA-SC)

Injectable contraceptives are a very popular method among women in sub-Saharan Africa because they offer safe and effective protection and privacy, but injections are mostly provided by clinics. Sayana Press is the commercial name of a subcutaneous DMPA (DMPA-SC) developed by Pfizer as a prefilled injectable suitable for self-injection. DMPA-SC, also called "depot MPA", and previously available in intramuscular form (DMPA-IM), when injected, forms a reservoir that releases the drug over the course of 3 months, providing contraceptive protection. Because of its simplicity of delivery and injection, DMPA-SC is an innovation that allows making injectable contraceptives available where they have never been available before and thus expand access to family planning in non-clinic settings where community-based services can be sporadic or unreliable. Its introduction may prompt policies for task-shifting in contraceptive service delivery. Instead of replacing DMPA-IM, DMPA-SC has the potential of broadening the family planning method mix and thus contributing to the freedom of choice for users.

Following the 2012 London Summit on Family Planning, public and private partners committed to start offering Sayana Press to women in sub-Saharan Africa and South Asia between 2013 and 2016, in order to expand the use of LARCs.

Interest in the product increased in 2014 when a public-private partnership negotiated to make the DMPA-SC available for qualified purchasers in the 69 FP2020 countries at a cost of USD 1 per dose. In 2017, the price was further reduced to USD 0.85 per dose, nearly matching the cost of intramuscular DMPA (DMPA-IM).

² IPM, USAID, PEPFAR. Davipirine: the case for action. September 2017 hera / DSO – Study report - Final version Volume II: Annexes/ June 2020

Sayana Press is registered by the Medicines and Healthcare products Regulatory Authority (MHRA) of the United Kingdom – considered a SRA - which serves as a key reference and accelerator for registration in other countries. In some countries (e.g., DRC and Malawi) Sayana Press has been made available through a waiver, a kind of interim regulatory approval granted for a limited time and concurrent with the full regulatory approval process, which is often requested for pilot studies or trials. Since 2016, Sayana Press has been approved by national regulatory authorities in Niger and Uganda, and in some other countries, the approval is in the final phase of the process. The product has been introduced in several pilot programs by PATH (in Uganda, Niger, Senegal, and Burkina Faso, among other countries) For the first time in over a decade a new contraceptive is being scaled up globally. Lessons learnt from expanding access to DMPA-SC through public and private delivery channels—including community-based distribution and pharmacies and drug shops—can be used to increase access to other family planning methods.³

A recent study in Senegal and Uganda reports that some providers believe that Sayana Press could facilitate supply management, storage, and waste disposal, with a positive impact on service delivery logistics, including reductions in stock-outs.⁴

5.3 CONTRACEPTIVE IMPLANT

A contraceptive implant is a LARC that is inserted under the skin of the upper arm. It releases progestin hormone into the body during a period of 3 to 5 years to prevent pregnancies.

Although implants are not new, their use in Africa has recently witnessed a "blossoming". Since commercialisation in the 1980s, the price for one implant set had remained around USD 20 for several decades. This contributed to low usage. For instance, in 2011 implant use prevalence was only 0.5% in LMICs. The Implant Access Program (IAP) which started in 2013, reduced the cost to USD 8.5 for the 69 FP2020 countries. The introduction of generic versions of the implant in the market increased competition and further reduced prices: a generic levonorgestrel implant prequalified by WHO in June 2017 was sold at a price of less than USD 8 per set, and its price was subsequently reduced to USD 6.9 per set. 6

Between 2013 and 2017, donors (mainly UNFPA and USAID) delivered more than 25 million implants to Sub-Saharan African countries. With this substantial donor support these countries were able to make progress towards achieving their FP2020 goals to reach more women and provide a greater range of method options. The reduction in implant prices have been a key factor in expanding their availability. In many countries there were also policy changes to allow task shifting: training of less-qualified providers in insertion and removal of implants. As a consequence, the use of implants has, for example, quadrupled in Tanzania and increased more than 15-fold in Ethiopia. Implant users tend to be younger than users of other LARCs, an important finding considering that Adolescent's Sexual Reproductive Health and Rights have become a priority on the global health agenda.⁷

5.4 PROGESTOGEN VAGINAL RING

The progesterone vaginal ring (PVR) is a ring-shaped device designed for use by women who breastfeed in the postpartum period to avoid pregnancy by complementing and extending the contraceptive effectiveness of lactational amenorrhea. Like other vaginal rings, it offers benefits both to users and health systems: self-

³ PATH. DMPA-SC Access Collaborative: Putting a new type of injectable contraception within reach. 2019

⁴ RHSCH. Intersections between Youth and Reproductive Health Supplies: A Report to the Reproductive Health Supplies Coalition. May 2016.

⁵ Braddock M., Skibiak J. Creating an effective & sustainable ecosystem for reproductive health supplies by 2030. October 2019

⁶ Jacobstein R. Liftoff: The Blossoming of Contraceptive Implant Use in Africa. Glob Heal Sci Pract. 2018 Mar;6(1):17–39.

⁷ Benova, Cleland, Daniele, Ali. Expanding Method Choice in Africa with Long-Acting Methods: IUDs, Implants or Both? Int Perspect Sex Reprod Health [Internet]. 2017 Dec;43(4):183.

insertion and self-removal gives women greater control over product use, while health systems do not need to invest in extensive clinical training, equipment and supplies.⁸

Developed by Population Council and partners, and introduced in the WHO's EML in 2015, the ring is currently available only in eight Latin American countries. However, the PVR is a method that could be suitable to women in Sub-Saharan Africa, given the near-universal practice of breastfeeding and the current low level of method choice for effective contraception in the postpartum period. A recent project by Population Council assessed the feasibility and possible impact of introduction of the ring in Kenya, Nigeria, and Senegal, countries with different contraceptive use trends and markets. Results showed that the PVR is a highly acceptable contraceptive to women, their partners and to the community at large. Additional assessments took place in those countries to determine the most suitable sectors in which to make the PVR available (public, private, NGO, social marketing). Main recommendations were related to the optimisation of the PVR price throughout the supply chain.⁹

5.5 HEAT STABLE CARBETOCIN

Heat stable carbetocin (HSC) is a heat-stable uterotonic medicine that has the potential to be widely used to prevent and treat post-partum haemorrhage (PPH) - the main direct cause of maternal mortality worldwide.

Structurally, it is an analogue of oxytocin, which remains the first line therapy for PPH, but that presents an important limitation: Oxytocin must be stored and transported between 2 and 8°C in order to maintain its properties (cold chain). In many LMICs ambient temperatures exceed 25°C and cold chain infrastructure is lacking or unreliable; the use of oxytocin of uncertain quality has been consistently reported in places without options for refrigeration, or where health professionals are not aware of the required storage conditions. This may also affect the availability of oxytocin, when quality concerns lead to the drug being discarded, and stocks cannot be replaced regularly. Introduction of health stable carbetocin (HSC) on the market is a promising solution to the challenge of temperature sensitivity and related quality problems of oxytocin.¹⁰

In 2018, the WHO's recommendations on uterotonics for the prevention of PPH were updated with the introduction of HSC, indicating its use 'for the prevention of excessive bleeding after all births in settings where oxytocin is unavailable or where its quality cannot be guaranteed, and where its cost is comparable to other effective uterotonics'.¹¹. In 2019, the product was added to the WHO EML. Carbetocin is currently registered in more than 80 countries worldwide for the prevention of PPH due to uterine atony following caesarean section, but the manufacturer – Ferring Pharmaceuticals - is now seeking registrations for the prevention of PPH following all births. Additionally, Ferring recently committed to a subsidised price of USD 0.35 per ampoule for LMICs. This is comparable to the current UNFPA Procurement Services price for oxytocin of USD 0.33 per unit.¹² Availability of HSC in those settings will be determined by its regulatory review and approval, a process that is expected to start in 2022.¹³

⁸ Ishaku SM, Diop N, Mane B, Liambila W, RamaRao S, Clark H, et al. Introducing the Progesterone Vaginal Ring (PVR) as a New Option for Postpartum Family Planning in Sub-Saharan Africa: Insights from Engagements with Stakeholders. Afr J Reprod Health. 2018 Jun;22(2):68–75.

⁹ Source: https://www.popcouncil.org/news/progesterone-vaginal-ring-lessons-from-nigeria-for-the-launch-and-scale-up

¹⁰ Torloni MR, Gomes Freitas C, Kartoglu UH, Metin Gülmezoglu A, Widmer M. Quality of oxytocin available in low- and middle-income countries: a systematic review of the literature. BJOG. 2016;123(13):2076–86.

¹¹ WHO. WHO recommendations: uterotonics for the prevention of postpartum haemorrhage [Internet]. Geneva: World Health Organisation. 2018. 53 p.

¹² https://www.unfpaprocurement.org/products?id=OXYTOCIN 10IU/ML

¹³ Theunissen FJ, Chinery L, Pujar Y V. Current research on carbetocin and implications for prevention of postpartum haemorrhage. Reprod Health. 2018;15(Suppl 1).

5.6 TRANEXAMIC ACID

Tranexamic acid is an inhibitor of plasminogen activation that can reduce bleeding. WHO's recommendations for prevention and treatment of PPH published in 2012 included this drug for treatment of PPH when first line options fail to control the bleeding, or the bleeding is caused by trauma. In 2017, new evidence led to an update of this guideline, that now recommends the use of tranexamic acid for treatment of all cases of PPH.¹⁴

The intravenous administration of tranexamic acid is a barrier for its implementation in low-resource settings where skilled health professionals are scarce. Research on other routes of administration is a current priority.

Currently, the RHSC's Maternal Health Caucus, in collaboration with its partners, is developing a guide to support countries taking strategic decisions about the appropriate combination of uterotonic medicines and Tranexamic acid for their treatment protocols, and in their and procurement.¹⁵

5.7 COMBIPACK MISOPROSTOL-MIFEPRISTONE

Misoprostol and mifepristone are the 2 drugs recommended by WHO for medical abortion up to 12 weeks of pregnancy. Apart from being an abortifacient, misoprostol is used for a range of other clinical indications, e.g., prevention of gastric ulcers and prevention and treatment of post-partum haemorrhage. Therefore, the product is available even in some of the countries with very restrictive laws regarding termination of pregnancy. However, mifepristone is only approved for medical abortion and, because of strict legislation, it is generally less available than misoprostol.

The combination of mifepristone-misoprostol is more effective than administration of only one of the two products, promotes adherence to treatment, and is less invasive than surgical procedures. The combipack can be self-administered, which supports women to make their own decision with dignity. Currently Medabon® is the only quality-assured combipack available in LMICs. With the support of Concept Foundation, it has been registered and introduced in 27 countries.

The Medical Abortion Commodities Database includes information on different brands of mifepristone, misoprostol or combipacks that are registered and available in a country and have evidence of good quality. The database includes data from 20 brands of misoprostol, 43 of mifepristone and (only) 14 of combipack from 92 countries. Continuous efforts are undertaken by different stakeholders to make the combipack available in LMICs; in November 2019, the first co-pack of mifepristone oral tablet and misoprostol for vaginal administration was prequalified by WHO, one more step towards access for women who need these products. The state of the products of the state of the state

¹⁴ World Health Organisation (WHO). Updated WHO Recommendation on Tranexamic Acid for the Treatment of Postpartum Haemorrhage: Highlights and Key Messages from the World Health Organisation's 2017 Global Recommendation. 2017;(October):5.

¹⁵ https://www.rhsupplies.org/activities-resources/groups/maternal-health-supplies-caucus/

¹⁶ Products that meet at least one of the following criteria: have been approved by a Stringent Regulatory Authority (SRA), WHO prequalified, positive category 1 or 2 in UNFPA ERP process

¹⁷ WHO has just prequalified a combination mifepristone misoprostol (combipack) for medical abortion. WHO, Concept Foundation. 2019.

6 OVERVIEW OF KEY INTERVENTIONS

Name	Description	Relation to fields of interest	Relation to study questions
2:1 Matching Fund Mechanism	A USD 18 million fund for family planning launched by BMGF and managed by UNFPA supplies, designed to encourage the Ouagadougou Partnership countries to make and scale up investments. These nine countries have committed to increasing domestic resources for these commodities, but only four have regularly allocated funds. The fund allocates two dollars for family planning supplies for every dollar that these countries invest in those commodities from domestic resources. Over time, the fund can be adapted and expanded to other countries and could inform the evolving domestic resource allocation strategies of UNFPA Supplies. Five countries allocated USD 2.3 million in 2018, with a total matching amount of USD 4.7 million.	West Africa, DRM	Successful interventions to stimulate DRM (question 3)
African Medicines Regulatory Harmonisation (AMRH)	The AMRH is an initiative from the African Union's New Partnership for Africa's Development (NEPAD). It focuses on the improvement of access to good quality medicines through an enabling regulatory environment. The AMRH project for the West-African region aims to improve the availability of quality, safe and effective medicines and vaccines in the Economic Community of West African States ECOWAS region.	Private sector, West Africa	Impact of interventions in the availability of RHCs (question 3), Organisations that can facilitate increased availability of RHCs, quality assurance, including registration (question 5)
African Medicines Agency (AMA) Treaty	The Agency, established in 2019 in the African Union, aims to regulate medical products in order to improve access to quality, safe and efficacious medical products on the continent. This includes the strengthening and harmonisation within the Union, but details are not yet available due to the recent establishment of the AMA.	Private sector	Impact of interventions in the availability of RHCs (question 3), Organisations that can facilitate increased availability of RHCs, quality assurance, including registration (question 5)

Name	Description	Relation to fields of interest	Relation to study questions
Bridge Funding Mechanism	An US\$80 million revolving pool of financing from BMGF, managed by UNFPA, that ensures that cash to procure commodities is readily on hand, meeting needs as they arise. It allows UNFPA to access funds that have been committed even before they are received. The fund is replenished when committed donor funding is disbursed later in the year. In 2018, UNFPA used over USD 54 million from the mechanism to meet urgent needs in 27 countries and close supply gaps in 20 others.	West Africa	Impact of interventions in the availability of RHCs (question 3)
CEDAG	CEDAG is implemented by ACAMA. The general objective of this project is to contribute to the implementation of a group purchasing scheme based on mutual recognition of pre-selection and purchasing procedures among eight members of ACAME (CAME Benin, CAMEG Burkina Faso, NPSP-CI Côte d'Ivoire, CECOME Guinea Bissau, PPM Mali, ONPPC Niger, PNA Senegal and CAMEG-Togo).	West Africa (focus on Francophone countries)	Main players in RHCs procurement and technical assistance in the public and private sector (question 5)
Contraceptive distribution through informal channels	In Niger, contraceptive services were not provided by the university health centre because they were not integrated in the local health procurement system, and students therefore did not have easy access to contraceptives. Including these centres in the system, and engaging and training the students in distribution resulted in a greater availability of products and services for that vulnerable population. [Engaging Students to Improve Sexual and Reproductive Health A R]	West Africa, LMD	Innovation for LMD (question 3)
East African Community Medicines Regulatory (EAC – MRH) Programme	This program was launched in 2012 to start the implementation of the AMRH in the East African Community. Under the programme, several joint Good Manufacturing Practices (GMP) inspections have been performed, as well as joint assessment procedures.	Private sector	Impact of interventions in the availability of RHCs (question 3), Organisations that can facilitate increased availability of RHCs, quality assurance, including registration (question 5)

Name	Description	Relation to fields of interest	Relation to study questions
FPWatch	In 2015, the FPWatch Project conducted representative outlet surveys in Ethiopia, Nigeria, and DRC. Every public and private sector outlet with the potential to sell or distribute modern contraceptives was approached. In outlets with modern contraceptives, product audits and provider interviews assessed contraceptive market composition, availability, and price.	West Africa, Private sector	Impact of interventions in the availability of RHCs (question 3), Barriers of the private sector (question 4)
Implant Access Program (IAP)	Starting in 2013 and with current agreements until 2023, this program is based on a volume guarantee of orders of implants to the manufacturers Bayer and Merck, who in return agreed to significantly reduce implant prices for the 69 FP2020 priority countries.	West Africa, Private sector	Impact of interventions in the availability of RHCs (question 3), Main players in procurement (question 5)
Improving Last Mile Supply Chains for Women in Nigeria	Implemented by VillageReach with funding from MSD Mothers and support from CHAI. Together with the Government of Nigeria the project aims to adopt a holistic system design approach to delivering maternal and reproductive health commodities. Phase 1 currently in implementation	West Africa, LMD	Impact of interventions in the availability of RHCs (question 3)
Informed Pushed Model	Program that addresses supply chain obstacles through direct regional-to-facility delivery of contraceptives and use of private sector logistics operators. Following promising pilot results, Senegal's Ministry of Health and Social Action committed to a three-year (2013–2016) expansion of IPM to all public health facilities nationwide	Last-mile distribution, Private market	Innovation for LMD (question 3), Successful interventions to stimulate DRM (question 3)
Introduction of a new device to insert IUD	PSI introduced a new device to insert the IUD in the post partum period with a pilot program with positive results.	West Africa	Innovation at product level (question 3)

Name	Description	Relation to fields of interest	Relation to study questions
Online Sales	DKT International set up an online shop where clients can order condoms and lubricants. The products are delivered to the home addresses, in discrete anonymous packages. Online sales are available in Myanmar and Egypt. In Turkey, DKT's condoms and sexual enhancement products are available from a popular online sales site.	LMD, private market	Impact of interventions in the availability of RHCs (question 3)
Payment for Performance (P4P)	Financial incentives are given to health facilities, district and regional managers based on their performance on pre-defined targets. P4P is premised on the assumption that a change in provider behaviour is required. In Tanzania, a study on the impact of P4P on the availability of RMNCH medicines and health commodities found some positive effects, mainly in poor and rural areas. The study argues furthermore that for positive effects to happen, commodities have to be incentivised at both, facility and district level.	LMD	Impact of interventions in the availability of RHCs (question 3)
PERF-APPRO	PERF-APPRO is implemented by ACAME in collaboration with CHMP. it is part of a broader grant provided by the 5% Initiative, aiming at contributing to the development of the central medical stores through the implementation of an integration quality system, taking into account all requirements of standards applicable within procurement agencies. This is linked to the private market as the suppliers of procurement agencies/central medical stores are private companies (e.g., manufacturers, distributors, wholesalers)/	LMD, private market	Main players in RHCs procurement and technical assistance in the public and private sector (question 5)
Pooled Procurement Mechanism (PPM)	The PPM is a strategy from the Global Fund, aimed at ensuring a cost effective and efficient procurement of core health commodities. i+solutions is responsible for all pharmaceutical related procurement and supply chain activities.	Private market, West Africa	Innovation for LMD (question 3), Successful interventions to stimulate DRM (question 3)

Name	Description	Relation to fields of interest	Relation to study questions
Prime vendor system	Public Private Partnership created to complement the national supply chain in case of stock-outs with a simplified, transparent and efficient procurement procedure with a prime vendor at the regional level. Successfully tested in Tanzania.	Private market, LMD	Innovation for LMD (question 3)
Project Last Mile	Project Last Mile shares and applies the supply chain expertise of The Coca-Cola system with Ministries of Health to build capability in the area of Pharmaceutical supply chain management.	LMD, West Africa	Innovation for the LMD (question 3)
Regional Financing Mechanism	An initiative managed by WAHO This mechanism supports (both financially and technically) national procurement agencies with procurement of family planning products. This includes an exchange of stocks between countries in the region that helps to avoid expiries and stockouts of family planning supplies. Limited information was found about this initiative in the public space, and the information requested was not provided timely to be considered for this report. Interviewees did not refer to this initiative.	West Africa	Impact of interventions in the availability of RHCs (question 3)
Sahel Women's Empowerment and Demographic Dividend project (SWEDD)	Approved in 2014 and now being scaled up to more countries in the region, SWEDD is generating demand for reproductive, maternal, neonatal, child health and nutrition commodities and services; improving the supply of commodities and qualified personnel; and strengthening advocacy and policy dialogue, as well as capacity for monitoring and policymaking in relation to demographic dividends.	Private market, West Africa	Interventions for private sector strengthening (question 3), Successful interventions to stimulate DRM (question 3), Innovation for LMD (question 3)

Name	Description	Relation to fields of interest	Relation to study questions
Sustaining Health Outcomes through the Private Sector (SHOPS) Plus	USAID's flagship initiative in private sector health. It seeks to harness the full potential of the private sector and catalyse public-private engagement to improve health outcomes in family planning, maternal health, and other health areas.	Private market, West Africa, DRM	Interventions for private sector strengthening (question 3)
Task Shifting/Task Sharing	The process of delegation whereby tasks are moved, where appropriate, to less specialised health workers, for example CHWs It presents a viable solution for improving health care coverage by making more efficient use of the human resources already available while training and retention programmes are expanded. An example of success is Ethiopia, with Health Extension Workers covering large rural areas of the country.	Last-mile distribution, West Africa	Innovation for the LMD (question 3)
USAID Deliver Project	In partnership with ministries of health and other organisations, aims to increase the availability of health supplies through procurement, supply chain strengthening and last-mile distribution. Successful examples are Nigeria and Ethiopia, were family planning and maternal health commodities increased in availability and access.	West Africa, LMD	Impact of interventions in the availability of RHCs (question 3)

7 OVERVIEW OF TOOLS FOR PROCUREMENT RELATED TOPICS

Tool	Description	Countries of focus
Central Contraceptive Procurement (CCP) project	The Central Contraceptive Procurement project was established to ensure a steady and reliable mechanism for the supply of contraceptives for voluntary family planning programs. CCP tasks include the procurement, warehousing and freight services of contraceptives to USAID missions, as well as quality control and testing.	USAID supported countries
Commodity requirement tool (CRT)	This tool, developed by UNFPA Supplies and launched in 2019, supports the estimation of needs by compiling logistics data from different sources. Requirements from different partners providing supplies can be calculated through program type, consumption trends, and inventory levels.	Global
Costed Implementation Plan (CIP)	The CIP is a multi-year roadmap to support governments to achieve their family planning goals. The tools is developed to transform commitment into policies and actionable programmes. The CIP can accommodate planning and budgeting for the different thematic areas of a family planning program.	Global
Family Planning Estimation Tool (FPET)	This tool is used by Track20 to collect and review survey and demographic data available from different sources to estimate contraceptive use and unmet needs. The tool allows to estimate needs for the current year, and reestimate the trend back to 2012, the baseline year.	FP2020 supported countries
FP202 Rights and Empowerment Principles for Family Planning	Through this tool, FP2020 monitors annually several indicators linked to the principles of free choice. The indicators measure different dimensions of rights-based family planning and offer perspective on the complexities of the decisions facing women, girls, and couples when choosing to use a method of contraception.	FP2020 supported countries

Tool	Description	Countries of focus
FP2020 Core Indicators Results Framework	The FP2020 Core Indicators are based on a results framework designed to measure aspects of the enabling environment for family planning, the process of delivering services, the output of those services, expected outcomes, and the impact of contraceptive use. One of the indicators measures stock out of RHCs.	FP2020 supported countries
Global Family Planning Visibility and Analytics network (Global FP VAN)	The development of this platform was led by the RHSC and went live in the beginning of 2019 with shipment data information from 95 countries. Through an information hub data on inventory and shipments from different sources is provided. Increased visibility of the supply chain, available to all registered parties involved facilitates informed decision making at any stage of the chain. So far Malawi and Nigeria joined the platform, and another 15 countries are expected to follow. The Global FP VAN is supported by DIFD an USAID.	Global
Market Bookshelf	Market Bookshelf (https://marketbookshelf.com) is a large and growing open-access collection of health market literature. It offers documents from key sources as well as unpublished sources, easily searchable and downloadable. Market Bookshelf is supported by RHSC, USAID and WDI.	Global
Maturity Model	Several organisations (e.g., UNICEF, Pamela Steel Associates Ltd, BMGF) developed so-called maturity models to provide a holistic view of the supply chain and identify areas for improvement. Usually these models include different stages of maturity through which progress towards a mature system can be measured. (We were informed that the WFP supply chain maturity model is applied by UNFPA Supplies but have not been able to find information on this specific model)	Global
Private Capital and Microenterprise (PCM)	The Office of PCM focuses on development of strategic relationships with private investors who focus at the nexus of business opportunities and development priorities. PCM provides support to develop tools and approaches, and intermediaries that can mobilise private finance in the developing world.	USAID supported countries

Tool	Description	Countries of focus
Population data platform	This platform is developed by UNFPA and was launched in 2018. It provides information for planners on mapping the greatest needs, and where interventions need to focus to reach those furthest behind. The platform stores and generates data from several sources including population census, and SDG indicators, and is developed to enable interaction with platforms of sister agencies.	Global
Procurement Planning and Monitoring Report (PPMR)	The PPMR was developed by USAID DELIVER PROJECT back in 2007. It focuses on inventory data (stocks) in 34 countries and produces monthly reports for CARhs at the RHSC. The PPMR data is available online for registered users (e.g., data providers, CARhs members, representatives of in-country donors, Ministries of Health, and implementing partners.	38 countries (not specified, but most located in Sub Saharan Africa, including West Africa)
RHInterchange (RHI)	RHI is an online tool that allows sharing data on past, current and future orders and shipments for contraceptives for more than 140 countries. This data provides important information for monitoring of shipment, commodity management, analysis and planning. The tool includes data from IPPF, MSI, PSI, UNFPA, and USAID. The tool is an initiative of UNFPA, RHSC and other organisations active in RHCs.	Over 150 countries (not specified)
Total Market Approach (TMA)	Different definitions and approaches exist for TMA which is a tool used by different organisations working on health in general, and RHCs. The tool allows exploring options for involvement of all sectors to provide health services to the population. For RHCs this generally means governments and donors meet the needs of those with few financial resources, while the private sector provides products and services to more prosperous segments of the population. The process involves an analysis to better understand the contraceptive market (e.g., ,use, unmet needs by age, gender), who are the groups not reached through the common channels, and how contraceptives can be made available to these groups. Various tools exist to guide government, nongovernmental, and private-sector actors through the development of national TMA plans.	Different countries but difficult to know which ones, as the TMA is applied, in different forms, by several organisations

Tool	Description	Countries of focus
wambo.org	wambo.org is an online platform accessible to the Global Fund implementers who use the Global Fund Pooled Procurement Mechanism (PPM). The Global Fund is exploring options to allow other organisations working on interventions related to HIV, tuberculosis and malaria to buy through this platform as well broader. Currently, implementers of the Global Fund grants that do not make us of the PPM are allowed access information on prices and products on wambo.org but are not allowed to place orders.	Countries supported by the Global Fund who use the Global Fund PPM

8 SUGGESTIONS FROM INTERVIEWEES FOR INTERVENTIONS TO BE SUPPORTED BY THE NETHERLANDS

- Increase funding for RHCs
- (Further) Introduction of hormonal IUD. This product has potential but remained underutilised so far, mainly because of the high price charged by the current (single) supplier¹⁸
- Technical and/or financial support manufacturers with the WHO prequalification and regulatory approvals at country level
- The development of a revised policy framework for quality standards for RHCs
- Investment for innovation of new products, based on the principle that the private market needs differentiation of product lines
- Creation of stronger, healthier and sustainable markets through improved collaboration with other organisations working in this field
- Empower local organisations and companies in the private sector
- Exploration of the opportunities to establish a procurement space/e-procurement platform; a sort of
 global procurement platform where countries, donors, private sector companies can procure
 commodities, and where manufacturers and suppliers can compete with one another to sell their
 commodities to those
- The reform of UNFPA Supplies, and assist the program it its efforts to transport from a product donation program towards a meaningful development program
- Increased availability of quality assured safe abortion commodities
- Improve the financial viability of social marketing programmes by supporting demand generation
- Second a supply chain specialist to UNFPA Supplies
- Focus on the Sahel; at present in this region (additional) capacity is needed more than anywhere else
 in Africa, and in the absence of adequate support in this region the situation in this region is likely to
 seriously worsen

Other, broader, and more general recommendations expressed by interviewees include the focus on development of strong partnerships and relations with countries support by the Netherlands. It is believed that such relationship will considerably improve and enrich the collaboration and consequently lead to better results.

Furthermore, general recommendations were in line with the expressed strengthens of the support provided by the Netherlands, e.g., the flexibility of the Dutch funding mechanisms that allow for adapting funding to the ever-changing environment. Several interviewees recommended to foster the private sector, as opposed to the more traditional focus on the public sector. It goes without saying that interviewees from the different sectors have different opinions about what is best invested in, and self-interest plays a certain role in this as well.

¹⁸ https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6370355/

9 DOCUMENTS REVIEWED AND WEBSITES SEARCHED

9.1 GREY LITERATURE

- 1. UNFPA. One vision, three zeros. Annual report 2018
- 2. UNFPA State of World Population 2018. The power of choice reproductive rights and the demographic transition. 2018
- 3. UNFPA State of World Population 2019. Unfinished business- the pursuit of rights and choices for all. 2019
- 4. UNFPA Supplies. The World's Largest Provider of Donated Contraceptives
- UNFPA Supplies. Annual Report 2018 part two- Reporting on the Performance Monitoring Framework
- 6. UNFPA Supplies. Annual report 2018
- 7. USAID/SHOPS Plus. Stewarding the Private Sector for Family Planning. January 2019
- 8. United Nations, Department of Economic and Social Affairs, Population Division (2017). World Family Planning 2017 Highlights (ST/ESA/SER.A/414)
- 9. INGO impact investing network. ampliy ii the next mile of impact investing for INGOs. December 2018
- Countdown 2030 Europe. Contraceptive supplies financing: what role for donors? A brief guide.
 September 2018
- 11. Braddock M., Skibiak J. Creating an effective & sustainable ecosystem for reproductive health supplies by 2030. October 2019
- 12. FP2020. Women at the centre A call to action from FP 2020's 2018-2019 annual progress report.
- 13. FP2020. Women at the centre 2018-2019. Progress report
- 14. Global Financing Facility, Adolescent sexual and reproductive health and rights: the GFF's support to accelerate action. May 2019
- 15. Mann Global Health. Landscape Assessment: Leveraging the role of national distributors to increase access to MA combi-packs in Africa. January 2019
- 16. USAID | DELIVER PROJECT. 2016. Achieving the Grand Convergence A case for Investing in Family Planning Supply Chains. Arlington, Va.: USAID | DELIVER PROJECT, Task Order 4.
- 17. PATH. Advances in reproductive health. September 2016
- 18. USAID, Advancing Partners & Communities. Drug shops & Pharmacies. November 2017
- 19. PSI. Developing Family Planning Markets in Francophone West Africa 2017-2020.
- 20. USAID, SHOPS Plus, Centre for accelerating innovation and impact. Increasing Same-Day Access to FP through Available, Affordable Pregnancy tests
- 21. PATH. Monitoring Sayana Press pilot introduction Final pilot project results. January 2017

- 22. PATH. How can we accelerate women's access to beneficial innovations, and keep learning? The ongoing story of subcutaneous DMPA and self-injection. November 2018
- 23. PATH. Sayana Press (DMPA-SC in Uniject) Product and Project Summary. January 2017
- 24. USAID, PSI. Shaping the Family Planning Market by Strengthening the Public Sector Program Brief. 2017
- 25. RHCS. Summary of August 2015 CSP Contraceptive Implant Demand Forecast. April 2016
- 26. RHCS, USAID/DELIVER PROJECT. The Procurement Planning and Monitoring Report (PPMR)

 Reducing Contraceptive Stockouts through Increased Data Visibility and Global Coordination.
- 27. RHSC. Third Youth Consultation on Reproductive Health Supplies Ouagadougou Partnership Annual Meeting, Abidjan. Côte d'Ivoire. December 2016
- 28. USAID/DELIVER PROJECT. Policy Brief Using National Resources to Finance Contraceptive Procurement
- 29. UNDP/UNFPA/UNICEF/WHO/World Bank Special Programme of Research, Development and Research Training in Human Reproduction (HRP). Highlights of 2015
- 30. Castle S. Intersections between Youth and Reproductive Health Supplies A Report to the Reproductive Health Supplies Coalition. May 2016
- 31. Ministry of Health, Ethiopia. Costed Implementation Plan for Family Planning in Ethiopia 2015/16-2020. January 2016
- 32. RHSC AAWG. Last Mile Advocacy. March 2017
- 33. RHSC, Knowledge for Health, Pathfinder International. Case study Tuungana Project in Tanzania Reaching clients at the Last Mile
- 34. IntraHealth, MSD, BMGF, Ministry of Health Senegal, Pharmacie National d'Approvisionnement Senegal. Providing Reliable Last Mile Access to Contraceptives and Other Essential Medicines: The Informed Push Model with Third Party Logistics Providers in Senegal. October 2017
- 35. USAID/DELIVER PROJECT. Lessons Learned from Latin America. Supply Chain Costing: Visibility and Advocacy for the Public Health Supply Chain. December 2016
- 36. USAID | DELIVER PROJECT, Task Orders 4 and 7. 2016. USAID | DELIVER PROJECT Final Country Report: Ethiopia. Arlington, Va.: USAID | DELIVER PROJECT, Task Orders 4 and 7.
- 37. HIP/Family Planning High Impact Practices. Drug Shops and Pharmacies: Sources for family planning commodities and information. June 2013
- 38. Advance Family Planning. Advocacy in Zanzibar Leads to Reduction in Family Planning Commodity Stock-outs- Case study. November 2015
- 39. DFID. Shaping markets and supply chains for quality reproductive health commodities for the poorest and the most marginalised -Annual Review. June 2019
- PATH. Sexual and Reproductive Health Program. Supporting women's rights and choices. October
 2018

- 41. PATH. Outlook on reproductive health. Women's self-care: Products and practices. November 2017
- 42. PATH, JSI. DMPA-SC Access Collaborative Putting a new type of injectable contraception within reach.
- 43. HIP/Family Planning High Impact Practices. Mobile Outreach Services: Expanding access to a full range of modern contraceptives. May 2014
- 44. HIP/Family Planning High Impact Practices. Social Marketing: Leveraging the private sector to improve contraceptive access, choice, and use. January 2013
- 45. Vreeke, E. Sexual and reproductive health: a market scan in Burundi. October 2019
- 46. RHSC. Commodity Gap Analysis 2019.
- 47. Global Financing Facility, Technical briefing for FP2020, Financing for Family planning (presentation). Date unknown
- 48. FP2020 Reference Group Meeting Report. April 2019
- 49. FP2020 Reference Group Meeting Young People's Perspective Post 2020 (presentation). April 2019
- 50. FP2020 Reference Group Meeting The Global Early Adolescent Study (presentation). April 2019
- 51. FP2020 Reference Group Meeting Post-2020: Deep dive on key constituencies (presentation).

 April 2019
- 52. FP2020 Reference Group Meeting ICPD at 25: The Nairobi Summit. April 2019
- UNFPA Evaluation Office. Mid-Term Evaluation of the UNFPA Supplies Programme (2013-2020).
 2018
- 54. Clinton Health Access Initiative, Reproductive Health Supplies Coalition. Family planning market report. December 2019
- 55. UNFPA. Strategic plan 2018-2021
- 56. HIP/Family Planning High Impact Practices. Supply Chain Management: Investing in contraceptive security and strengthening health systems. November 2012
- 57. IPM, USAID, PEPFAR. Davipirine: the case for action. September 2017
- 58. PATH. DMPA-SC Access Collaborative: Putting a new type of injectable contraception within reach. 2019
- 59. RHSCH. Intersections between Youth and Reproductive Health Supplies: A Report to the Reproductive Health Supplies Coalition. May 2016.
- 60. Laura J. Frost & Michael R. Reich. Access: how do good health technologies get to poor people in poor countries? July 2016
- 61. WHO. WHO Model List of Essential Medicines, 21st version. 2019
- 62. WHO. WHO recommendations: uterotonics for the prevention of postpartum haemorrhage [Internet]. Geneva: World Health Organisation. 2018. 53 p. Available from:

- http://scholar.google.com/scholar?hl=en&btnG=Search&q=intitle:WHO+Recommendations+for+t he+Prevention+of+Postpartum+Haemorrhage#0
- 63. World Health Organisation (WHO). Updated WHO Recommendation on Tranexamic Acid for the Treatment of Postpartum Haemorrhage: Highlights and Key Messages from the World Health Organisation's 2017 Global Recommendation. 2017;(October):5.
- 64. UNICEF. Sustainable Supply Chains for Health System Strengthening Workshop 14-18 May 2018: Brief Recap.
- 65. Family Planning Post 2020 Vision Framework. September 2019
- 66. UNFPA Supplies Steering Committee. Strengthening the Governance and Decision-making of UNFPA Supplies. 17 October 2019
- 67. UNFPA Supplies. Transition Oversight Group Meeting 4
- 68. UNFPA Supplies. UNFPA Supplies Country Support Operating Model and Operational Plan Draft for review. January 2020
- 69. DFID. RH Supplies Business Case, Summary Sheet. November 2019
- 70. Countdown 2030 Europe. Contraceptive supplies financing: what role for donors? A guide for advocates. June 2018
- 71. Brunner, Bettina, Jeffrey Barnes, Andrew Carmona, Arsène Kpangon, Pamela Riley, Erin Mohebbi et Leslie Miles. 2016. Evaluation du secteur privé de la santé au Senegal a travers quelques exemples d'offres de produits et de prestations de services. Bethesda, MD: Projet Strengthening Health Outcomes through the Private Sector, Abt Associates Inc.
- 72. Wright, C. et al. What should you deliver by unmanned aerial systems? The role of geography, product, and UAS type in prioritising deliveries by UA. JSI Research & Training Institute, Inc. January 2018
- 73. Fair Pricing Forum 2019 Meeting Report. Geneva: World Health Organisation; 2019. WHO/MVP/EMP/IAU/2019.09 Licence: CC BY-NC-SA 3.0 IGO.
- 74. WHO. WHO PQ Collaborative Registration Procedure and SRA Collaborative Procedure. Orientation for Assessment Session. November 2017
- 75. The Global Fund Office of the Inspector General. Audit report. The wambo.org platform. Progress against business case, key risks and current implementation arrangements. November 2017
- 76. UNFPA. Quality Reproductive Health Medicines & Contraceptive Devices: 2017 Annual Meeting of Procurers. May 2017
- 77. Jille Traas, C.C. Effects of Global Health Initiatives on country supply systems. Thesis submitted in partial fulfilment of the requirements for the degree of Master of Science in Public Health –

 Diseases Control. July 2014
- 78. The Paris declaration on aid effectiveness and the Accra agenda for action. Organisation for Economic Co-operaton and Development; 2008.

- 79. Cavallaro, F et al. Presentation Lessons learned from the evaluation of the Informed Push Model in Senegal. RHSC meeting, Brussels, 22 March 2018.
- 80. Warren, April, Sean Callahan, and Ali Lauer. 2020. Social Enterprise Innovations in Family Planning: Case Studies. Brief. Rockville, MD: Sustaining Health Outcomes through the Private Sector Plus Project, Abt Associates.
- 81. High Impact Practices in Family Planning (HIP). Supply chain management: investing in contraceptive security and strengthening health systems. Washington, DC: USAID; 2012 Nov. Available from: http://www.fphighimpactpractices.org/briefs/supply-chain-management/
- 82. Karen Hardee, Population Council; David Wofford, Meridien Group International; Nandita Thatte, World Health Organisation. Family Planning Evidence Brief Partnering with the private sector to strengthen provision of contraception. July 2017
- 83. Pharos Global Health Advisors. Transitions in Family Planning: Challenges, Risks, and Opportunities Associated with Upcoming Declines in Donor Health Aid to Middle-Income Countries. 2019
- 84. Share-Net International. Getting to know each-other Private sector engagement in improving Sexual and Reproductive Health and Rights in developing countries.

9.2 PEER-REVIWED ARTICLES

- Ali M, Farron M, Ramachandran Dilip T, Folz R. Assessment of Family Planning Service Availability and Readiness in 10 African Countries. Glob Heal Sci Pract [Internet]. 2018 Oct 3;6(3):473–83.
 Available from: http://www.ghspjournal.org/lookup/doi/10.9745/GHSP-D-18-00041
- Ali M, Folz R, Farron M. Expanding choice and access in contraception: an assessment of intrauterine contraception policies in low and middle-income countries. BMC Public Health. 2019 Dec;19(1):1707.
- 3. Amo-Adjei J, Mutua M, Athero S, Izugbara C, Ezeh A. Improving family planning services delivery and uptake: experiences from the "Reversing the Stall in Fertility Decline in Western Kenya Project." BMC Res Notes [Internet]. 2017 Dec 10;10(1):498.
- 4. Babazadeh S, Lea S, Kayembe P, Akilimali P, Eitmann L, Anglewicz P, et al. Assessing the contraceptive supply environment in Kinshasa, DRC: trend data from PMA2020. Health Policy Plan [Internet]. 2018 Mar 1;33(2):155–62.
- 5. Barden-O'Fallon J. Availability of family planning services and quality of counseling by faith-based organisations: a three-country comparative analysis. Reprod Health [Internet]. 2017 Dec 8;14(1):57.
- 6. Benevides R, Chau K, Ousseini A, Innocent I, Simmons R. Engaging Students to Improve Sexual and Reproductive Health: A Report of the University Leadership for Change Initiative in Niger. Afr J Reprod Health [Internet]. 2019 Mar;23(1):55–64.

- 7. Benova, Cleland, Daniele, Ali. Expanding Method Choice in Africa with Long-Acting Methods: IUDs, Implants or Both? Int Perspect Sex Reprod Health [Internet]. 2017 Dec;43(4):183.
- 8. Benson J, Andersen K, Brahmi D, Healy J, Mark A, Ajode A, et al. What contraception do women use after abortion? An analysis of 319,385 cases from eight countries. Glob Public Health [Internet]. 2018 Jan 2;13(1):35–50.
- 9. Briggs J, Embrey M, Maliqi B, Hedman L, Requejo J. How to assure access of essential RMNCH medicines by looking at policy and systems factors: an analysis of countdown to 2015 countries. BMC Health Serv Res [Internet]. 2018 Dec 7;18(1):952.
- 10. Burke E, Dakouo ML, Glish L, Moon P, Blumenthal PD. Helping Postpartum Women in Mali Achieve Their Fertility Intentions: Perspectives From Introduction of the Dedicated Postpartum IUD Inserter. Glob Heal Sci Pract [Internet]. 2018 Oct 3;6(3):515–27.
- 11. Burke E, Gold J, Razafinirinasoa L, Mackay A. Youth Voucher Program in Madagascar Increases Access to Voluntary Family Planning and STI Services for Young People. Glob Heal Sci Pract [Internet]. 2017 Mar 24;5(1):33–43.
- 12. Casey SE, Tshipamba M. Contraceptive availability leads to increase in use in conflict-affected Democratic Republic of the Congo: evidence from cross-sectional cluster surveys, facility assessments and service statistics. Confl Health [Internet]. 2017 Dec 8;11(1):2.
- 13. Castle S, Schroffel H, Nzau Mvuezolo JJ, Mupenda B, Mumbere J, Shapiro R. Successful programmatic approaches to facilitating IUD uptake: CARE's experience in DRC. BMC Womens Health [Internet]. 2019 Jul 24;19(1):104.
- 14. Chakraborty NM, Sprockett A. Use of family planning and child health services in the private sector: an equity analysis of 12 DHS surveys. Int J Equity Health [Internet]. 2018 Dec 24;17(1):50. Available from: https://equityhealthj.biomedcentral.com/articles/10.1186/s12939-018-0763-7
- 15. Chavkin W, Stifani BM, Bridgman-Packer D, Greenberg JMS, Favier M. Implementing and expanding safe abortion care: An international comparative case study of six countries. Int J Gynecol Obstet [Internet]. 2018 Oct 30;143(S4):3–11.
- 16. Dawson A, Tran NT, Westley E, Mangiaterra V, Festin M. Workforce interventions to improve access to emergency contraception pills: A systematic review of current evidence in low- and middle-income countries and recommendations for improving performance Health systems and services in low and middle income sett. BMC Health Serv Res [Internet]. 2015;15(1).
- 17. Dennis ML, Benova L, Owolabi OO, Campbell OMR. Meeting need vs. sharing the market: a systematic review of methods to measure the use of private sector family planning and childbirth services in sub-Saharan Africa. BMC Health Serv Res [Internet]. 2018 Dec 10;18(1):699.
- 18. Dennis ML, Radovich E, Wong KLM, Owolabi O, Cavallaro FL, Mbizvo MT, et al. Pathways to increased coverage: an analysis of time trends in contraceptive need and use among adolescents

- and young women in Kenya, Rwanda, Tanzania, and Uganda. Reprod Health [Internet]. 2017 Dec 17;14(1):130.
- 19. Di Giorgio L, Mvundura M, Tumusiime J, Namagembe A, Ba A, Belemsaga-Yugbare D, et al. Costs of administering injectable contraceptives through health workers and self-injection: evidence from Burkina Faso, Uganda, and Senegal. Contraception [Internet]. 2018 Nov;98(5):389–95.
- 20. Dieleman JL, Sadat N, Chang AY, Fullman N, Abbafati C, Acharya P, et al. Trends in future health financing and coverage: future health spending and universal health coverage in 188 countries, 2016–40. Lancet. 2018;391(10132):1783–98.
- 21. Fan VY, Kim S, Choi S, Grépin KA. Aligning Funding and Need for Family Planning: A Diagnostic Methodology. Stud Fam Plann [Internet]. 2017 Dec;48(4):309–22.
- 22. Footman K, Keenan K, Reiss K, Reichwein B, Biswas P, Church K. Medical Abortion Provision by Pharmacies and Drug Sellers in Low- and Middle-Income Countries: A Systematic Review. Stud Fam Plann [Internet]. 2018 Mar;49(1):57–70.
- 23. Glenton C, Sorhaindo AM, Ganatra B, Lewin S. Implementation considerations when expanding health worker roles to include safe abortion care: a five-country case study synthesis. BMC Public Health [Internet]. 2017 Dec 21;17(1):730.
- 24. Gold J, Burke E, Cissé B, Mackay A, Eva G, Hayes B. Increasing Access to Family Planning Choices Through Public-Sector Social Franchising: The Experience of Marie Stopes International in Mali. Glob Heal Sci Pract [Internet]. 2017 Jun 27;5(2):286–98.
- 25. Guiella G, Turke S, Coulibaly H, Radloff S, Choi Y. Rapid Uptake of the Subcutaneous Injectable in Burkina Faso: Evidence from PMA2020 Cross-Sectional Surveys. Glob Heal Sci Pract [Internet]. 2018 Mar 21;6(1):73–81.
- 26. H. Tang J. Implementation of postpartum intrauterine device (PPIUD) services across 10 districts in Malawi. Malawi Med J [Internet]. 2018 Sep 30;30(3):205.
- 27. Hasselback L, Dicko M, Viadro C, Ndour S, Ndao O, Wesson J. Understanding and addressing contraceptive stockouts to increase family planning access and uptake in Senegal. BMC Health Serv Res [Internet]. 2017 Dec 26;17(1):373.
- 28. Hernandez JH, Akilimali PZ, Muanda MF, Glover AL, Bertrand JT. Evolution of a Large-Scale Community-Based Contraceptive Distribution Program in Kinshasa, DRC Based on Process Evaluation. Glob Heal Sci Pract [Internet]. 2018 Dec 27;6(4):657–67.
- 29. Hernandez JH, Akilimali P, Glover A, Emel R, Mwembo A, Bertrand J. Task-shifting the provision of DMPA-SC in the DR Congo: Perspectives from two different groups of providers. Contraception [Internet]. 2018 Nov;98(5):449–53.
- 30. Hernandez JH, Mbadu MF, Garcia M, Glover A. The provision of emergency contraception in Kinshasa's private sector pharmacies: experiences of mystery clients. Contraception. 2018 Jan;97(1):57–61.

- 31. Hobday K, Hulme J, Prata N, Wate PZ, Belton S, Homer C. Scaling Up Misoprostol to Prevent Postpartum Hemorrhage at Home Births in Mozambique: A Case Study Applying the ExpandNet/WHO Framework. Glob Heal Sci Pract. 2019 Mar;7(1):66–86.
- 32. Ishaku SM, Diop N, Mane B, Liambila W, RamaRao S, Clark H, et al. Introducing the Progesterone Vaginal Ring (PVR) as a New Option for Postpartum Family Planning in Sub-Saharan Africa: Insights from Engagements with Stakeholders. Afr J Reprod Health. 2018 Jun;22(2):68–75.
- 33. Izugbara C, Wekesah FM, Sebany M, Echoka E, Amo-Adjei J, Muga W. Availability, accessibility and utilization of post-abortion care in Sub-Saharan Africa: A systematic review. Health Care Women Int [Internet]. 2019;0(0):1–29
- 34. Jacobstein R. Liftoff: The Blossoming of Contraceptive Implant Use in Africa. Glob Heal Sci Pract. 2018 Mar;6(1):17–39.
- 35. Kabra R, Ali M, Kiarie J. Design and initial implementation of the WHO FP umbrella project- to strengthen contraceptive services in the sub Saharan Africa. Reprod Health [Internet]. 2017 Dec 15;14(1):74.
- 36. Keyonzo N, Korir J, Abilla F, Sirera M, Nyakwara P, Bazant E, et al. Changing Face of Family Planning Funding in Kenya: A Cross-Sectional Survey of Two Urban Counties. Afr J Reprod Health [Internet]. 2017 Dec 30;21(4):24–32.
- 37. Kibira D, Kitutu FE, Merrett GB, Mantel-Teeuwisse AK. Availability, prices and affordability of UN Commission's lifesaving medicines for reproductive and maternal health in Uganda. J Pharm policy Pract [Internet]. 2017 Nov 15;10:35.
- 38. Kwete D, Binanga A, Mukaba T, Nemuandjare T, Mbadu MF, Kyungu M-T, et al. Family Planning in the Democratic Republic of the Congo: Encouraging Momentum, Formidable Challenges. Glob Heal Sci Pract. 2018 Mar;6(1):40–54.
- 39. Li Q, Louis TA, Liu L, Wang C, Tsui AO. Subnational estimation of modern contraceptive prevalence in five sub-Saharan African countries: a Bayesian hierarchical approach. BMC Public Health. 2019 Feb;19(1):216.
- 40. Liu J, Schatzkin E, Omoluabi E, Fajemisin M, Onuoha C, Erinfolami T, et al. Introducing the subcutaneous depot medroxyprogesterone acetate injectable contraceptive via social marketing: lessons learned from Nigeria's private sector. Contraception [Internet]. 2018 Nov;98(5):438–48.
- 41. Metzger AM, Bormet M. Pharmaceutical stockouts: problems and remedies for faith-based health facilities in Africa. Christ J Glob Heal. 2017;4(2):19.
- 42. Mukasa B, Ali M, Farron M, Van de Weerdt R. Contraception supply chain challenges: a review of evidence from low- and middle-income countries. Eur J Contracept Reprod Health Care [Internet]. 2017/10/31. 2017 Oct;22(5):384–90.

- 43. Nara R, Banura A, Foster AM. Assessing the availability and accessibility of emergency contraceptive pills in Uganda: A multi-methods study with Congolese refugees. Contraception. 2019 Oct.
- 44. Ndziessi G, Bintsene-Mpika G, Bileckot R. User Satisfaction with Family Planning Services in Government Health Centres in the Congo. Afr J Reprod Health [Internet]. 2017 Sep 30;21(3):70–5.
- 45. Negussie A, Girma G. Is the role of Health Extension Workers in the delivery of maternal and child health care services a significant attribute? The case of Dale district, southern Ethiopia. BMC Health Serv Res [Internet]. 2017 Dec 11;17(1):641.
- 46. Ngo TD, Nuccio O, Pereira SK, Footman K, Reiss K. Evaluating a LARC Expansion Program in 14 Sub-Saharan African Countries: A Service Delivery Model for Meeting FP2020 Goals. Matern Child Health J [Internet]. 2017 Sep 6;21(9):1734–43.
- 47. Nguyen TH, Lambert P, Minhas RS, McEvoy C, Deadman K, Wright P, et al. Temperature stability of oxytocin ampoules labelled for storage at 2°C-8°C and below 25°C: an observational assessment under controlled accelerated and temperature cycling conditions. BMJ Open. 2019;9(7):e029083.
- 48. Odwe G, Gray K, Kyarimpa A, Obare F, Nagendi G. Introduction of Subcutaneous Depot Medroxyprogesterone Acetate (DMPA-SC) Injectable Contraception at Facility and Community Levels: Pilot Results From 4 Districts of Uganda. Glob Heal Sci Pract [Internet]. 2018 Dec 27;6(4):711–22.
- 49. Oyugi B, Kioko U, Kaboro SM, Gikonyo S, Okumu C, Ogola-Munene S, et al. Accessibility of long-term family planning methods: a comparison study between Output Based Approach (OBA) clients verses non-OBA clients in the voucher supported facilities in Kenya. BMC Health Serv Res [Internet]. 2017 Dec 27;17(1):236.
- 50. Reiss K, Footman K, Burke E, Diop N, Ndao R, Mane B, et al. Knowledge and provision of misoprostol among pharmacy workers in Senegal: a cross sectional study. BMC Pregnancy Childbirth [Internet]. 2017 Dec 3;17(1):211.
- 51. Riley C, Garfinkel D, Thanel K, Esch K, Workalemahu E, Anyanti J, et al. Getting to FP2020: Harnessing the private sector to increase modern contraceptive access and choice in Ethiopia, Nigeria, and DRC. PLoS One. 2018;13(2):e0192522.
- 52. Samnani AABA, Rizvi N, Ali TS, Abrejo F. Barriers or gaps in implementation of misoprostol use for post-abortion care and post-partum hemorrhage prevention in developing countries: a systematic review. Reprod Health [Internet]. 2017 Dec 27;14(1):139.
- 53. Shiferaw S, Spigt M, Seme A, Amogne A, Skrøvseth S, Desta S, et al. Does proximity of women to facilities with better choice of contraceptives affect their contraceptive utilization in rural Ethiopia? Dangal G, editor. PLoS One [Internet]. 2017 Nov 13;12(11):e0187311.

- 54. Solheim IH, Moland KM, Kahabuka C, Pembe AB, Blystad A. Beyond the law: Misoprostol and medical abortion in Dar es Salaam, Tanzania. Soc Sci Med [Internet]. 2019/11/14. 2020 Jan;245:112676.
- 55. Stout A, Wood S, Barigye G, Kaboré A, Siddo D, Ndione I. Expanding Access to Injectable Contraception: Results from Pilot Introduction of Subcutaneous Depot Medroxyprogesterone Acetate (DMPA-SC) in 4 African Countries. Glob Heal Sci Pract [Internet]. 2018 Mar 21;6(1):55–72.
- 56. Tanabe M, Myers A, Bhandari P, Cornier N, Doraiswamy S, Krause S. Family planning in refugee settings: findings and actions from a multi-country study. 2017;1–12.
- 57. Tebbets C, Santana D, Ros Silvestre J, Redwine D. Building Bridges: A Case for Community Health Worker Provision of Misoprostol-Only Abortion in the First Trimester. J Women's Heal [Internet]. 2018 Mar;27(3):311–6.
- 58. Thanel K, Garfinkel D, Riley C, Esch K, Girma W, Kebede T, et al. Leveraging long acting reversible contraceptives to achieve FP2020 commitments in sub-Saharan Africa: The potential of implants. PLoS One [Internet]. 2018 Apr 9;13(4): e0195228–e0195228.
- 59. Theunissen FJ, Chinery L, Pujar Y V. Current research on carbetocin and implications for prevention of postpartum haemorrhage. Reprod Health. 2018;15(Suppl 1).
- 60. Tilahun Y, Lew C, Belayihun B, Lulu Hagos K, Asnake M. Improving Contraceptive Access, Use, and Method Mix by Task Sharing Implanon Insertion to Frontline Health Workers: The Experience of the Integrated Family Health Program in Ethiopia. Glob Heal Sci Pract [Internet]. 2017 Dec 28;5(4):592–602.
- 61. Torloni MR, Gomes Freitas C, Kartoglu UH, Metin Gülmezoglu A, Widmer M. Quality of oxytocin available in low- and middle-income countries: a systematic review of the literature. BJOG. 2016;123(13):2076–86.
- 62. Tran NT, Yameogo WME, Langwana F, Gaffield ME, Seuc A, Cuzin-Kihl A, et al. Participatory action research to identify a package of interventions to promote postpartum family planning in Burkina Faso and the Democratic Republic of Congo. BMC Womens Health [Internet]. 2018 Dec 5;18(1):122.
- 63. Ugaz, Leegwater, Chatterji, Johnson, Baruwa, Toriola, et al. Impact of Family Planning and Business Trainings on Private-Sector Health Care Providers in Nigeria. Int Perspect Sex Reprod Health [Internet]. 2017 Jun;43(2):51.
- 64. Vermandere H, Galle A, Griffin S, de Melo M, Machaieie L, Van Braeckel D, et al. The impact of facility audits, evaluation reports and incentives on motivation and supply management among family planning service providers: an interventional study in two districts in Maputo Province, Mozambique. BMC Health Serv Res [Internet]. 2017 Dec 2;17(1):313.

- 65. Vledder M, Friedman J, Sjöblom M, Brown T, Yadav P. Improving Supply Chain for Essential Drugs in Low-Income Countries: Results from a Large-Scale Randomised Experiment in Zambia. Heal Syst Reform. 2019;5(2):158–77.
- 66. Weidert K, Gessessew A, Bell S, Godefay H, Prata N. Community Health Workers as Social Marketers of Injectable Contraceptives: A Case Study from Ethiopia. Glob Heal Sci Pract [Internet]. 2017 Mar 24;5(1):44–56.
- 67. Wiedenmayer K, Mbwasi R, Mfuko W, Mpuya E, Charles J, Chilunda F, et al. Jazia prime vendor system- A public-private partnership to improve medicine availability in Tanzania: From pilot to scale. J Pharm Policy Pract. 2019;12(1):1–10.
- 68. Binyaruka P, Borghi J. Improving quality of care through payment for performance: examining effects on the availability and stock-out of essential medical commodities in Tanzania. Trop Med Int Health [Internet]. 2016/12/07. 2017 Jan;22(1):92–102.
- 69. Weaver, E.H et al. Effect of Village Midwife Program on Contraceptive Prevalence and Method Choice in Indonesia. Stud Fam Plann. 2013 December; 44(4): 389–409. doi:10.1111/j.1728-4465.2013.00366.x
- 70. Purdy, C. How One Social Marketing Organisation Is Transitioning From Charity to Social Enterprise. Sage Journals. April 2020. DOI: 10.1177/1524500420918703
- 71. Björkman Nyqvist M, Guariso A, Svensson J, Yanagizawa-Drott D. Reducing Child Mortality in the Last Mile: Esperimental Evidence on Community Health Promotors in Uganda. American Economic Journal: Applied Economics 2019, 11(3): 155–192. 2019. https://doi.org/10.1257/app.20170201

9.3 WEBSITES

- https://extranet.who.int/prequal/content/prequalifiedlists/medicines?label=&field_medicine_applicant=&field_medicine_fpp_site_value=&search_api_a ggregation_1=&field_medicine_pq_date%5Bdate%5D=&field_medicine_pq_date_1%5Bdate%5D= &field_therapeutic_area=18&field_medicine_status=&field_basis_of_listing=All
- 2. https://www.msh.org/our-work/projects/the-medicines-technologies-and-pharmaceutical-services-mtaps-program
- 3. https://www.msh.org/sites/default/files/factsheets_mtaps_mnch_042319.pdf
- 4. https://www.msh.org/our-work/projects/the-medicines-technologies-and-pharmaceutical-services-mtaps-program
- 5. https://www.medab.org/
- 6. https://www.nepad.org/programme-details/998
- https://www.msh.org/sites/default/files/factsheets_mtaps_pharmaceutical_regulatory_systems_
 042319.pdf
- 8. http://www.familyplanning2020.org/Beyond2020

- 9. https://www.kff.org/global-health-policy/fact-sheet/the-u-s-government-and-international-family-planning-reproductive-health-efforts/
- 10. https://www.popcouncil.org
- 11. https://www.prb.org/can-drones-help-avert-contraceptive-stockouts-maybe/
- 12. https://www.unfpaprocurement.org/budget-planner)
- 13. https://www.psi.org
- 14. https://www.pharmaccess.org
- 15. https://www.dktinternational.org/about/
- 16. https://www.pfizer.com/news/press-release/press-release-detail/mylan_and_upjohn_a_division_of_pfizer_to_combine_creating_a_new_champion_for_glob al health uniquely positioned to fulfill the world s need for medicine
- 17. https://www.mrknewsroom.com/news-release/corporate-news/merck-focus-key-growth-pillars-through-spinoff-womens-health-trusted-leg
- 18. https://www.who.int/medicines/access/fair_pricing/en/
- 19. https://www.tmda.go.tz/programs/hamornization-and-international-collaboration
- 20. https://www.ghsupplychain.org/for-suppliers/how-to-work-with-us
- 21. https://www.devex.com/news/exclusive-chemonics-battles-wave-of-challenges-with-9-5b-health-supply-chain-project-91150
- 22. https://www.devex.com/news/significant-mistakes-in-usaid-global-health-supply-chain-house-says-93674
- 23. https://www.devex.com/news/usaid-should-rethink-its-culture-of-partnership-with-implementers-inspector-general-says-95273
- 24. https://www.theglobalfund.org/board-decisions/b42-dp05/
- 25. https://au.int/en/pressreleases/20200205/african-medicine-agency-ama-treaty
- 26. https://www.conceptfoundation.org
- 27. http://wcgcares.org
- 28. https://www.conrad.org
- 29. https://www.cgdev.org
- 30. https://extranet.who.int/prequal/content/technical-advice
- 31. https://www.cgdev.org/better-health-procurement
- 32. https://www.wahooas.org/web-ooas/en/projets/wa-mrh-west-africa-medicines-regulatory-harmonization-project
- 33. https://africanrec.frb.io
- 34. https://www.pamsteele.co.uk/wp-content/uploads/2019/02/Supply-Chain-Maturity_Frontier-Markets-2.pdf

- 35. https://decorrespondent.nl/11010/wat-er-gebeurt-als-bill-en-melinda-gates-zich-niet-op-software-maar-spiraaltjes-storten/5219515335210-cd01ecf9
- 36. https://decorrespondent.nl/11005/op-pad-met-de-racende-dokters-die-een-heel-land-van-anticonceptie-willen-voorzien/5217144983105-002097a1
- 37. https://apps.who.int/iris/bitstream/handle/10665/70737/WHO_RHR_11.29 eng.pdf;jsessionid=7

 D4FF33B75016371E7C7882607CE10EE?sequence=1
- 38. https://www.fphighimpactpractices.org
- 39. https://wcaro.unfpa.org/sites/default/files/pub-pdf/SWEDD_ENG.pdf