Translating Data into Better Health for Children

Lessons from the CODES project in Uganda

7 December, 2021

Image credit: Kate Holt/MCSP, Busowobi Inganga, Uganda

Child Health Task Force Today

2000+ members *from* **80+** countries **300+** organizations

Working together in **10** subgroups

Coordination
Advocacy
Support Countries
Learning
Knowledge Management

Focused on **5** themes of work

Read the strategy on the website:
https://bit.ly/chtfstrategy

Today's Topic & Speakers

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District Health Systems strengthening through the CODES Study

(Community and District Empowerment for Scale up)

7 December 2021
Child Health task force Webinar

Prof Stefan Peterson,
Prof Peter Waiswa
Dr Flavia Mpanga Kaggwa

unicef

MAKERERE UNIVERSITY

Karolinska Institutet

ChildFund International

LSTM LIVERPOOL SCHOOL OF TROPICAL MEDICINE

Implementation Arrangements

- General Oversight by Steering Committee : MoH, UNICEF, US fund for UNICEF, GATES, ACADEMIA, District Reps Mukono and Buhweju, MUK/Karolinka
- UNICEF engaged two sub-contractors to support districts on: SUPPLY (CFI & LSTM) and DEMAND (ACODE)
  - Baseline and End line surveys
  - Bottleneck & Casual analysis, management tools, Continuous Quality Improvement
  - Community empowerment

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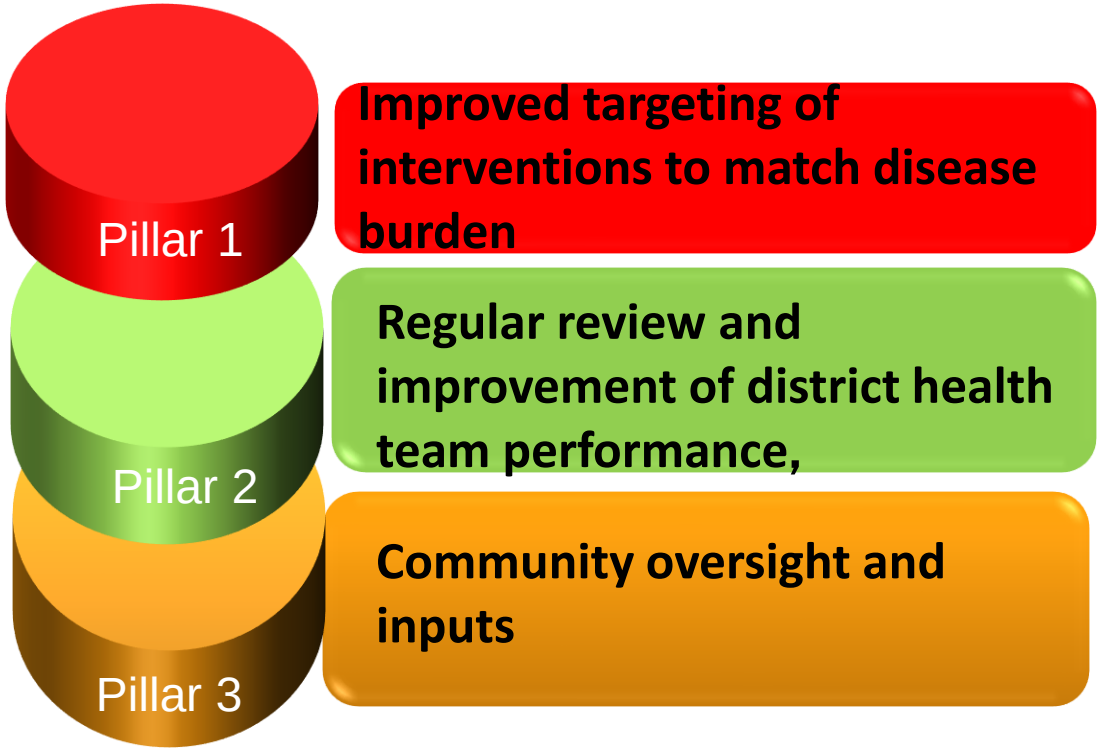
CODES HYPOTHESIS AND PILLARS

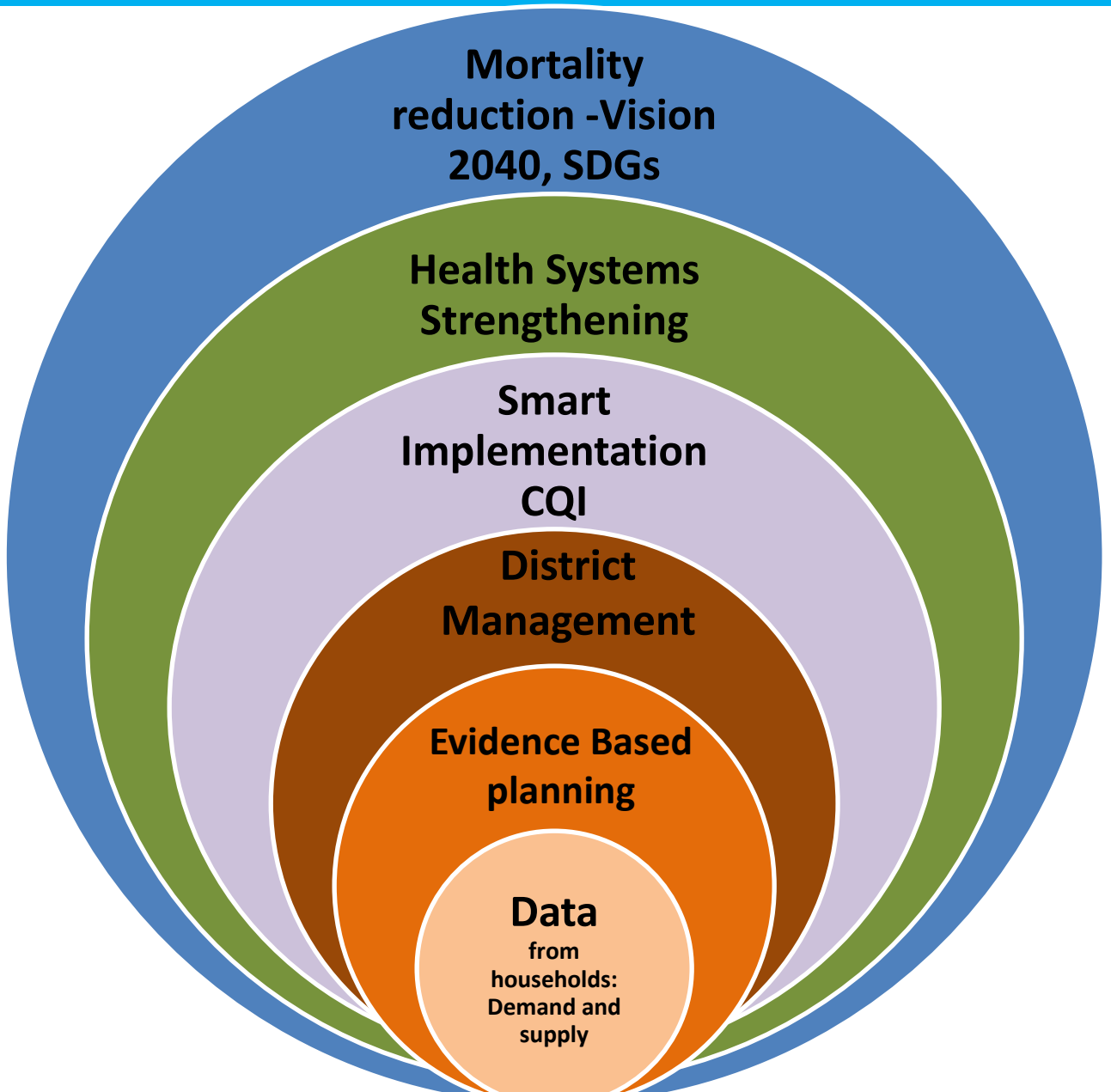
CODES Hypothesis

Areas receiving CODES intervention will perform "better" and show accelerated "improvement" on the key protective, preventive and curative quality coverage indicators for pneumonia, diarrhea and malaria compared to those that have not received the CODES intervention.

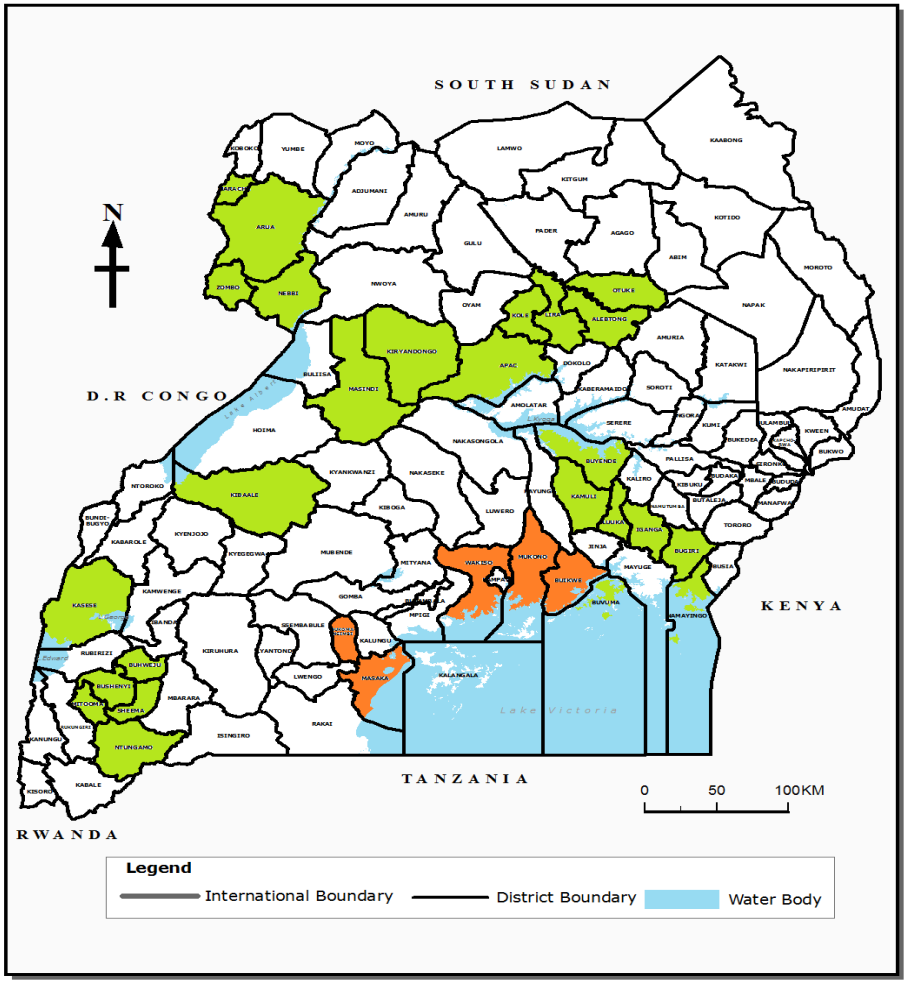
CODES PILLARS



Community and District Empowerment for Scale Up
'In a nut shell'



Geographical Scope: 5 districts proof of concept, 8 Intervention & 8 control



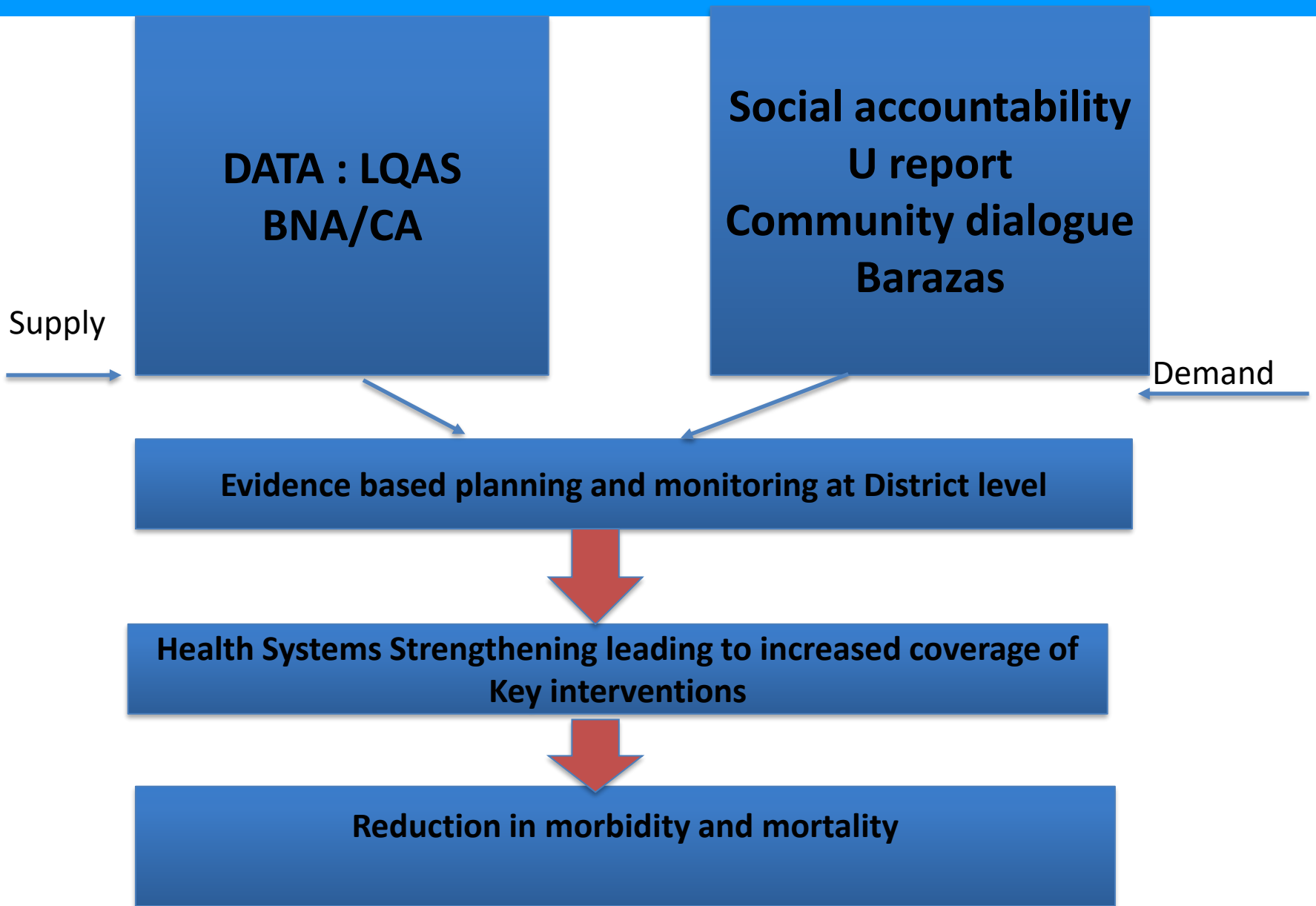
Wave 0: 2011-2013

Buikwe, Bukomansimbi, Masaka, Mukono, Wakiso

Wave 1: 2013-2017

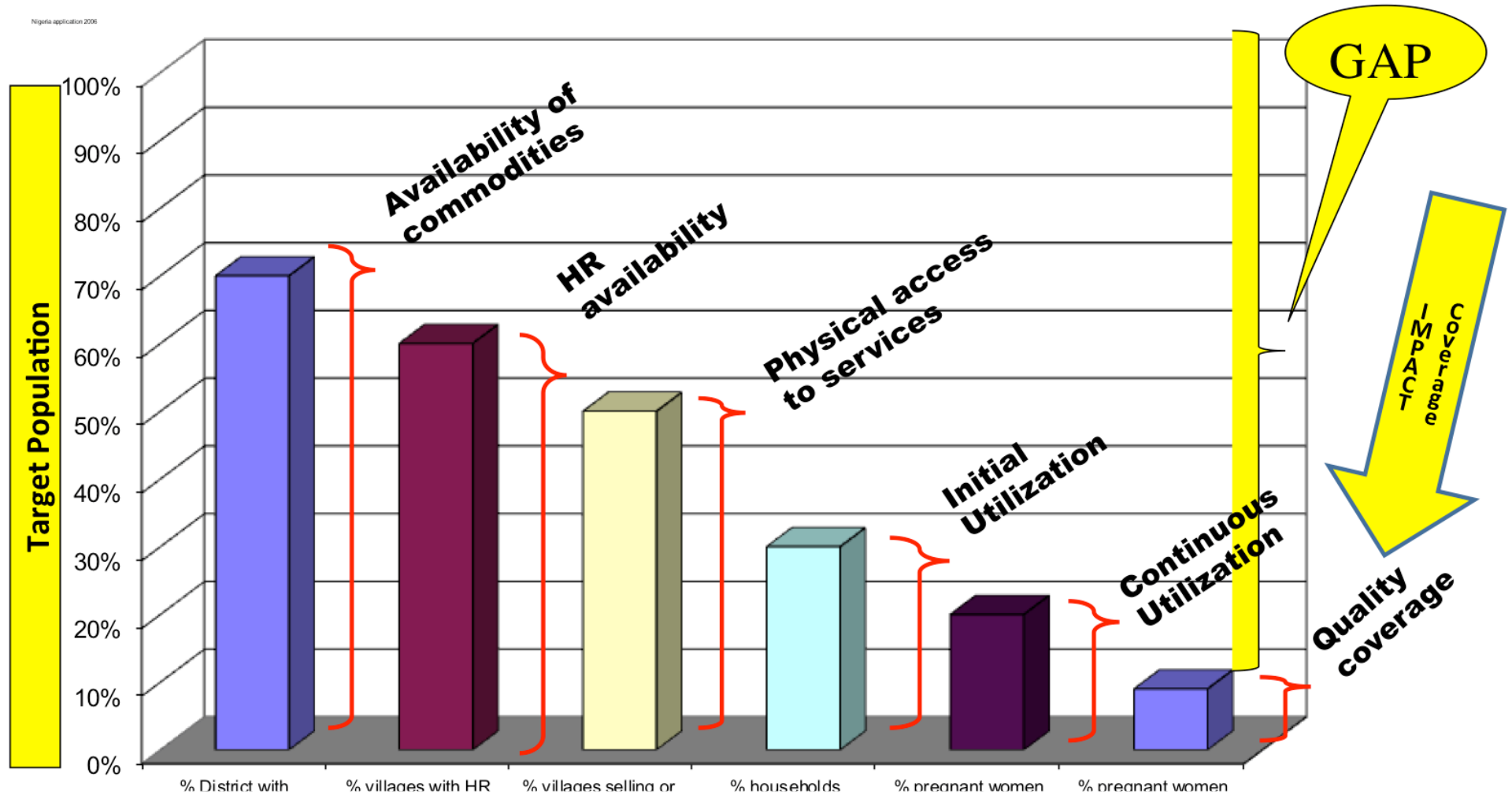
- **Intervention:** Apac, Arua, Bugiri, Buhweju, Buvuma, Luuka, Masindi and Maracha.
- **Control districts:** Alebtong, Kole, Kiryandongo, Kamuli, Iganga, Kasese, Mitoma and Sheema

Key Steps under CODES



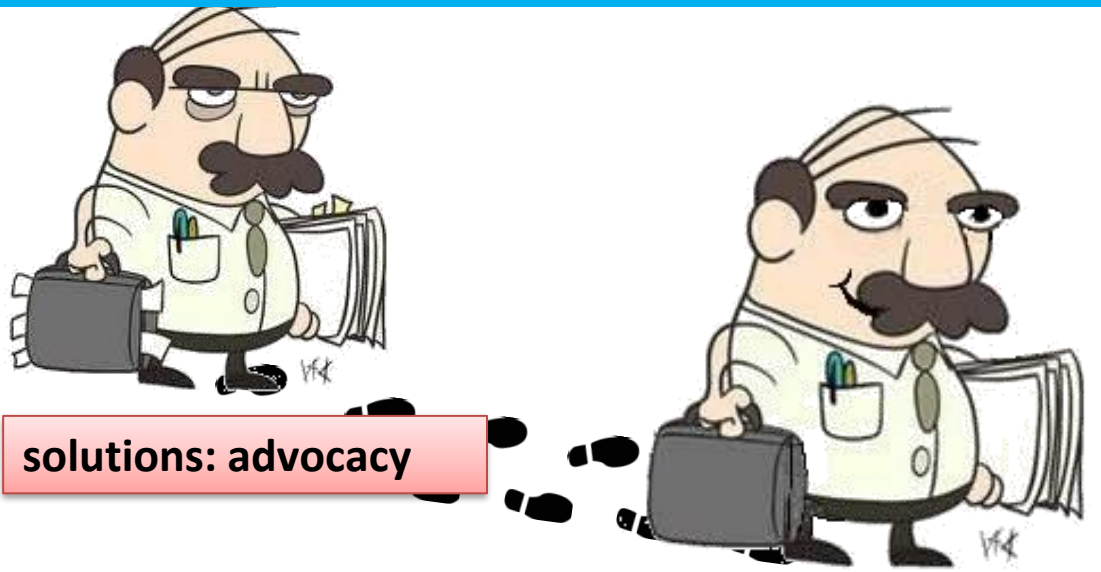
Step 1: Identification of Bottlenecks

The Tanahashi Model to assess system bottlenecks



Adapted by T. O'Connell from *Tanahashi T. Bulletin of the World Health Organization, 1978, 56 (2)*
http://whqlibdoc.who.int/bulletin/1978/Vol56-No2/bulletin_1978_56(2)_295-303.pdf

Step 2: Causal analysis using the management analysis and 5 WHY's



Bottleneck

Managerial shortcoming

Decision space — NO → solutions: advocacy

YES

Resources — NO → 5 WHYs → solutions: collection, advocacy

YES

Capacity — NO → 5 WHYs → solutions: capacity building

YES

Motivation — NO → 5 WHYs → solutions: incentives

YES

What else?

Step 3: Identification of solutions and strategies for District Annual Plans

Example of solutions proposed by: Bugiri District

INTERVENTION	BOTTLENECK	CAUSES	PROPOSED SOLUTION
Pneumonia	Stock out of antibiotics at 46%.	Over prescription of antibiotics because breath rate not taken Lack of respiratory timers Inadequate forecasting of needs	• Procurement of wall clocks for respiratory rate assessment for health facility • Refresher training on quantification; CQI

Achievements: Supply side

- Intervention districts reported significant net increases in the treatment of:
  - Malaria **(+23%)**
  - Pneumonia **(+19%)**
  - Diarrhea **(+13%)**
  - Improved stool disposal **(+10%)**
  - Coverage rates for immunization and vitamin A consumption saw similar improvements.

Achievements: Supply side

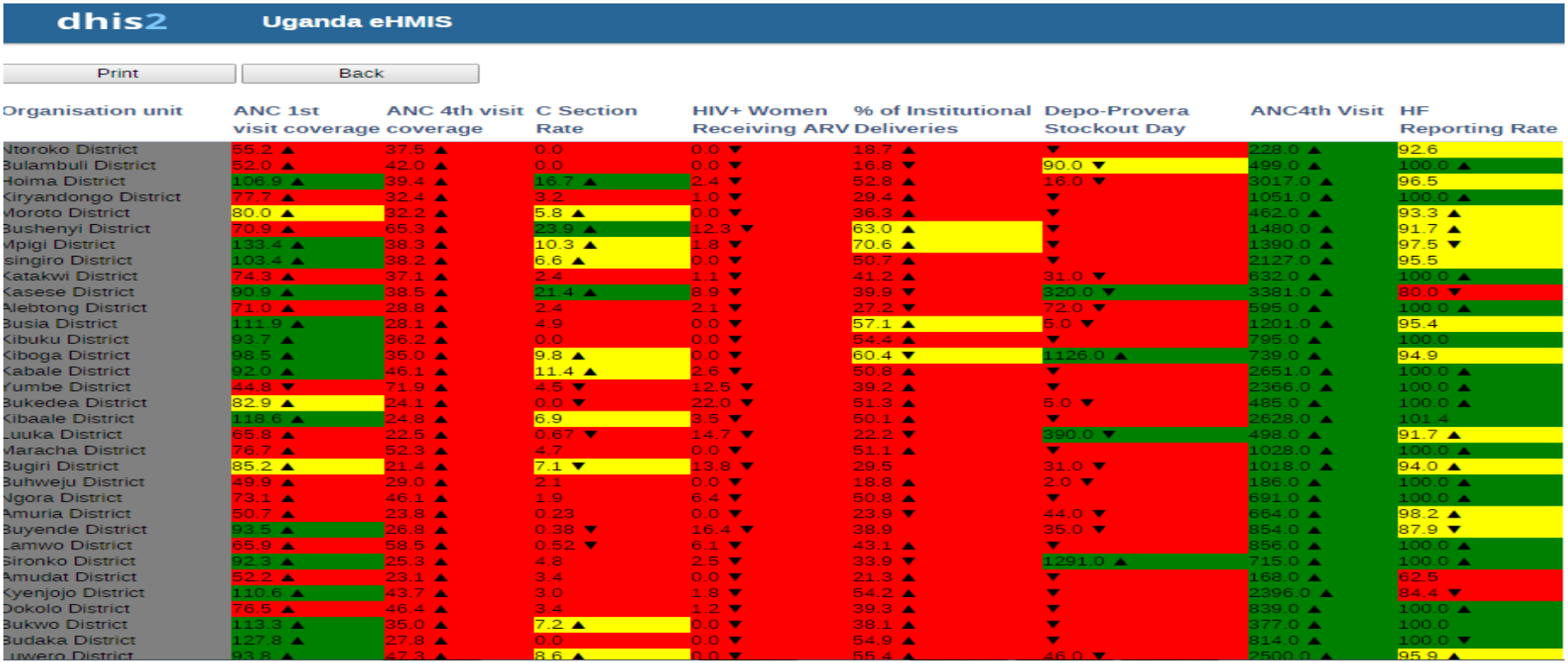
- ✓ Improved reporting through DHIS 2 from **23.5%** in 2013 to over **80%** in 2016 across the 487 facilities in the 13 districts
- ✓ Decrease in health worker absenteeism from **44%** to **29%** in 2 years
- ✓ Evidence based work-plans in 13 districts increased funding for child health from **4%** to **6%** in 2 years

Achievements: Demand side

- Increased knowledge about the symptoms, causes, prevention and treatment of malaria, diarrhea and pneumonia -as per the national guidelines. Mostly in communities that participated in Community dialogues.
- Improved change in the conduct of heath workers at government health facilities
- Improved working relationship between the HW/HTs and the community.
- Increased up take and completion of immunization schedules which was attributed better understanding of EPI programme
- Community dialogue approach can potentially inform work plan activity in a tremendous way, the *Baraza* program under Office of the Prime Minister
- Community owned schemes e.g., Transport voucher for pregnant women and sick children
- Community led construction of Health facilities
- Increased male involvement: ANC with spouses

Sustaining the gains from CODES

- Data: Shift from expensive surveys to the use of routine data: **from LQAS to DHIS 2**
  - RMNCAH score cards automatically generated in DHIS 2



dhis2 Uganda eHMIS

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Organisation unit	ANC 1st visit coverage	ANC 4th visit coverage	C Section Rate	HIV+ Women Receiving ARV	% of Institutional Deliveries	Depo-Provera Stockout Day	ANC4th Visit	HF Reporting Rate
Ntoroko District	55.2 ▲	37.5 ▲	0.0	0.0 ▼	18.7 ▲	▼	228.0 ▲	92.6
Bulambuli District	52.0 ▲	42.0 ▲	0.0	0.0 ▼	16.8 ▼	90.0 ▼	499.0 ▲	100.0 ▲
Hoima District	106.9 ▲	39.4 ▲	16.7 ▲	2.4 ▼	52.8 ▲	16.0 ▼	3017.0 ▲	96.5
Kiryandongo District	77.7 ▲	32.4 ▲	3.2	1.0 ▼	29.4 ▲	▼	1051.0 ▲	100.0 ▲
Moroto District	80.0 ▲	32.2 ▲	5.8 ▲	0.0 ▼	36.3 ▲	▼	462.0 ▲	93.3 ▲
Bushenyi District	70.9 ▲	65.3 ▲	23.9 ▲	12.3 ▼	63.0 ▲	▼	1480.0 ▲	91.7 ▲
Mpigi District	133.4 ▲	38.3 ▲	10.3 ▲	1.8 ▼	70.6 ▲	▼	1390.0 ▲	97.5 ▼
Isingiro District	103.4 ▲	38.2 ▲	6.6 ▲	0.0 ▼	50.7 ▲	▼	2127.0 ▲	95.5
Katakwi District	74.3 ▲	37.1 ▲	2.4	1.1 ▼	41.2 ▲	31.0 ▼	632.0 ▲	100.0 ▲
Kasese District	90.9 ▲	38.5 ▲	21.4 ▲	8.9 ▼	39.9 ▼	320.0 ▼	3381.0 ▲	80.0 ▼
Alebtong District	71.0 ▲	28.8 ▲	2.4	2.1 ▼	27.2 ▼	72.0 ▼	595.0 ▲	100.0 ▲
Busia District	111.9 ▲	28.1 ▲	4.9	0.0 ▼	57.1 ▲	5.0 ▼	1201.0 ▲	95.4
Kibuku District	93.7 ▲	36.2 ▲	0.0	0.0 ▼	54.4 ▲	▼	795.0 ▲	100.0
Kiboga District	98.5 ▲	35.0 ▲	9.8 ▲	0.0 ▼	60.4 ▼	1126.0 ▲	739.0 ▲	94.9
Kabale District	92.0 ▲	46.1 ▲	11.4 ▲	2.6 ▼	50.8 ▲	▼	2651.0 ▲	100.0 ▲
Kumbe District	44.8 ▼	71.9 ▲	4.5 ▼	12.5 ▼	39.2 ▲	▼	2366.0 ▲	100.0 ▲
Bukedea District	82.9 ▲	24.1 ▲	0.0 ▼	22.0 ▼	51.3 ▲	5.0 ▼	485.0 ▲	100.0 ▲
Kibaale District	118.6 ▲	24.8 ▲	6.9	3.5 ▼	50.1 ▲	▼	2628.0 ▲	101.4
Luuka District	65.8 ▲	22.5 ▲	0.67 ▼	14.7 ▼	22.2 ▼	390.0 ▼	498.0 ▲	91.7 ▲
Maracha District	76.7 ▲	52.3 ▲	4.7	0.0 ▼	51.1 ▲	▼	1028.0 ▲	100.0 ▲
Bugiri District	85.2 ▲	21.4 ▲	7.1 ▼	13.8 ▼	29.5	31.0 ▼	1018.0 ▲	94.0 ▲
Buhweju District	49.9 ▲	29.0 ▲	2.1	0.0 ▼	18.8 ▲	2.0 ▼	186.0 ▲	100.0 ▲
Ngora District	73.1 ▲	46.1 ▲	1.9	6.4 ▼	50.8 ▲	▼	691.0 ▲	100.0 ▲
Amuria District	50.7 ▲	23.8 ▲	0.23	0.0 ▼	23.9 ▼	44.0 ▼	664.0 ▲	98.2 ▲
Buyende District	93.5 ▲	26.8 ▲	0.38 ▼	16.4 ▼	38.9	35.0 ▼	854.0 ▲	87.9 ▼
Lamwo District	65.9 ▲	58.5 ▲	0.52 ▼	6.1 ▼	43.1 ▲	▼	856.0 ▲	100.0 ▲
Sironko District	92.3 ▲	25.3 ▲	4.8	2.5 ▼	33.9 ▼	1291.0 ▲	715.0 ▲	100.0 ▲
Amudat District	52.2 ▲	23.1 ▲	3.4	0.0 ▼	21.3 ▲	▼	168.0 ▲	62.5
Kyenjojo District	110.6 ▲	43.7 ▲	3.0	1.8 ▼	54.2 ▲	▼	2396.0 ▲	84.4 ▼
Dokolo District	76.5 ▲	46.4 ▲	3.4	1.2 ▼	39.3 ▲	▼	839.0 ▲	100.0 ▲
Bukwo District	113.3 ▲	35.0 ▲	7.2 ▲	0.0 ▼	38.1 ▲	▼	377.0 ▲	100.0
Budaka District	127.8 ▲	27.8 ▲	0.0	0.0 ▼	54.9 ▲	▼	814.0 ▲	100.0 ▼
Luwero District	93.8 ▲	47.3 ▲	8.6 ▲	0.0 ▼	55.4 ▲	46.0 ▼	2500.0 ▲	95.9 ▲

Key Milestones in the Evolution of HSS Approach In Uganda and Beyond (Tanzania, Malawi, Kenya, Swaziland, Zimbabwe)

Community & District Empowerment for Scale-up (CODES) (2011-2017)

- Proof of concept
- Initial expansion phase

Program Monitoring and Response Initiative (2014-2018)

- Customizing management and decision support tools for scale-up

Advocacy and technical support for institutionalization of HSS (2016-2018)

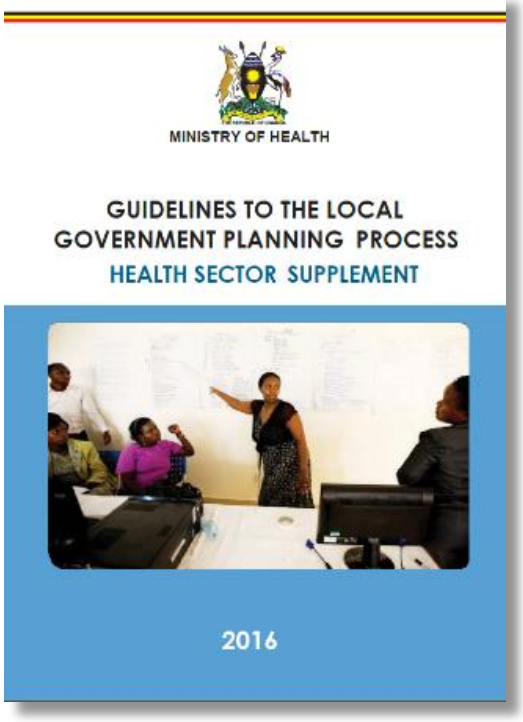
- National Planning Guidelines
- HMIS/DHIS2
- Regional and District Planning and Review meetings

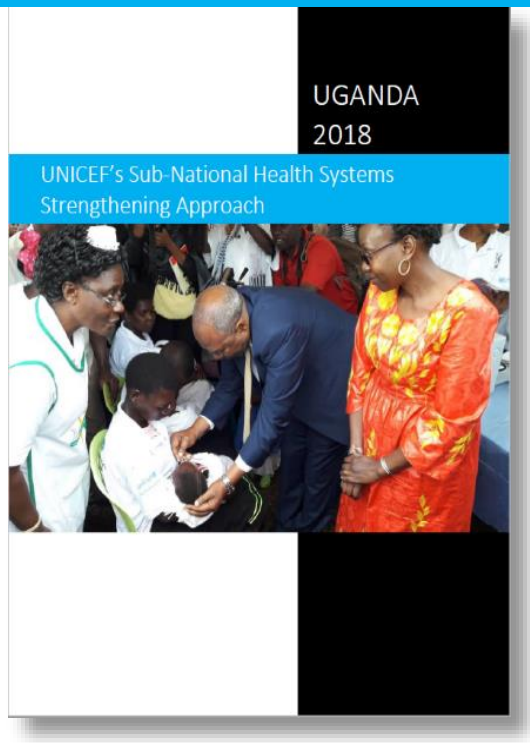
Capacity-building for scale-up and sustainability (2018 to date)

- Sharpening of the HSS conceptual, implementation and monitoring frameworks
- HSS capacity building

Systems Strengthening - a key strategy of the 2016-2020 UCO CPD and the 2021-2025 UCO Programme Strategy Note

Institutionalizing Health Systems Strengthening in Uganda





LESSONS LEARNT

- Aligning the project to the already existing national planning and budgeting cycle strengthens the planning process
- Bottleneck and causal analysis useful for evidence-based planning
- Continuous Quality Improvement is important for QI
- Community dialogues should be aligned to already existing community structures to ensure sustainability
- Political and technical district leadership is necessary to influence real change in the communities
- Limited utility unless there is increased fiscal space at district level

Publications

- **Trials:** *Community and District Empowerment for Scale-up (CODES): a complex district-level management intervention to improve child survival in Uganda: study protocol for a randomized controlled trial* Peter Waiswa1,2*, Thomas O'Connell3 , Danstan Bagenda1,4,5, Pricila Mullachery6 , Flavia Mpanga7 , Dorcus Kiwanuka Henriksson2,8, Anne Ruhweza Katahoire9 , Eric Ssegujja1 , Anthony K. Mbonye1,10 and Stefan Swartling Peterson1,8

- **BMC Public Health:** *Improving child survival through a district management strengthening and community empowerment intervention: early implementation experiences from Uganda* Anne Ruhweza Katahoire1 , Dorcus Kiwanuka Henriksson2,3*, Eric Ssegujja4 , Peter Waiswa4,2, Florence Ayebare4 , Danstan Bagenda5,4,6, Anthony K. Mbonye7,4 and Stefan Swartling Peterson2,3,

- **BMJ:** *Child health and the implementation of Community and District-management Empowerment for Scale-up (CODES) in Uganda: a randomized controlled trial* Peter Waiswa,1 Flavia Mpanga,2 Danstan Bagenda,3,4 Rornald Muhumuza Kananura,5 Thomas O'Connell,6 Dorcus Kiwanuka Henriksson,7,8 Theresa Diaz,9 Florence Ayebare,5 Anne Ruhweza Katahoire,10 Eric Ssegujja,5 Anthony Mbonye,11 Stefan Swartling Peterson1

Publications

https://pubmed.ncbi.nlm.nih.gov/31170988/

Decision-making in district health planning in Uganda: does use of district-specific evidence matter? Dorcus Kiwanuka Henriksson 1, Stefan Swartling Peterson 2, Peter Waiswa 3, Mio Fredriksson 4

http://uu.diva-portal.org/smash/get/diva2:1139476/FULLTEXT01.pdf

Health systems bottlenecks and evidence-based district health planning Experiences from the district health system in Uganda
DORCUS KIWANUKA HENRIKSSON

https://pubmed-ncbi-nlm-nih-gov.proxy.kib.ki.se/31148986/

Community participation to improve health services for children: a methodology for a community dialogue intervention in Uganda

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Suggestions for improvement or additional resources are welcome. Please email **childhealthtaskforce@jsi.com**.

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Thank you for your participation today!

The Child Health Task Force is managed by JSI Research & Training Institute, Inc. through the USAID Advancing Nutrition project and funded by USAID and the Bill & Melinda Gates Foundation.

This presentation was made possible by the generous support of the American people through the United States Agency for International Development (USAID), under the terms of the Contract 7200AA18C00070 awarded to JSI Research & Training Institute, Inc. The contents are the responsibility of JSI and do not necessarily reflect the views of USAID or the U.S. Government.