

Integration of HIV services in low income countries



Louis Pizarro

Sidaction satellite
AIDS 2014
Melbourne
20th of July



Agenda

- 1. Some definitions**
2. A patient perspective
3. A health system perspective
4. Solthis approach

What integration means ?

Systematic analysis of the relative merits of integration in various contexts and for different interventions is complicated as there is no commonly accepted definition of 'integration'. (Atun 2009)

UNAIDS : Joining together different kinds of services or operational programs in order to maximize outcomes, e.g. by organizing referrals from one service to another or offering one-stop comprehensive and integrated services. This includes services from a singular provider and from separate providers (within one site) where there is clearly functional referral system.

The Value of Science in Integration of Services

The Journal of Infectious Diseases 2012;205:S1–3

Anne Schuchat¹ and Kevin M. De Cock²

¹National Center for Immunization and Respiratory Diseases and ²Center for Global Health, Centers for Disease Control and Prevention, Atlanta, Georgia

The key to successful integration is to make use of scarce human and logistic resources for multiple important purposes without diminishing health benefits to the population served.

5 factors are appropriate topics of scientific study when the integration of diverse interventions is being introduced:

- Coverage of interventions.
- Quality of services.
- Acceptability by the target population.
- Complexity remains consistent
- Unintended consequences.

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Comprehensive MCH Services

Integrated MCH Service

Antenatal care

HIV testing

HIV Maternal ARV Prophylaxis

Maternity

Newborn Prophylaxis

Immunizations

Early Infant Diagnosis for HIV

HIV care and support

CD4 cell count testing

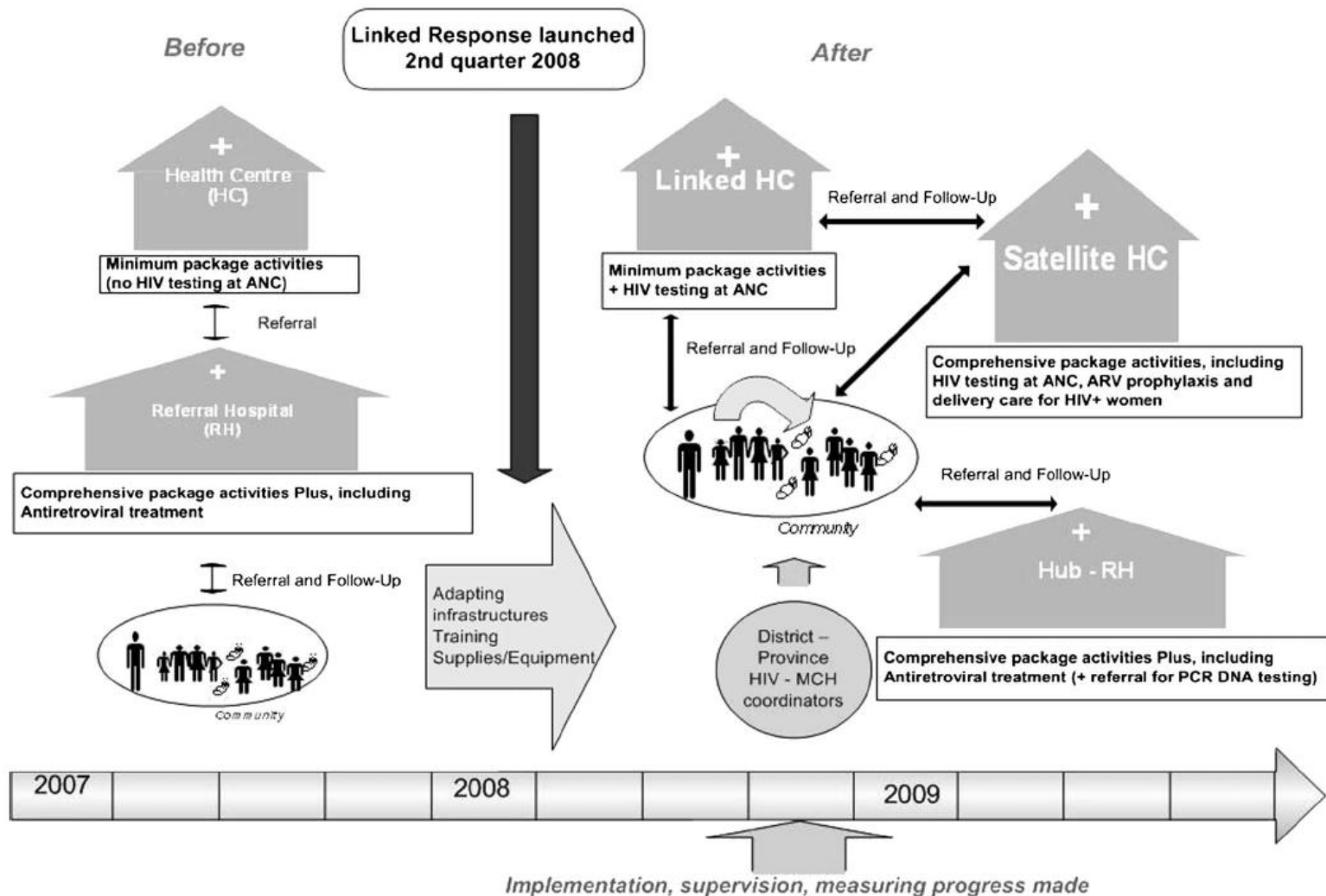
Antiretroviral therapy

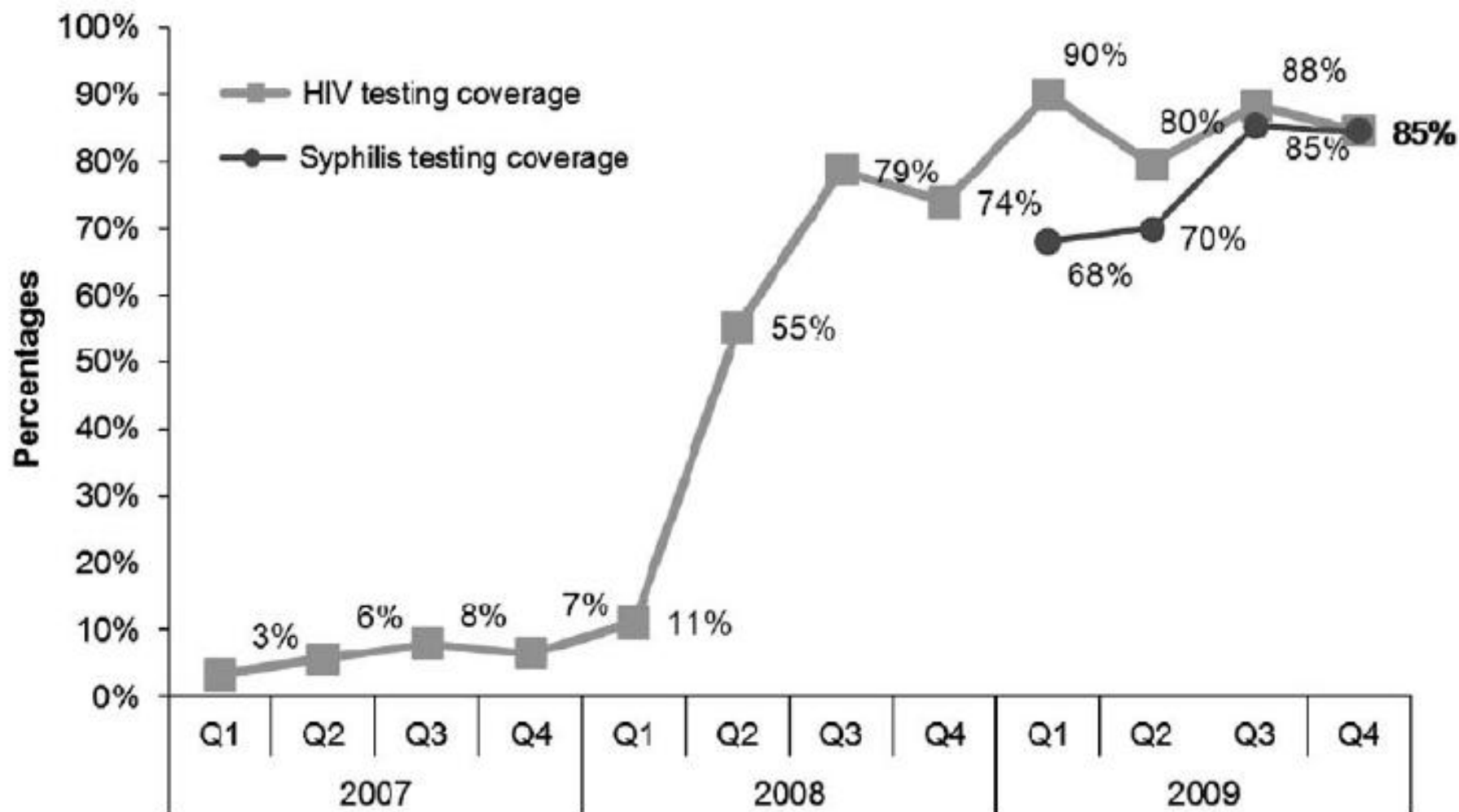
Long term follow-up

COMMUNITY

Linked Response for Prevention, Care, and Treatment of HIV/AIDS, STIs, and Reproductive Health Issues: Results After 18 Months of Implementation in Five Operational Districts in Cambodia

5 Operational Districts (ODs): Kirivong OD in Takeo province, and 4 ODs in Prey Veng province





RESEARCH ARTICLE

Open Access

Development and pilot testing of HIV screening program integration within public/primary health centers providing antenatal care services in Maharashtra, India

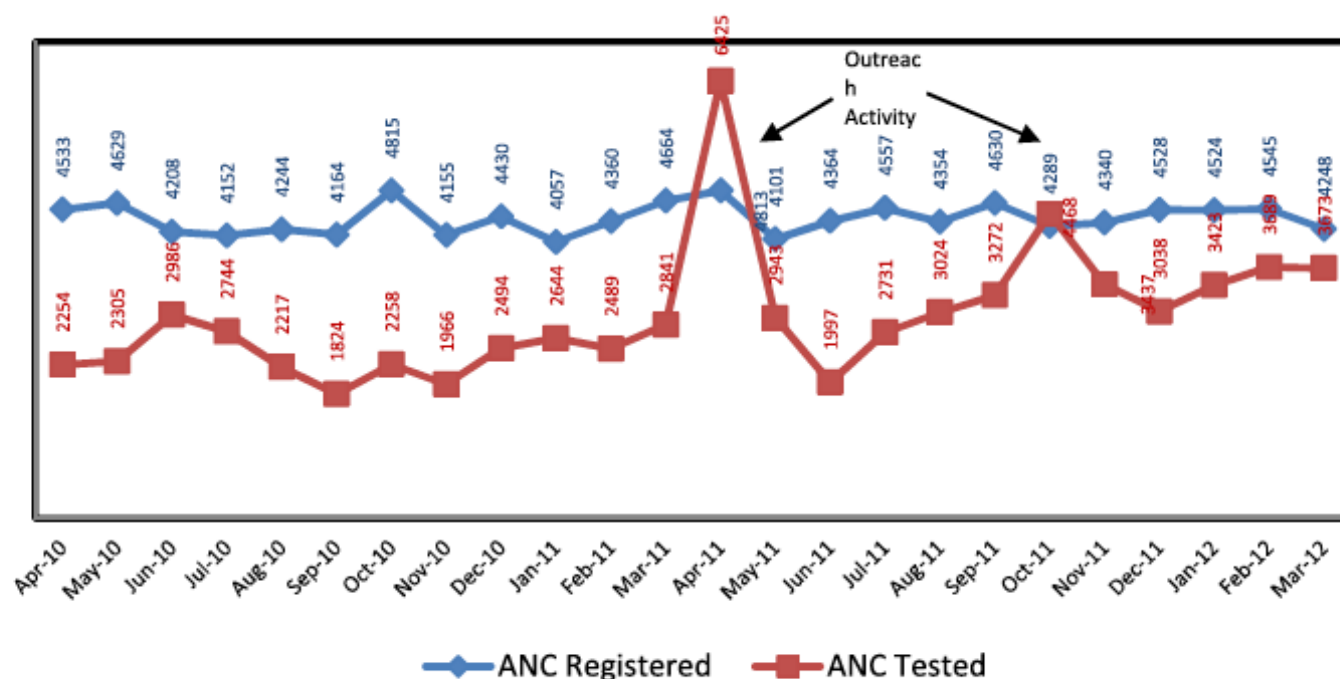


Figure 2 Decreasing gap between ANC registration and HIV screening among antenatal care attendees, Satara district.

Integration of family planning into HIV services: a synthesis of recent evidence

Rose Wilcher, Theresa Hoke, Susan E. Adamchak and Willard Cates Jr

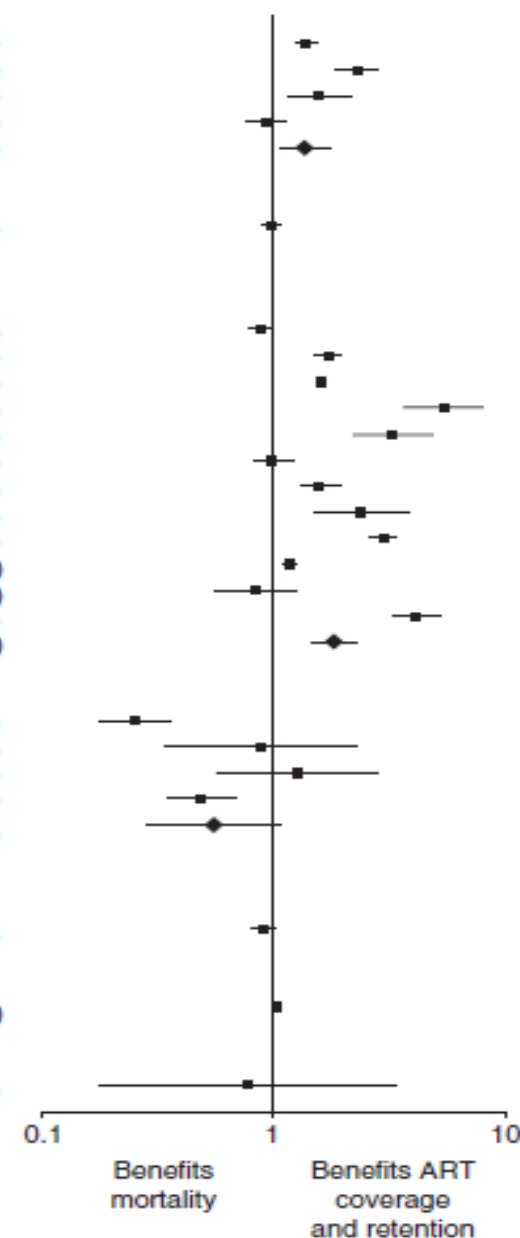
« Although overall study rigor was low, the studies showed that family planning/HIV service integration is effective in increasing contraceptive uptake among clients with HIV who do not wish to become pregnant. »

Improving antiretroviral therapy scale-up and effectiveness through service integration and decentralization

Amitabh B. Suthar^a, George W. Rutherford^b, Tara Horvath^b,
Meg C. Doherty^a and Eyerusalem K. Negussie^a

Methods: The reviewers searched PubMed, Embase, PsycINFO, Web of Science, CENTRAL, and the WHO Index Medicus databases. Randomized controlled trials and observational cohort studies were included if they compared ART coverage, retention in HIV care, and/or mortality in MNCH, TB, or OST facilities providing ART with MNCH, TB, or OST facilities providing ART services separately; or primary health facilities or communities providing ART with hospitals providing ART.

	±	<u>Integrated</u>		±	<u>Separated</u>		<u>Relative risk</u> <u>(95% CI)</u>
		<u>Total</u>	<u>Percent</u>		<u>Total</u>	<u>Percent</u>	
MNCH							
<u>ART coverage</u>							
Christie (Jamaica)	156	160	97.5%	135	191	70.7%	1.38 (1.29–1.47)
Killam (Zambia)	278	846	32.9%	103	716	14.4%	2.28 (1.87–2.80)
Pfeiffer (Mozambique)	-	-	-	-	-	-	1.58 (1.17–2.14)
Tsague (Rwanda)	105	135	77.8%	22	26	84.6%	0.92 (0.76–1.11)
Overall ($I^2 = 83\%$)							1.37 (1.05–1.79)
<u>Retention in HIV care</u>							
Killam (Zambia)	244	278	87.8%	94	103	91.3%	0.96 (0.89–1.04)
TB							
<u>ART coverage</u>							
Bygrave (Lesotho)	174	225	77.3%	131	151	86.8%	0.89 (0.81–0.98)
Chifundo (Malawi)	257	338	76.0%	201	456	44.1%	1.73 (1.53–1.94)
Howard (Kenya)	19233	40069	48.0%	12426	41174	30.2%	1.59 (1.56–1.62)
Huerga (Kenya)	150	325	46.2%	26	304	8.6%	5.40 (3.67–7.94)
Ikeda (Guatemala)	115	156	73.7%	21	93	22.6%	3.26 (2.22–4.81)
Kerschberger (R.S.A.)	64	88	72.7%	74	100	74.0%	0.98 (0.83–1.17)
Louwagie (R.S.A.)	74	105	70.5%	104	233	44.6%	1.58 (1.31–1.91)
Morse (Zambia)	53	204	26.0%	22	203	10.8%	2.40 (1.52–3.79)
Pevzner (Rwanda)	1036	2673	38.8%	296	2276	13.0%	2.98 (2.65–3.35)
Phiri (Malawi)	775	1138	68.1%	758	1289	58.8%	1.16 (1.09–1.23)
Schwartz (Botswana)	17	42	40.5%	70	143	49.0%	0.83 (0.56–1.24)
Van Rie (D.R.C)	354	513	69.0%	62	373	16.6%	4.15 (3.28–5.25)
Overall ($I^2 = 98\%$)							1.83 (1.48–2.25)
<u>Mortality</u>							
Ikeda (Guatemala)	29	156	18.6%	68	93	73.1%	0.25 (0.18–0.36)
Kerschberger (R.S.A.)	7	88	8.0%	9	100	9.0%	0.88 (0.34–2.27)
Schwartz (Botswana)	8	79	10.1%	20	250	8.0%	1.27 (0.58–2.76)
Van Rie (D.R.C)	52	513	10.1%	78	373	20.9%	0.48 (0.35–0.67)
Overall ($I^2 = 84\%$)							0.55 (0.29–1.05)
OST							
<u>ART coverage</u>							
Zaller (U.S.A.)	89	116	76.7%	745	869	85.7%	0.90 (0.81–0.99)
<u>Retention in HIV care</u>							
Achmad (Indonesia)	35	35	100.0%	170	175	97.1%	1.03 (1.00–1.06)
<u>Mortality</u>							
Achmad (Indonesia)	2	35	5.7%	13	175	7.4%	0.77 (0.18–3.26)

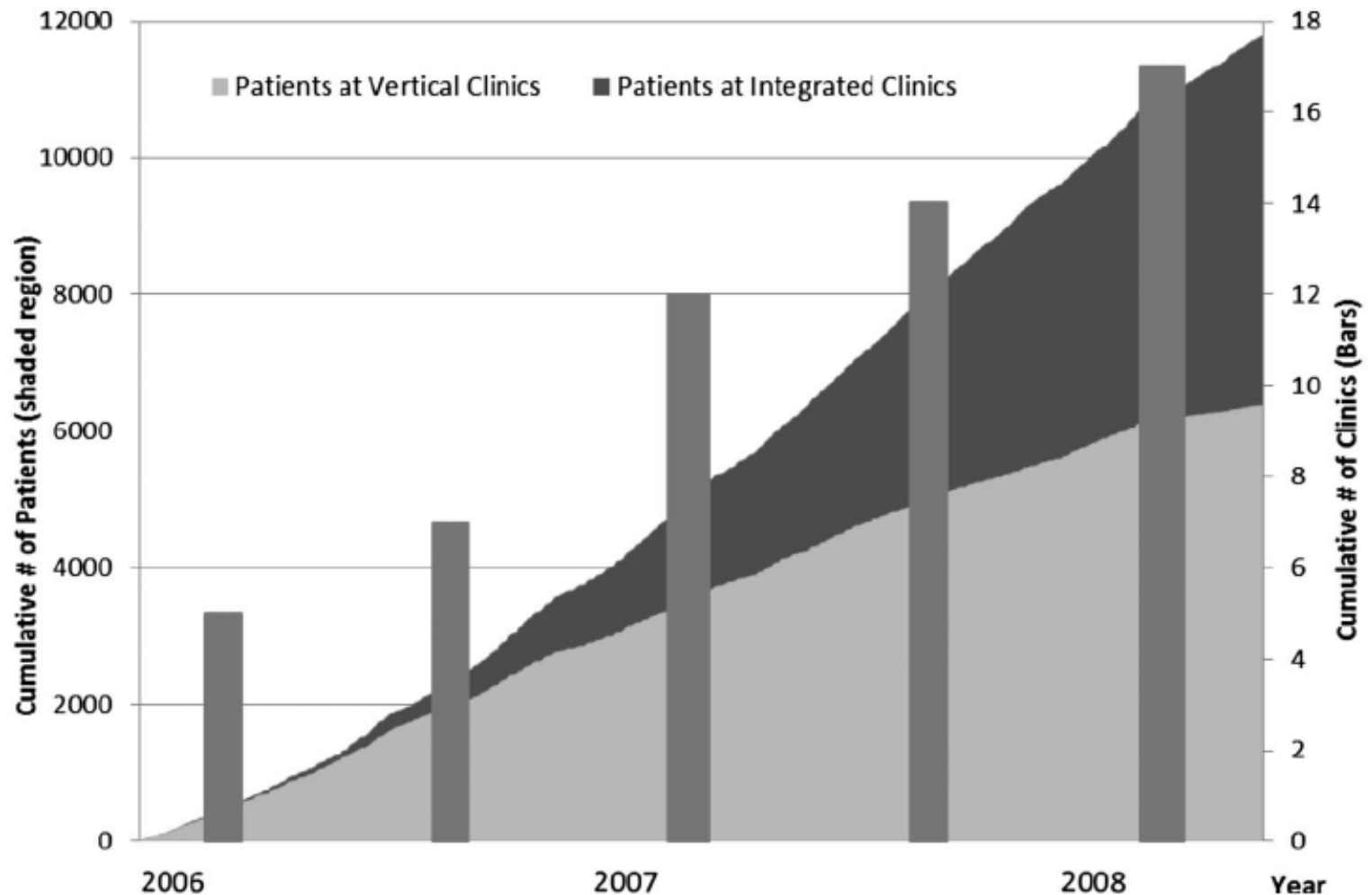


Integration of HIV Care and Treatment in Primary Health Care Centers and Patient Retention in Central Mozambique: A Retrospective Cohort Study

Methods: We conducted a retrospective cohort study including adult ART-naïve patients initiating ART between January 2006 and June 2008 in public sector clinics in Manica and Sofala provinces.

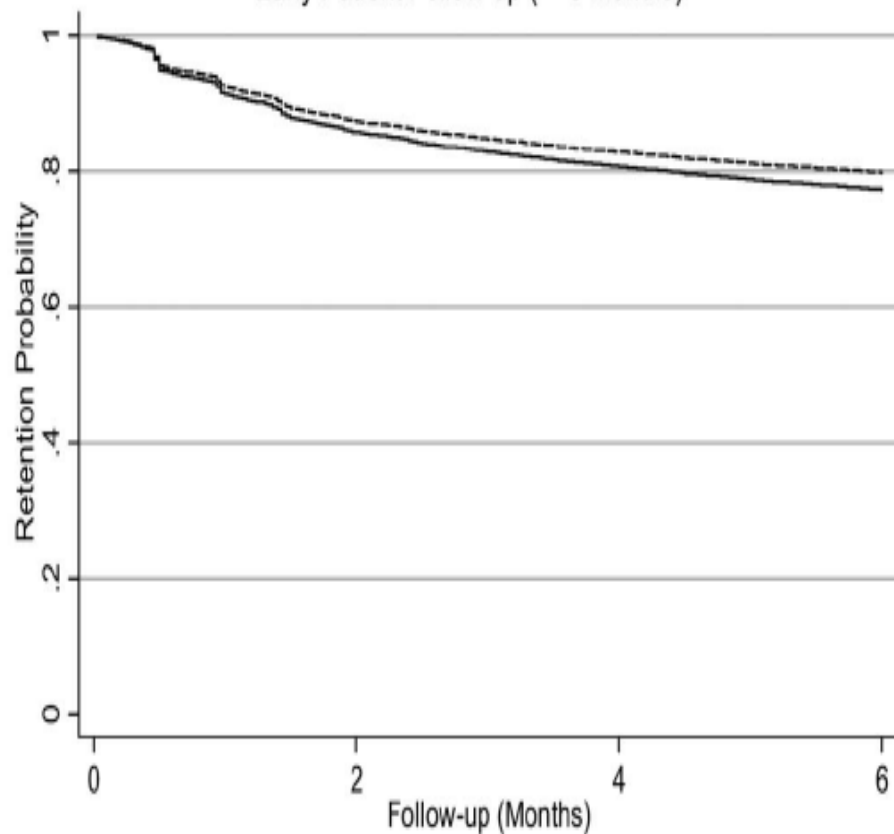
Cox proportional hazards models with robust variances were used to estimate the **association between clinic model** (vertical/integrated), clinic location (urban/rural), and clinic experience (first 6 months/post first 6 months) **and attrition** occurring in early patient follow-up (<6 months) and attrition occurring in late patient follow-up (>6 months), while controlling for age, sex, education, pre-ART CD4 count, World Health Organization stage and pharmacy staff burden.

Integration of HIV Care and Treatment in Primary Health Care Centers and Patient Retention in Central Mozambique



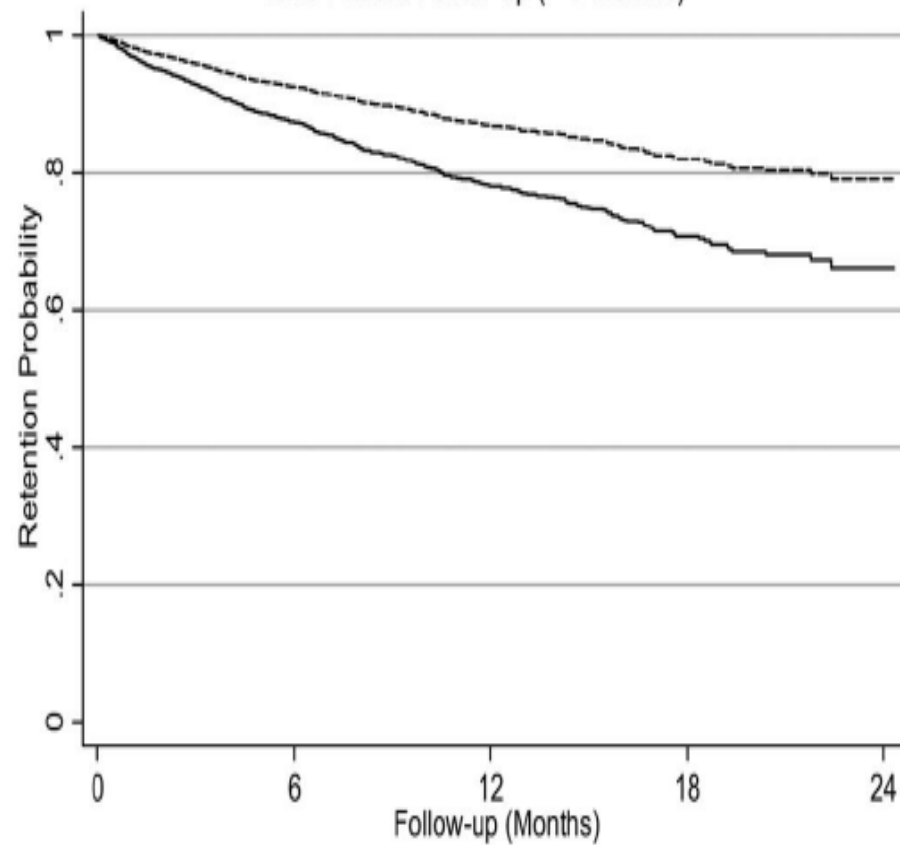
Integration of HIV Care and Treatment in Primary Health Care Centers and Patient Retention in Central Mozambique

Early Patient Follow-up (≤ 6 Months)



A

Late Patient Follow-up (> 6 Months)



B

Evidence about HIV-NCD integration in the literature

1. Cervical Cancer screening in to HIV services (Snedden, Huchko, Cohen, & Yamey)
2. Gestational Diabetes screening in to HIV treatment/PMTCT (Gonzalez-Tome et al., 2008)
3. HIV/AIDS, Diabetes, and Hypertension services in to a chronic disease clinic (Janssens et al., 2007)
4. Leveraging HIV programs to support diabetes services (Rabkin et al., 2012)
5. Integrating smoking cessation in to HIV care (Drach et al.)
6. Integrating HIV/AIDS and Alcohol (Bryant, Nelson, Braithwaite, & Raoch, 2010)

Health systems implications of the 2013 WHO consolidated antiretroviral guidelines and strategies for successful implementation

Charles Holmes^a, Yogan Pillay^b, Albert Mwangi^c, Jos Perriens^d, Andrew Balld, Oscar Barrenechee, Steven Wignall^f, Gottfried Hirnschalld and Meg C. Doherty^d

« Systems of care that may already be stressed need to be further augmented through innovations, and in many cases provided with additional resources in order to become more efficient, resilient, robust and effective. »

- ➔ Easy to say, hard to do it !
- ➔ Particularly in fragile states.

Agenda

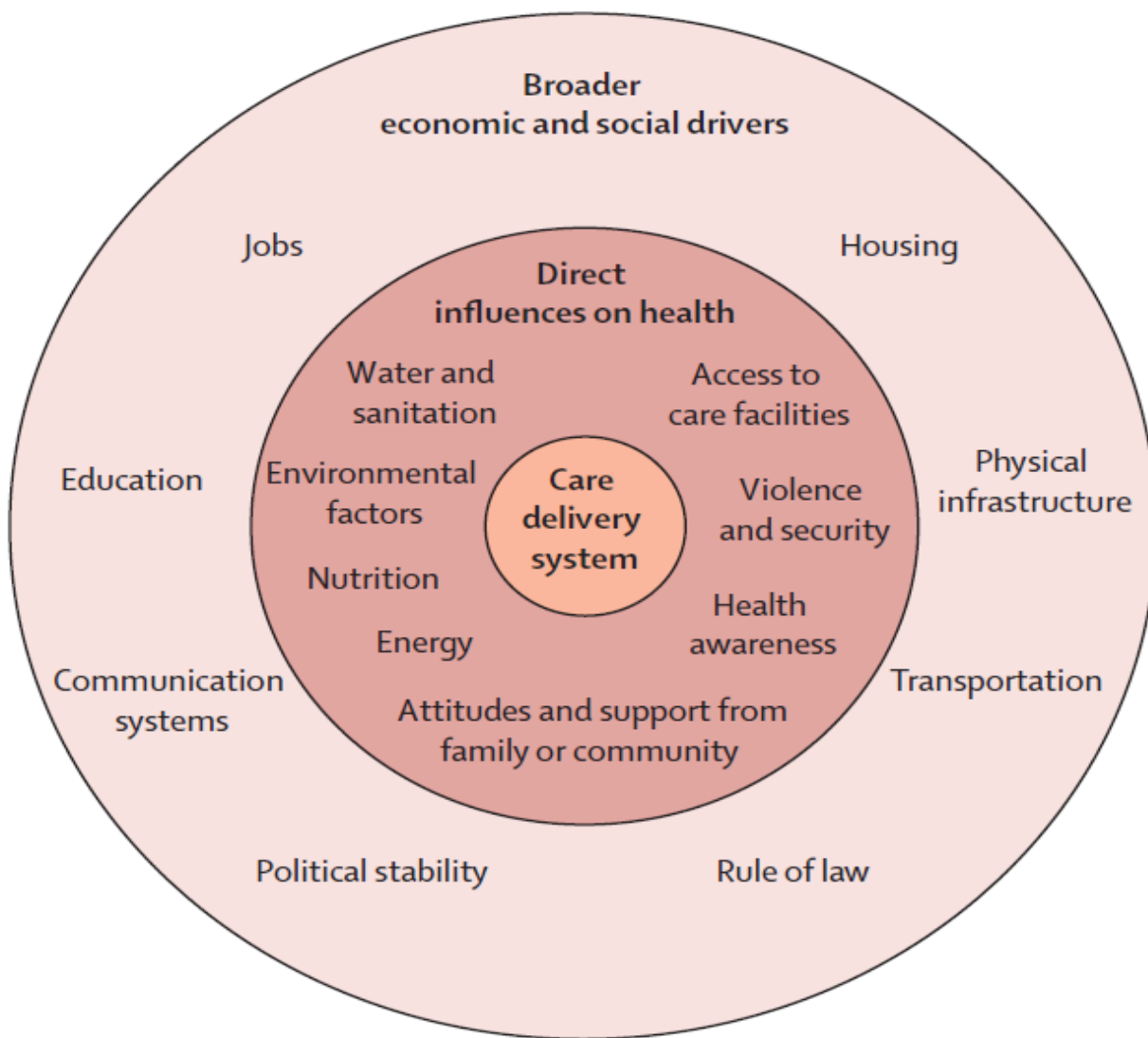
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Redefining global health-care delivery

Lancet 2013; 382: 1060-69

Jim Yong Kim, Paul Farmer, Michael E Porter

Integrating delivery and context



**Integrating
delivery system
and external
context:
Each situation
is unique**

An assessment of interactions between global health initiatives and country health systems

World Health Organization Maximizing Positive Synergies Collaborative Group*

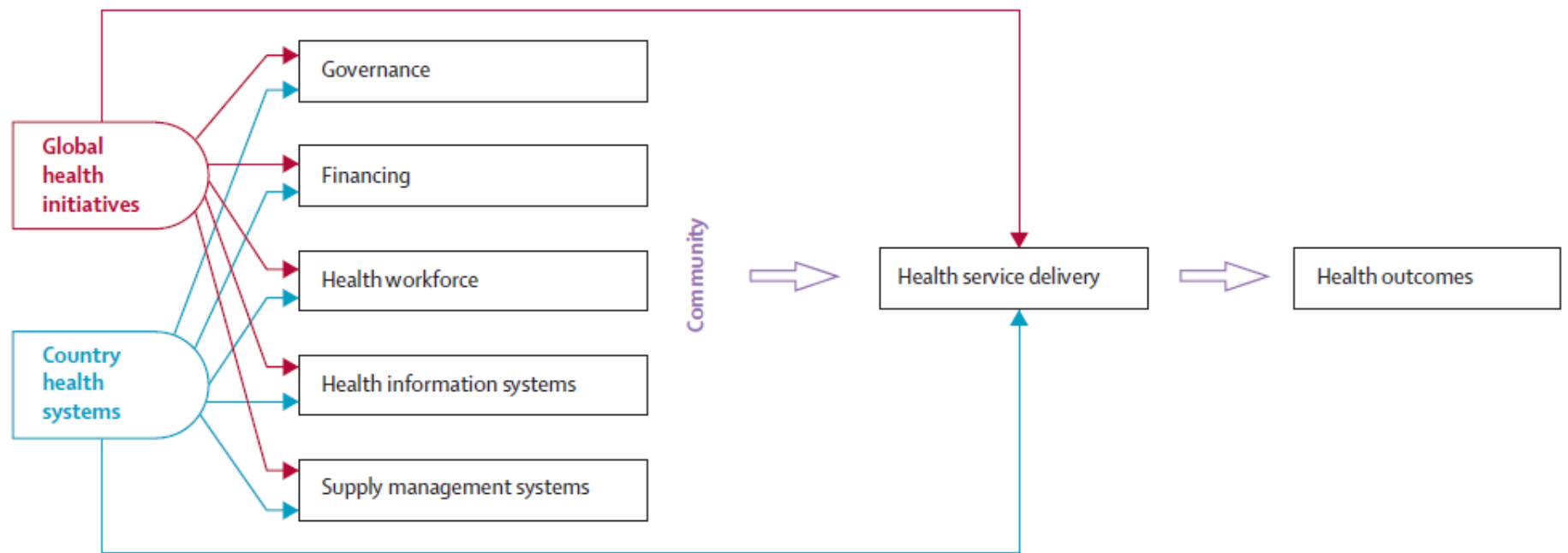
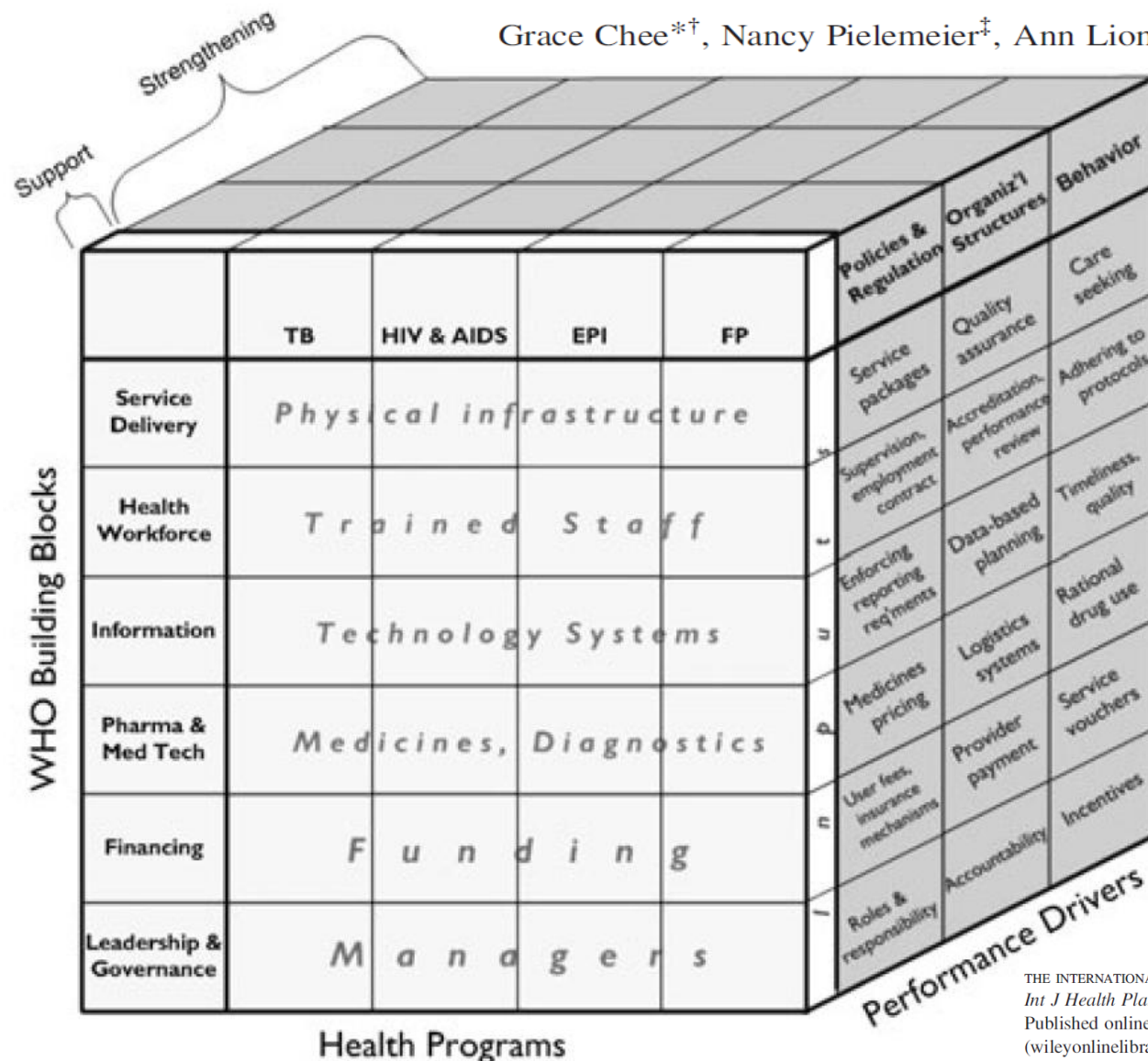


Figure 1: Conceptual framework of the interaction between global health initiatives and country health systems

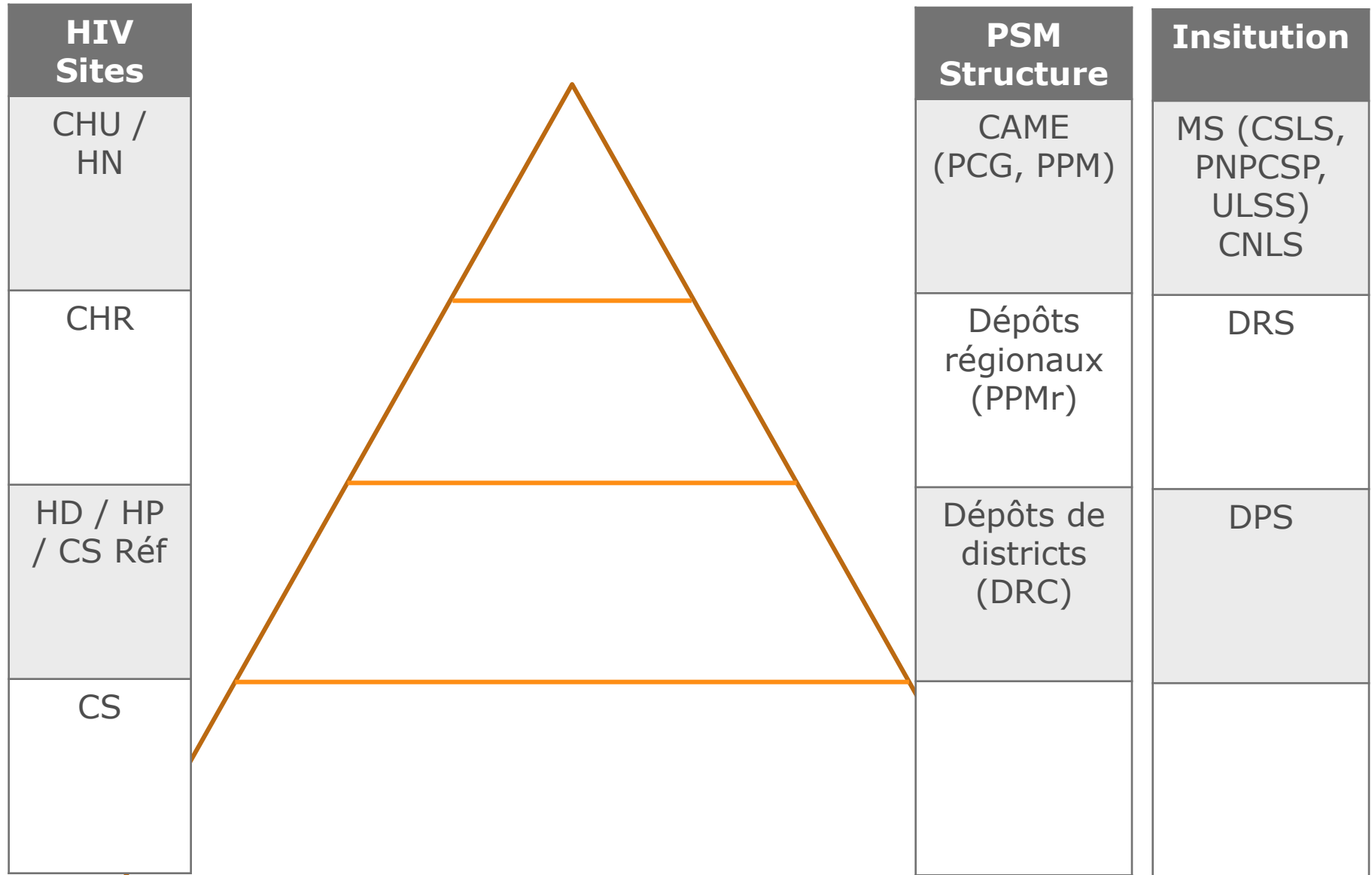
Lancet 2009; 373: 2137–69

Why differentiating between health system support and health system strengthening is needed

Grace Chee^{*†}, Nancy Pielemeier[‡], Ann Lion[§] and Catherine Connor[¶]

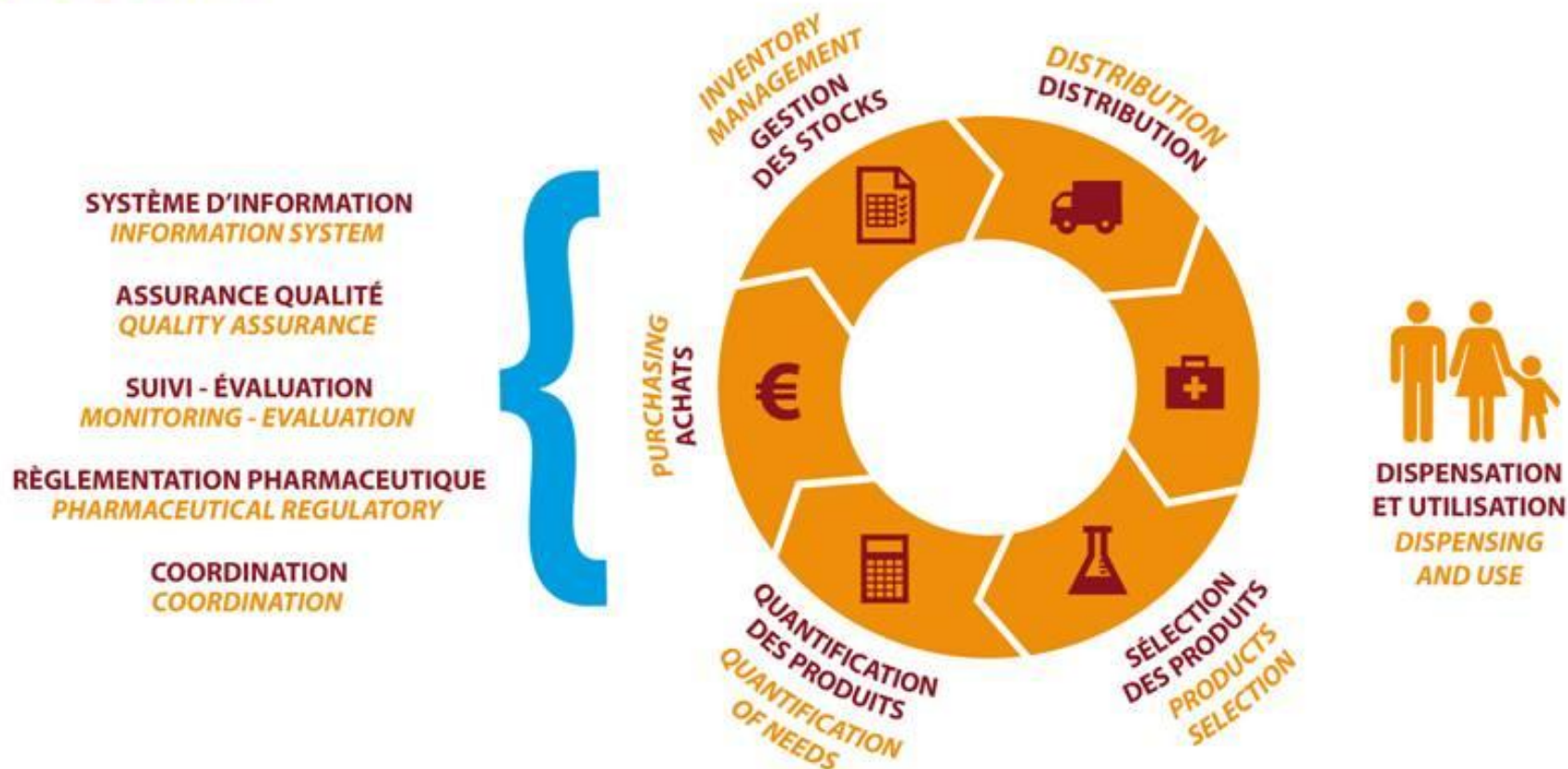


Health Pyramide



LE CIRCUIT D'APPROVISIONNEMENT

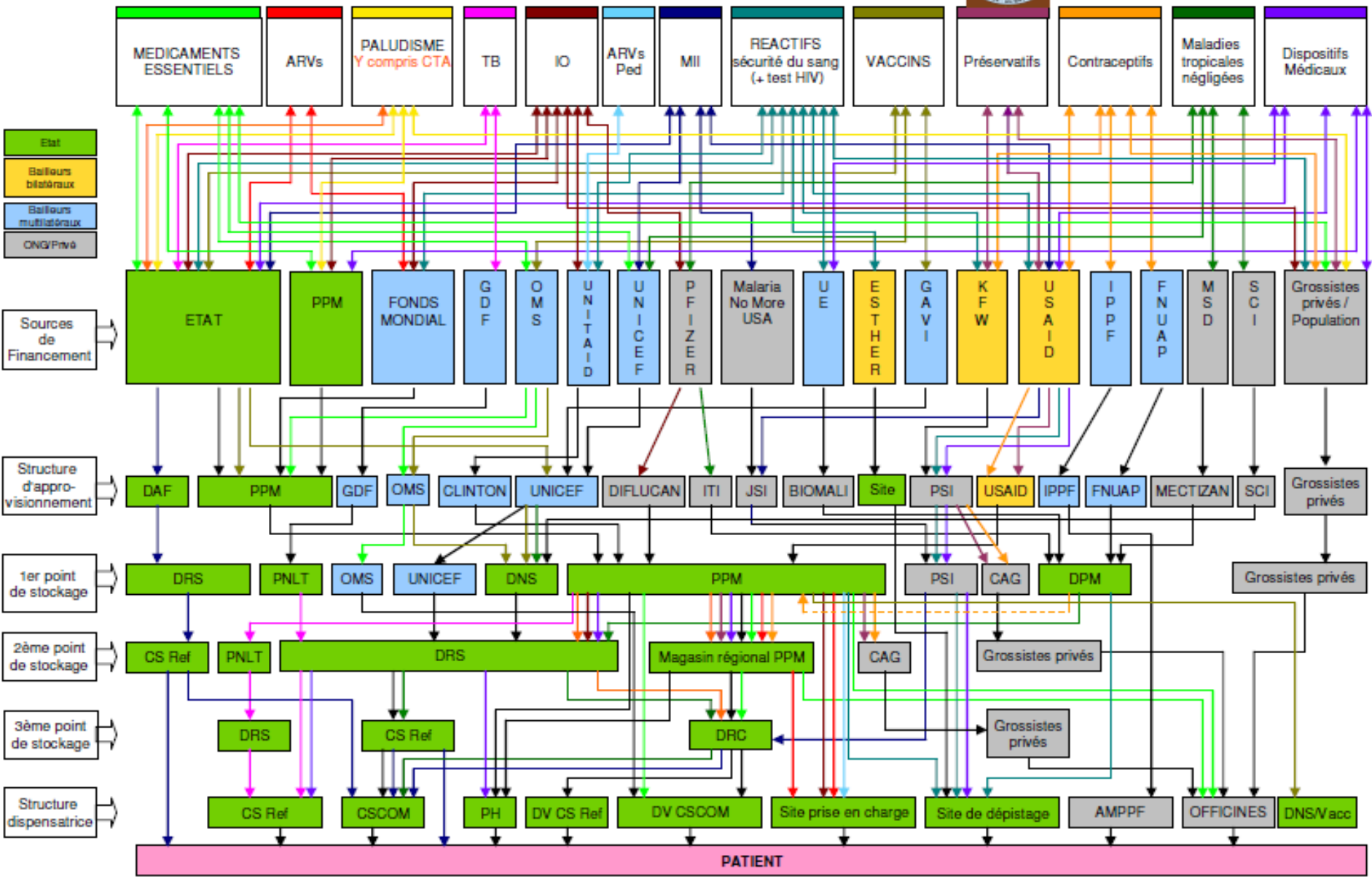
THE SUPPLY CHAIN



Systèmes d'approvisionnement des produits pharmaceutiques au MALI. Janvier 2008



République du Mali
Ministère de la santé



From WHO

Building a Durable Response to HIV/AIDS: Implications for Health Systems

Rifat Atun, MBBS, MBA, FRCGP, FFPH, FRCP† and Jacqueline Bataringaya, MD**

(J Acquir Immune Defic Syndr 2011;57:S91–S95)

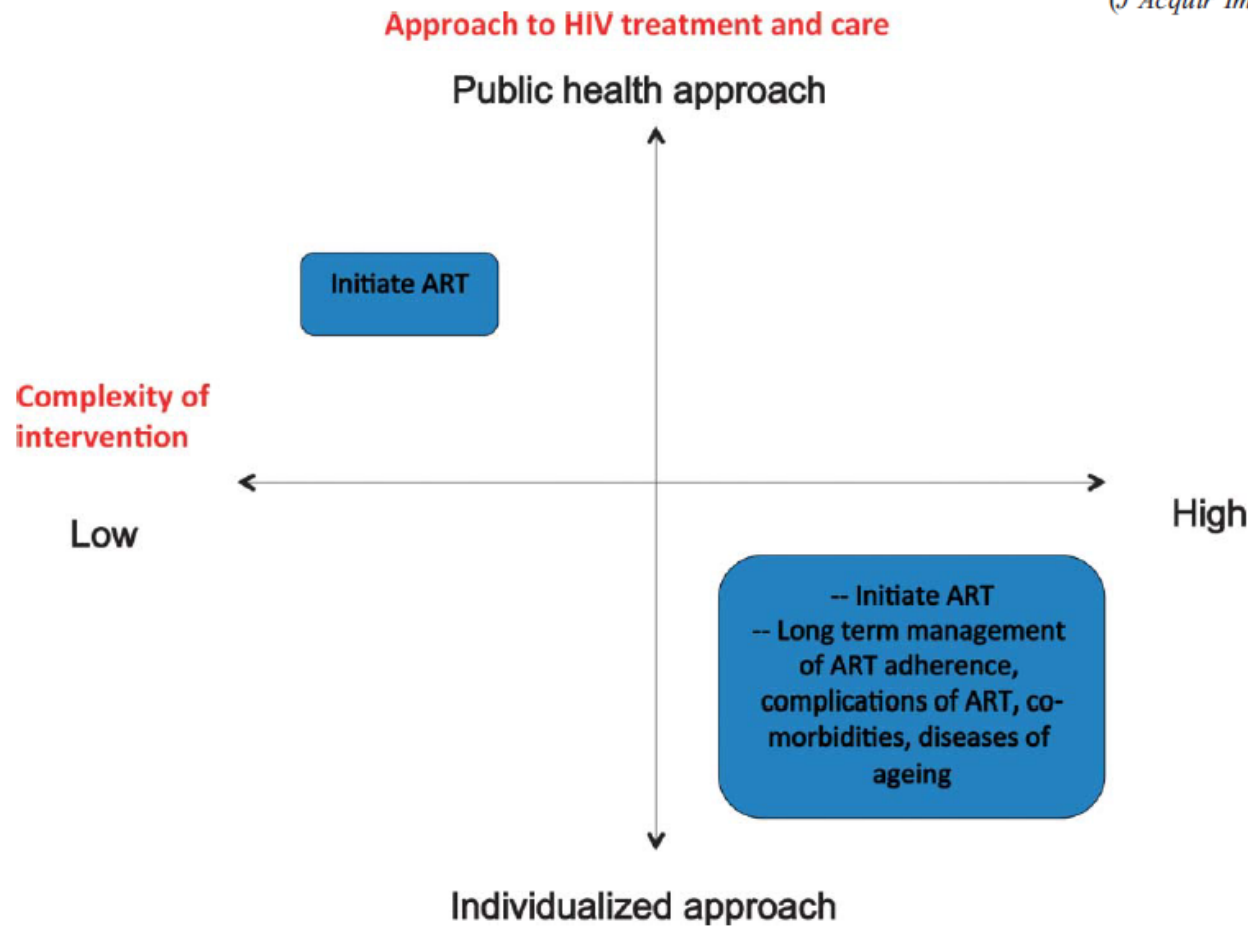


FIGURE 2. Transitioning from a public health approach to managing HIV infection to complex individualized care.

Integrating HIV and Maternal Health Services: Will Organizational Culture Clash Sow the Seeds of a New and Improved Implementation Practice?

Lynn P. Freedman, JD, MPH

In many countries with high maternal mortality rates:

- health care worker absenteeism (20–40%);
- leakage of funds and stockouts of drugs;
- a huge “know–do” gap persists, despite in-service training;
- rampant mistreatment of patients is but the tip of the iceberg of dismal quality care.
- organizational forms (best practices) adopted and adapted from elsewhere become a strategy to camouflage deeper dysfunction.

The culture of the health services for treating HIV was far more open to innovation.

→ The push for integration in the face of stagnating resources and increasing demand may now force the HIV community to confront the deeper challenges of implementation that have been so disastrously ignored in maternal health.

RESEARCH ARTICLE

Open Access

Experiences of health care providers with integrated HIV and reproductive health services in Kenya: a qualitative study

Methods: Semi-structured in-depth interviews were conducted with 32 frontline clinical officers, registered nurses, and enrolled nurses in Kitui district (Eastern province) and Thika and Nyeri districts (Central province) in Kenya.

Results:

At personal level, providers valued skills enhancement, more variety and challenge in their work, better job satisfaction through increased client-satisfaction.

However, they also felt that their salaries were poor, they faced increased occupational stress from: increased workload, treating very sick/poor clients, and less quality time with clients.

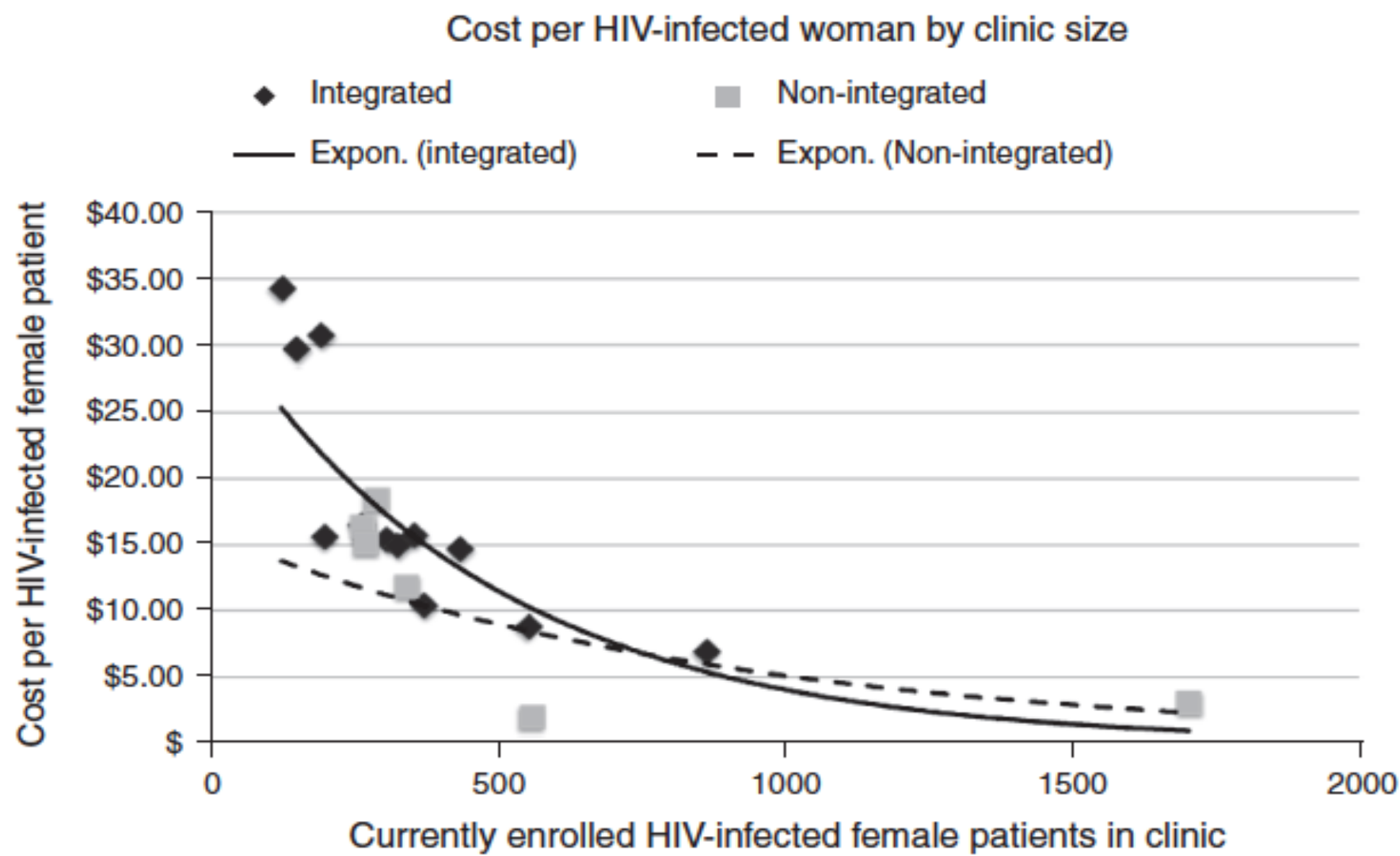
Cost, cost-efficiency and cost-effectiveness of integrated family planning and HIV services

Starley B. Shade

Setting: Twelve health facilities in Nyanza, Kenya were randomized to integrate family planning into HIV care and treatment; six health facilities were randomized to (nonintegrated) standard-of-care with separately delivered family planning and HIV services.

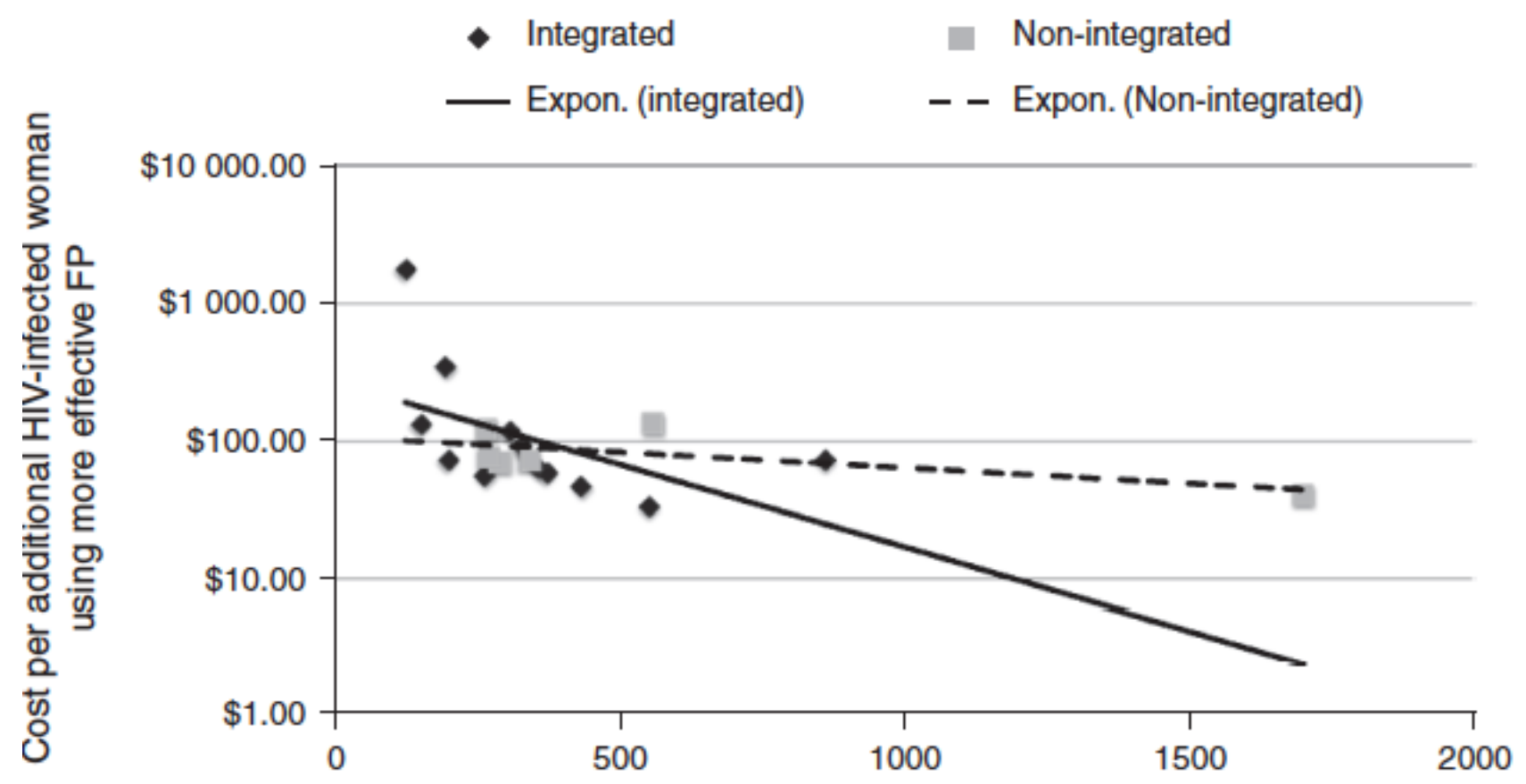
Main outcome measures: We assessed costs, cost-efficiency (cost per additional use of more effective family planning), and cost-effectiveness (cost per pregnancy averted) associated with the first year of integration of family planning into HIV care. More effective family planning methods included oral and injectable contraceptives, subdermal implants, intrauterine device, and female and male sterilization.

Cost, cost-efficiency and cost-effectiveness of integrated family planning and HIV services



Cost, cost-efficiency and cost-effectiveness of integrated family planning and HIV services

Cost per additional HIV-infected woman
Using more-effective FP by clinic size



Integration and efficiency gains

S.Sweeney (2012)

1. HIV and TB - SRH services : Address co-infections ; similar health services levels and may affect the same persons.
2. Low marginal cost of integrated services : Clinic space exists and staff have much of the knowledge and skills
3. HIV services may be valued by clients seeking general services and PLWHIV may have other unmet health needs.
4. Low correlation in existing demand : clients seeking other health services may not seek HIV-related services independently.

Integration and efficiency gains

S.Sweeney (2012)

1. A number of integrated HIV services have been shown to be cost-effective.
2. Little is known about the comparative efficiency of differing integration models.
3. Evidence gaps remain on economic impact of integration for HIV care and services for populations at higher risk of HIV exposure.
4. Further research is necessary to identify efficiency gains from integration beyond the service level and economic gains to HIV users.

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Health System Strengthening

Solthis provides capacity building for healthcare systems in order to facilitate high quality, accessible and sustainable treatment for people living with HIV/AIDS in developing countries

High quality:

Decrease the mortality and number of patient' lost-to- follow-up

Accessible:

Decentralization into isolated areas, increase patients under treatment and receiving free of charge care

Sustainable:

Work on local and professional capacity building

Intervention strategy

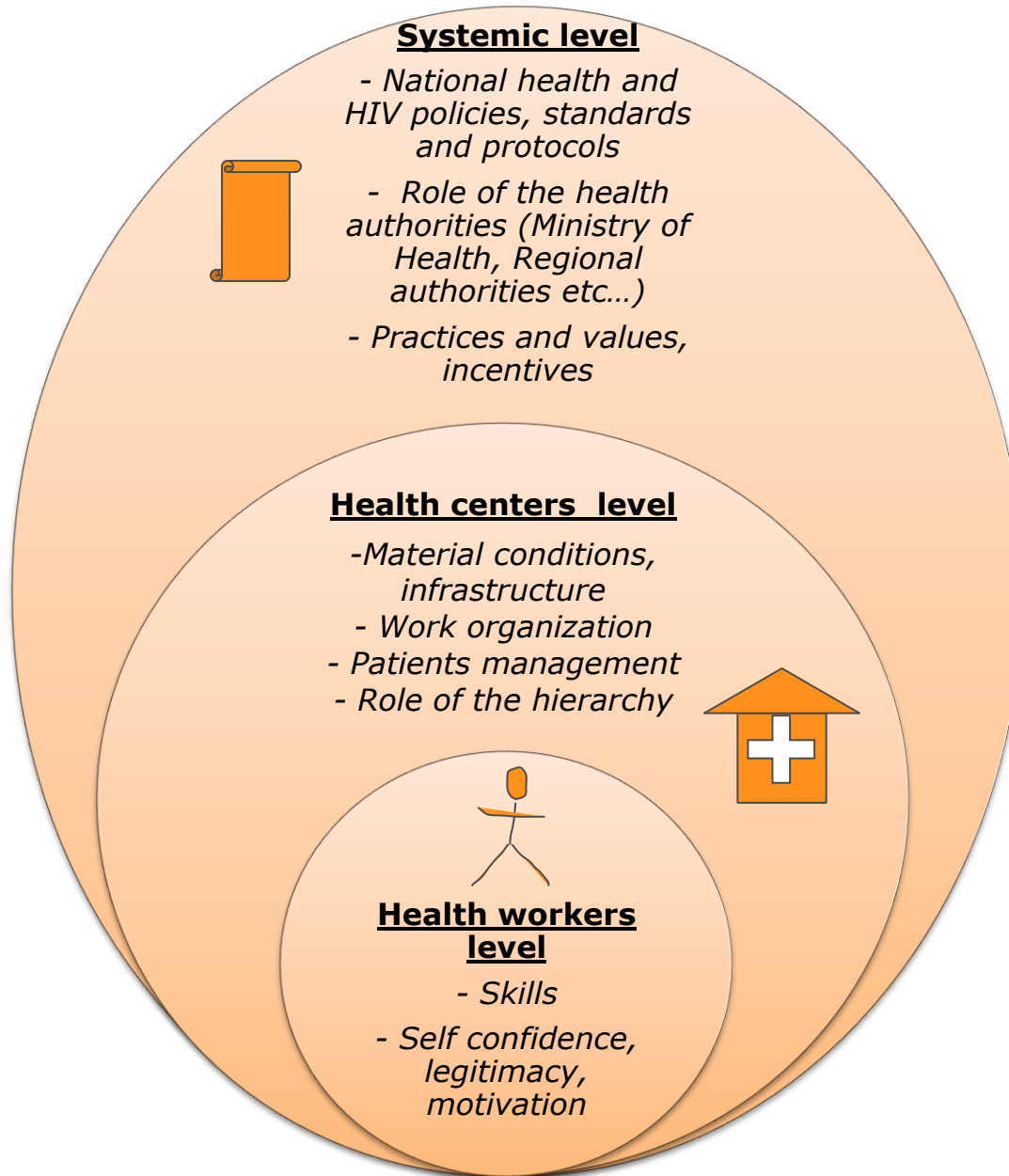
5 priority functions in healthcare systems



Advice, train, mentor

- **Healthcare providers** (medical and paramedical)
- **Laboratories and other technical platforms**
- **Pharmacies** (procurement, supply chain management, dispensation)
- **Health information systems** (management of health data)
- **Coordination bodies**

A Systemic approach



Expertise to improve policies, standards and protocols

Support for the patient management reorganization, tasks distribution

Needs evaluation, material and furniture set up, rehabilitations, equipment supply

Training
Technical support in daily practice



Integrating HIV data in the national health system



INITIATIVE 5%
SIDA, TUBERCULOSE, PALUDISME

Depuis fin 2011, l'Initiative 5%, deuxième modalité de la contribution de la France au Fonds mondial de lutte contre le sida, la tuberculose et le paludisme, appuie les pays, notamment francophones, dans la conception, la mise en œuvre et le suivi-évaluation des subventions allouées par le Fonds mondial.

Dotée d'une enveloppe annuelle de 18 millions d'euros, l'Initiative 5% est mise en œuvre par France Expertise Internationale et pilotée par le Ministère des Affaires étrangères.

<http://www.initiative5pour100.fr>



Avec un cofinancement de la Fondation Bettencourt Schueller

Mise en œuvre

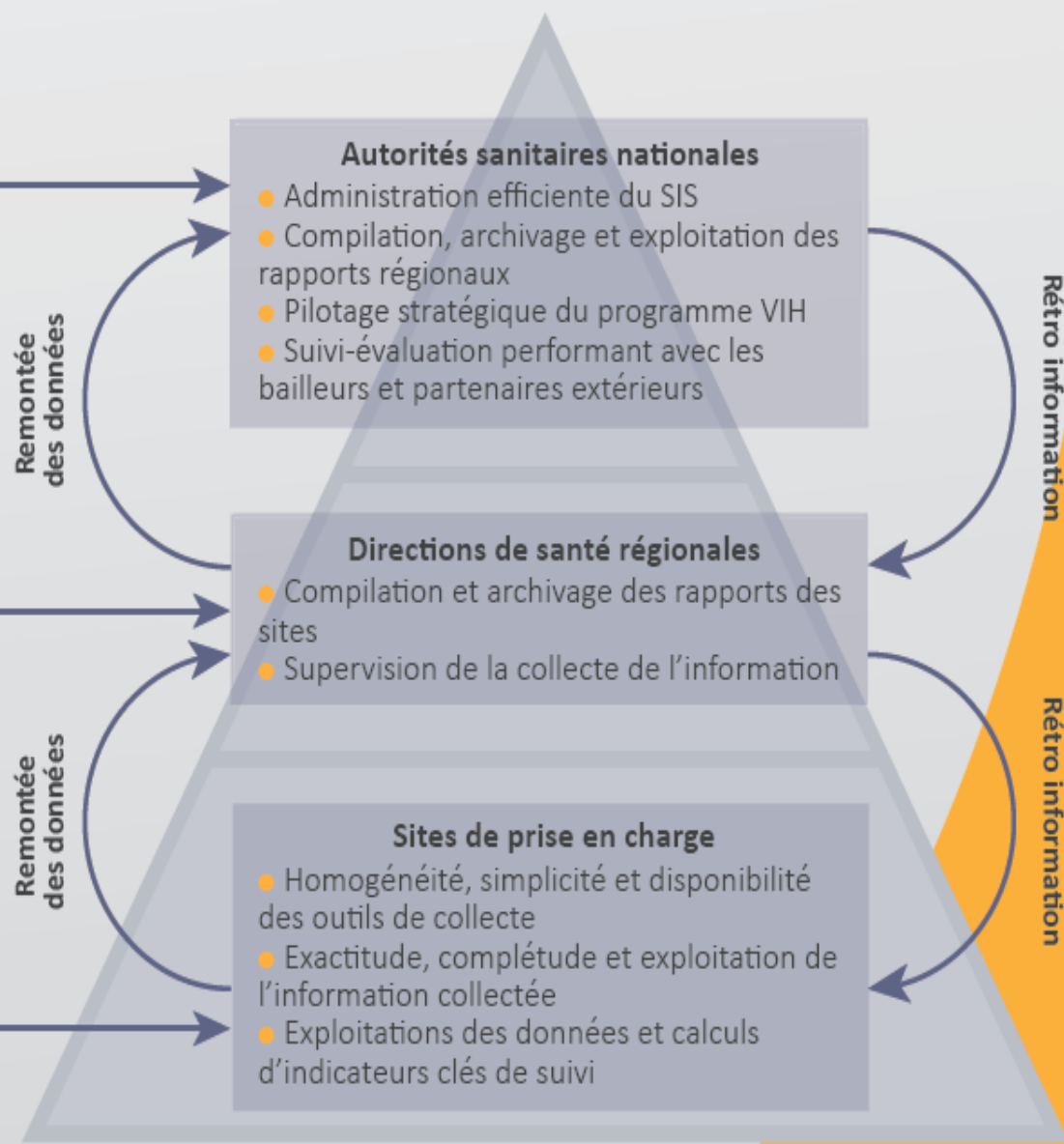
Action de CASSIS à chaque niveau de la pyramide sanitaire

- › Développement de méthodes et outils pour l'analyse et l'exploitation de l'information et pour la gestion du SIS
- › Appui à l'intégration du SIS VIH dans le Système National d'Information Sanitaire

- › Renforcement des capacités pour la supervision du SIS: formations, manuels de procédures, supervisions conjointes
- › Développement des méthodes et outils pour l'exploitation de l'information

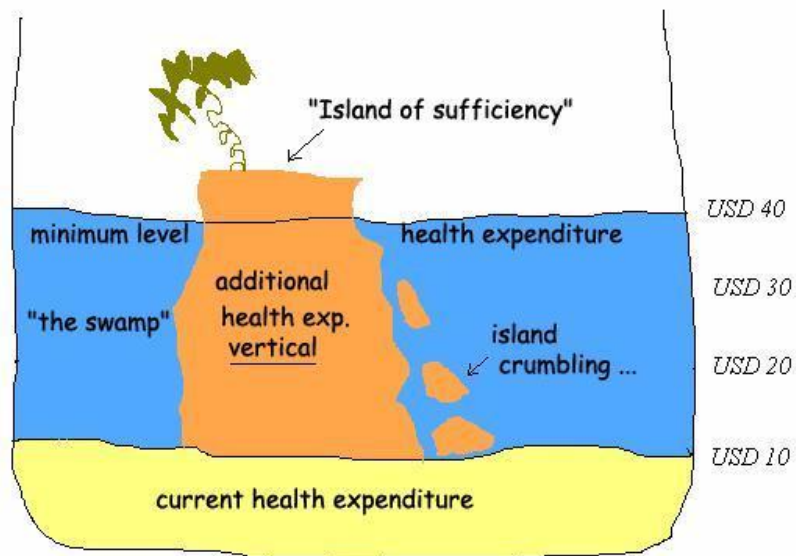
- › Consolidation du circuit et des outils de collecte de l'information: formations et accompagnement, mise en place d'outils informatiques et papiers
- › Renforcement des capacités d'analyse de l'information : formations, ateliers d'échange

Résultats attendus à chaque niveau de la pyramide sanitaire

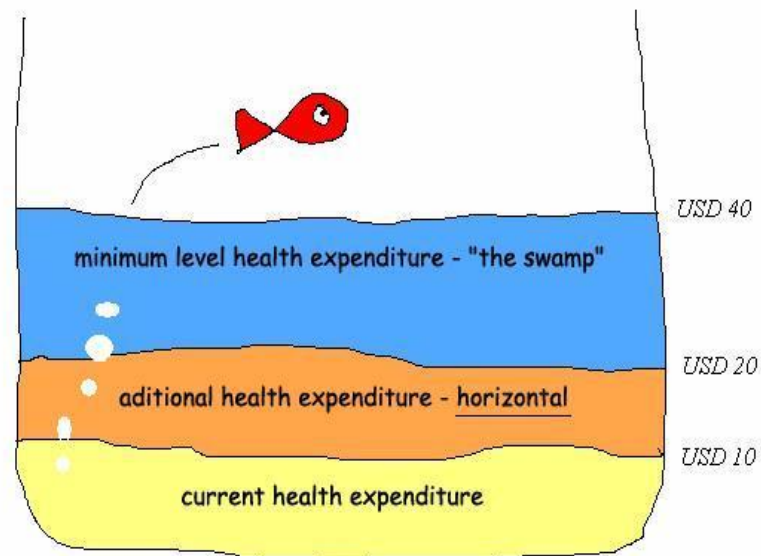


To conclude...

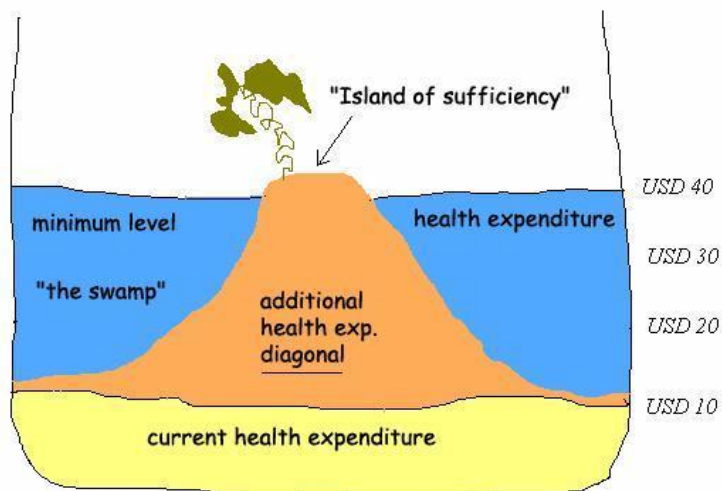
The "vertical approach"



The "horizontal approach"



The "diagonal approach"



The Value of Science in Integration of Services

The Journal of Infectious Diseases 2012;205:S1–3

Anne Schuchat¹ and Kevin M. De Cock²

¹National Center for Immunization and Respiratory Diseases and ²Center for Global Health, Centers for Disease Control and Prevention, Atlanta, Georgia

Critics who insist that immunization programs are too vertical must accept that health systems are only strengthened when a specific program, be it for HIV, tuberculosis, or any other important challenge, scales up and tackles the then-apparent need for integrating services.

Theoretical discussion of health systems strengthening has yielded few tangible results, and the moral authority lies with those who act.