

Evaluation Research on Results-Based Financing

An Annotated Bibliography of Health
Science Literature on RBF Indicators
for Reproductive, Maternal,
Newborn, Child, and Adolescent
Health

Leslie Craig, MPH, MEASURE Evaluation, Tulane University

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MEASURE Evaluation

University of North Carolina at Chapel Hill
400 Meadowmont Village Circle, 3rd Floor
Chapel Hill, NC 27517 USA
Phone: +1 919-445-9350

measure@unc.edu

www.measureevaluation.org

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INTRODUCTION

This annotated bibliography offers a critical review of peer-reviewed and gray literature, published between 2002 and 2016, and relevant to indicators for the monitoring and evaluation of results-based financing (RBF) initiatives for reproductive, maternal, neonatal, child, and adolescent health (RMNCAH). Unlike a systematic review, this annotated bibliography does not aim to be a comprehensive assessment of the research on RBF for health. Rather, it seeks to describe the conceptual contribution and practical experiences of experts in using indicators to assess performance and quality throughout RMNCAH-focused RBF schemes.

The review includes peer-reviewed articles, toolkits, technical briefs, case studies, and evaluation reports. Microsoft PowerPoint presentations, posters, and books are not included. Articles were identified via key informant interviews, online database searches, and website reviews. For Google Scholar and the PubMed databases, search terms were indicators, results based financing, performance based financing, performance based funding, quality, reproductive, maternal, neonatal, child, and adolescent health. Gray literature was identified through searches of the following regional, multilateral, and donor websites: RBFHealth, World Bank, World Health Organization, BlueSquare, United States Agency for International Development (USAID), USAID TRAction Project, Salud Mesoamerica Initiative, Pan American Health Organization, the United Nations Children’s Fund, and the USAID-funded MEASURE Evaluation. Review of the listed references of pertinent articles yielded additional resources.

PEER-REVIEWED LITERATURE

1. Adam, C. S., & Gunning, J. W. (2002). Redesigning the aid contract: Donors' use of performance indicators in Uganda. *World Development*, 30(12), 2045–2056. Retrieved from <http://www.sciencedirect.com/science/article/pii/S0305750X02001237>

Summary

The perceived failure of traditional (*ex ante*) conditionality has led to proposals for using performance indicators as a basis for aid allocations (*ex post* conditionality). In this article, the authors assess the role of performance indicators and their impact on the aid contract between donors and the government of Uganda. In Uganda the use of performance indicators has radically changed donor–recipient relations, by improving both program monitoring and donor coordination. It has, however, not yet fundamentally changed the incentive structure in the aid “contract.” To improve the incentive structure, the authors propose a distinction between indicators used for monitoring and those designed to guide aid allocations.

2. Adam, C., Chambas, G., Guillaumont, P., Jeanneney, S. G., & Gunning, J. W. (2004). Performance-based conditionality: A European perspective. *World Development*, 32(6), 1059–1070. Retrieved from <http://www.sciencedirect.com/science/article/pii/S0305750X04000397>

Summary

The critique of conditionality has led to the recent emphasis on “ownership” by the recipient government. To promote ownership it has been suggested that traditional *ex ante* conditionality based on (promises) of policy changes be replaced by *ex post* conditionality in which aid is based on performance in terms of ultimate objectives. In this spirit, the European Commission has reformed its adjustment aid. This article reviews early experience with the European Union initiative in four countries: Benin, Burkina Faso, Madagascar and Uganda. The authors find a shift toward intermediate indicators, which are too distant from the final impact of the policies.

3. Basinga, P., Gertler, P. J., Binagwaho, A., Soucat, A. L., Sturdy, J., & Vermeersch, C. M. (2011). Effect on maternal and child health services in Rwanda of payment to primary health-care providers for performance: An impact evaluation. *The Lancet*, 377(9775), 1421–1428. Retrieved from [http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(11\)60177-3/abstract](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(11)60177-3/abstract)

Summary

Evidence about the best methods with which to accelerate progress towards achieving the Millennium Development Goals is urgently needed. The authors assessed the effect of performance-based payment of health-care providers (payment for performance; P4P) on use and quality of child and maternal care services in health-care facilities in Rwanda. 166 facilities were randomly assigned at the district level either to begin P4P funding between June, 2006, and October, 2006 (intervention group; n=80), or to continue with the traditional input-based funding until 23 months after study baseline (control group; n=86). Randomization was done by coin toss. Facilities and 2158 households were surveyed at baseline and after 23 months. The main outcome measures were prenatal care visits and institutional deliveries, quality of prenatal care, and child preventive care

visits and immunization. The incentive effect was isolated from the resource effect by increasing comparison facilities' input-based budgets by the average P4P payments made to the treatment facilities. A multivariate regression specification of the difference-in-difference model in which an individual's outcome is regressed against a dummy variable was estimated, indicating whether the facility received P4P that year, a facility-fixed effect, a year indicator, and a series of individual and household characteristics.

The model estimated that facilities in the intervention group had a 23% increase in the number of institutional deliveries and increases in the number of preventive care visits by children aged 23 months or younger (56%) and aged between 24 months and 59 months (132%). No improvements were seen in the number of women completing four prenatal care visits or of children receiving full immunization schedules. An increase of 0.157 standard deviations (95% CI 0.026–0.289) was also estimated in prenatal quality, as measured by compliance with Rwandan prenatal care clinical practice guidelines.

The P4P scheme in Rwanda had the greatest effect on those services that had the highest payment rates and needed the least effort from the service provider. The authors concluded that P4P financial performance incentives can improve both the use and quality of maternal and child health services, and could be a useful intervention to accelerate progress towards Millennium Development Goals for maternal and child health.

4. Bawo, L., Leonard, K. L., & Mohammed, R. (2015). Protocol for the evaluation of a quality-based pay for performance scheme in Liberia. *Implementation Science*, 10(1), 1. Retrieved from <https://implementationscience.biomedcentral.com/articles/10.1186/s13012-014-0194-9>

Summary

Improving the quality of care at hospitals is a key next step in rebuilding Liberia's health system. In order to improve the efficiency, effectiveness, and quality of care at the secondary hospital level, the country is developing a system to upgrade health worker skills and competencies, and shifting towards improved provider accountability for results, including a Graduate Medical Residency Program (GMRP) and provider accountability for improvements in quality through performance-based financing (PBF) at the hospital level.

This document outlines the protocol for the impact evaluation of the hospital improvement program. The evaluation will provide an estimate of the impact of the project and investigate the mechanism for success in a way that can provide general lessons about the quality of health care in low-income countries. The evaluation aims 1) to provide the best possible estimate of program impact and 2) to quantitatively describe the changes that took place within facilities as a result of the program. In particular, the impact evaluation focuses on the changes in human resources within the hospitals. As such, a three-period intensive evaluation of treated and matched comparison hospitals is used to see how services change in treated hospitals, as well as a continuous data collection effort to track the activities of individual health workers within treated hospitals.

Of particular interest in this evaluation is understanding how facilities met quality targets. Did they bring in new health workers with higher qualifications? Did they improve the knowledge or competence of their existing staff? Did they improve the availability of medicines and equipment so that the capacities of existing health workers were improved? Did they address the motivation of health workers so that individuals with the same competence and capacity were able to provide higher quality? And, if they did improve quality, did patients notice?

- Brenner, S., Muula, A. S., Robyn, P. J., Bärnighausen, T., Sarker, M., Mathanga, D. P., ... & De Allegri, M. (2014). Design of an impact evaluation using a mixed methods model—an explanatory assessment of the effects of results-based financing mechanisms on maternal healthcare services in Malawi. *BMC Health Services Research*, 14(1), 1. Retrieved from <http://bmchealthservres.biomedcentral.com/articles/10.1186/1472-6963-14-180>

Summary

In this article, a study design is presented to evaluate the causal impact of providing supply-side performance-based financing incentives in combination with a demand-side cash transfer component on equitable access to and quality of maternal and neonatal healthcare services. This intervention is introduced to selected emergency obstetric care facilities and catchment area populations in four districts in Malawi. The study protocol is described and discussed with regard to the research aims, the local implementation context, and the rationale for selecting a mixed methods explanatory design with a quasi-experimental quantitative component.

The quantitative research component consists of a controlled pre- and post-test design with multiple post-test measurements. This allows the quantitative measurement of ‘equitable access to healthcare services’ at the community level and ‘healthcare quality’ at the health facility level. Guided by a theoretical framework of causal relationships, a number of input, process, and output indicators are determined to evaluate both intended and unintended effects of the intervention. Overall causal impact estimates will result from a difference-in-difference analysis comparing selected indicators across intervention and control facilities/catchment populations over time. To further explain heterogeneity of quantitatively observed effects and to understand the experiential dimensions of financial incentives on clients and providers, a qualitative component is designed, in line with the overall explanatory mixed methods approach. This component consists of in-depth interviews and focus group discussions with providers, service user, non-users, and policy stakeholders. In this explanatory design comprehensive understanding of expected and unexpected effects of the intervention on both access and quality will emerge through careful triangulation at two levels: across multiple quantitative elements and across quantitative and qualitative elements.

Combining a traditional quasi-experimental controlled pre- and post-test design with an explanatory mixed methods model permits an additional assessment of organizational and behavioral changes affecting complex processes. Through this impact evaluation approach, the design will not only create robust evidence measures for the outcome of interest, but also generate insights on how and why the investigated interventions produce certain intended and unintended effects and allows for a more in-depth evaluation approach.

- Brenner S, De Allegri M, Gabrysch S, Chinkhumba J, Sarker M, Muula AS (2015) The quality of clinical maternal and neonatal healthcare—a strategy for identifying “routine care signal functions.” *PLoS One* 10(4): e0123968. doi:10.1371/journal.pone.0123968. Retrieved from <http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0123968>

Summary

A variety of clinical process indicators exist to measure the quality of care provided by maternal and neonatal health (MNH) programs. To allow comparison across MNH programs in low- and middle-income countries (LMICs), a core set of essential process indicators is needed. Although such a core set is available for emergency obstetric care (EmOC), the ‘EmOC signal functions’, a similar approach is currently missing for MNH routine

care evaluation. This paper describes a strategy for identifying core process indicators for routine care and illustrates their usefulness in a field example.

An indicator selection strategy was first developed by combining epidemiological and programmatic aspects relevant to MNH in LMICs. Routine care process indicators, meeting the selection criteria were then identified by reviewing existing quality of care assessment protocols. These indicators were grouped into three categories based on their main function in addressing risk factors of maternal or neonatal complications. The indicator set was then tested in a study assessing MNH quality of clinical care in 33 health facilities in Malawi.

The strategy identified 51 routine care processes: 23 related to initial patient risk assessment, 17 to risk monitoring, 11 to risk prevention. During the clinical performance assessment a total of 82 cases were observed. Birth attendants' adherence to clinical standards was lowest in relation to risk monitoring processes. In relation to major complications, routine care processes addressing fetal and newborn distress were performed relatively consistently, but there were major gaps in the performance of routine care processes addressing bleeding, infection, and pre-eclampsia risks.

The identified set of process indicators could identify major gaps in the quality of obstetric and neonatal care provided during the intra- and immediate postpartum period. It is the hope of the authors that suggested indicators for essential routine care processes will contribute to streamlining MNH program evaluations in LMICs.

7. Condo, J., Mugeni, C., Naughton, B., Hall, K., Tuazon, M. A., Omwega, A., ... & Binagwaho, A. (2014). Rwanda's evolving community health worker system: A qualitative assessment of client and provider perspectives. *Human Resources for Health*, 12(1), 1. Retrieved from <https://human-resources-health.biomedcentral.com/articles/10.1186/1478-4491-12-71>

Summary

Community health workers (CHWs) can play important roles in primary health care delivery, particularly in settings of health workforce shortages. However, little is known about CHWs' perceptions of barriers and motivations, as well as those of the beneficiaries of CHWs. In Rwanda, which faces a significant gap in human resources for health, the Ministry of Health expanded its community health programme beginning in 2007, eventually placing 4 trained CHWs in every village in the country by 2009. The aim of this study was to assess the capacity of CHWs and the factors affecting the efficiency and effectiveness of the CHW programme, as perceived by the CHWs and their beneficiaries.

As part of a larger report assessing CHWs in Rwanda, a cross-sectional descriptive study was conducted using focus group discussions (FGDs) to collect qualitative information regarding educational background, knowledge and practices of CHWs, and the benefits of community-based care as perceived by CHWs and household beneficiaries. A random sample of 108 CHWs and 36 beneficiaries was selected in 3 districts according to their food security level (low, middle and high). Qualitative and demographic data were analyzed.

CHWs were found to be closely involved in the community, and widely respected by the beneficiaries. Rwanda's community performance-based financing (cPBF) was an important incentive, but CHWs were also strongly motivated by community respect. The key challenges identified were an overwhelming workload, irregular trainings, and lack of sufficient supervision.

This study highlights the challenges and areas in need of improvement as perceived by CHWs and beneficiaries, in regards to a nationwide scale-up of CHW interventions in a resource-challenged country. Identifying and understanding these barriers, and addressing them accordingly, particularly within the context of performance-based financing, will serve to strengthen the current CHW system and provide key guidance for the continuing evolution of the CHW system in Rwanda.

8. De Walque, D., Gertler, P. J., Bautista-Arredondo, S., Kwan, A., Vermeersch, C., de Dieu Bizimana, J., ... & Condo, J. (2015). Using provider performance incentives to increase HIV testing and counseling services in Rwanda. *Journal of Health Economics*, 40, 1–9. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/25554976>

Summary

Paying for performance provides financial rewards to medical care providers for improvements in performance measured by utilization and quality of care indicators. In 2006, Rwanda began a pay for performance scheme to improve health services delivery, including HIV/AIDS services. Using a prospective quasi-experimental design, this study examines the scheme's impact on individual and couples HIV testing. The study found a positive impact of pay for performance on HIV testing among married individuals (10.2 percentage points increase). Paying for performance also increased testing by both partners by 14.7 percentage point among discordant couples in which only one of the partners is an AIDS patient.

9. Eichler, R., Agarwal, K., Askew, I., Iriarte, E., Morgan, L., & Watson, J. (2013). Performance-based incentives to improve health status of mothers and newborns: What does the evidence show? *Journal of Health, Population, and Nutrition*, 31(4 Suppl 2), S36. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/24992802>

Summary

Performance-based incentives (PBIs) aim to counteract weak providers' performance in health systems of many developing countries by providing rewards that are directly linked to better health outcomes for mothers and their newborns. Translating funding into better health requires many actions by a large number of people. The actions span from community to the national level. While different forms of PBIs are being implemented in a number of countries to improve health outcomes, there has not been a systematic review of the evidence of their impact on the health of mothers and newborns. This paper analyzes and synthesizes the available evidence from published studies on the impact of supply-side PBIs on the quantity and quality of health services for mothers and newborns. This paper reviews evidence from published and gray literature that spans PBI for public-sector facilities, PBI in social insurance reforms, and PBI in NGO contracting. Some initiatives focus on safe deliveries, and others reward a broader package of results that include deliveries. The Evidence Review Team that focused on supply-side incentives for the US Government Evidence Summit on Enhancing Provision and Use of Maternal Health Services through Financial Incentives reviewed published research reports and papers and added studies from additional gray literature which were deemed relevant. After collecting and reviewing 17 documents, nine studies were included in this review, three of which used before-after designs; four included comparison or control groups; one applied econometric methods to a five-year time series; and one reported results from a large-scale impact evaluation with randomly-assigned intervention and

control facilities. The available evidence suggests that incentives that reward providers for institutional deliveries result in an increase in the number of institutional deliveries. There is some evidence that the content of antenatal care can improve with PBI. No direct evidence on the impact of PBI on neonatal health services or on mortality of mothers and newborns was found, although intention of the study was not to document impact on mortality. A number of studies describe approaches to rewarding quality as well as increases in the quantities of services provided, although how quality is defined and monitored is not always clear. Because incentives exist in all health systems, considering how to align the incentives of the many health workers and their supervisors so that they focus efforts on achieving health goals for mothers and newborns is critical if the health system is to perform more effectively and efficiently. A wide range of PBI models is being developed and tested, and there is still much to learn about what works best. Future studies should include a larger focus on rewarding quality and measuring its impact. Finally, more qualitative research to better understand PBI implementation and how various incentive models function in different settings is needed to help practitioners refine and improve their programmes.

10. Falisse, J. B., Ndayishimiye, J., Kamenyero, V., & Bossuyt, M. (2014). Performance-based financing in the context of selective free health-care: An evaluation of its effects on the use of primary health-care services in Burundi using routine data. *Health Policy and Planning*, czu132. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/25533992>

Summary

Performance-based financing (PBF) is an increasingly adopted strategy in low and middle-income countries. PBF pilot projects started in Burundi in 2006, at the same time when a national policy removed user fees for pregnant women and children below 5 years old. As part of the methods, PBF was gradually extended to the 17 provinces of the country. This roll-out and data from the national health information system were exploited to assess the impact of PBF on the use of health-care services.

Results found that PBF is associated with an increase in the number of anti-tetanus vaccination of pregnant women (around 20 percentage points in target population, $P < 0.10$). Non-robust positive effects are also found on institutional deliveries and prenatal consultations. Changes in outpatient visits, postnatal visits and children vaccinations are not significantly correlated with PBF. It is also found that more qualified nurses headed to PBF-supported provinces. The limited quality of the data and the restricted size of the sample have to be taken into account when interpreting these results. Health facility-level figures from PBF-supported provinces show that most indicators but those relative to preventive care are growing through time.

The dataset does not include indicators of the quality of care and does not allow to assess whether changes associated with PBF are resource-driven or due to the incentive mechanism itself. The results are largely consistent with other impact evaluations conducted in Burundi and Rwanda. The fact that PBF is mostly associated with positive changes in the use of services that became free suggests an important interaction effect between the two strategies. A possible explanation is that the removal of user fees increases accessibility to health care and acts on the demand side while PBF gives medical staffs incentives for improving the provision of services. More empirical research is needed to understand the sustainability of (the incentive mechanism of) PBF and the interaction between PBF and other health policies.

11. Kerber, K. J., de Graft-Johnson, J. E., Bhutta, Z. A., Okong, P., Starrs, A., & Lawn, J. E. (2007). Continuum of care for maternal, newborn, and child health: From slogan to service delivery. *The Lancet*, 370(9595), 1358-1369. Retrieved from [http://www.thelancet.com/article/S0140-6736\(07\)61578-5/abstract](http://www.thelancet.com/article/S0140-6736(07)61578-5/abstract)

Summary

The continuum of care has become a rallying call to reduce the yearly toll of half a million maternal deaths, 4 million neonatal deaths, and 6 million child deaths. The continuum for maternal, newborn, and child health usually refers to continuity of individual care. Continuity of care is necessary throughout the lifecycle (adolescence, pregnancy, childbirth, the postnatal period, and childhood) and also between places of caregiving (including households and communities, outpatient and outreach services, and clinical-care settings). A population-level or public-health framework is defined based on integrated service delivery throughout the lifecycle, and propose eight packages to promote health for mothers, babies, and children. These packages can be used to deliver more than 190 separate interventions, which would be difficult to scale up one by one. The packages encompass three which are delivered through clinical care (reproductive health, obstetric care, and care of sick newborn babies and children); four through outpatient and outreach services (reproductive health, antenatal care, postnatal care and child health services); and one through integrated family and community care throughout the lifecycle. Mothers and babies are at high risk in the first days after birth, and the lack of a defined postnatal care package is an important gap, which also contributes to discontinuity between maternal and child health programmes. Similarly, because the family and community package tends not to be regarded as part of the health system, few countries have made systematic efforts to scale it up or integrate it with other levels of care. Building the continuum of care for maternal, newborn, and child health with these packages will need effectiveness trials in various settings; policy support for integration; investment to strengthen health systems; and results-based operational management, especially at district level.

12. Lee, Elizabeth, Supriya Madhavan, and Sebastian Bauhoff. (2016). Levels and variations in the quality of facility-based antenatal care in Kenya: Evidence from the 2010 service provision assessment. *Health Policy and Planning*: czv132. Retrieved from <https://academic.oup.com/heapol/article/31/6/777/1750676/Levels-and-variations-in-the-quality-of-facility>

Summary

Quality of care is emerging as an important concern for low- and middle-income countries working to expand and improve coverage. However, there is limited systematic, large-scale empirical guidance to inform policy design. This study operationalized indicators for six dimensions of quality of care that are captured in currently available, standardized Service Provision Assessments. These measures were implemented to assess the levels and heterogeneity of antenatal care in Kenya. Using the indicator mix, it was found that performance is low overall and that there is substantial variation across provinces, management authority and facility type. Overall, facilities performed highest in the dimensions of efficiency and acceptability/patient-centeredness, and lowest on effectiveness and accessibility. Public facilities generally performed worse or similarly to private or faith-based facilities. The authors of this study illustrate how these data and methods can provide readily-available, low cost decision support for policy.

13. Meessen, B., Soucat, A., & Sekabaraga, C. (2011). Performance-based financing: Just a donor fad or a catalyst towards comprehensive health-care reform? *Bulletin of the World Health Organization*, 89(2), 153–156. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3040374/>

Summary

Performance-based financing is generating a heated debate. Some suggest that it may be a donor fad with limited potential to improve service delivery. Most of its critics view it solely as a provider payment mechanism. The authors' experience is that performance-based financing can catalyze comprehensive reforms and help address structural problems of public health services, such as low responsiveness, inefficiency and inequity. The emergence of a performance-based financing movement in Africa suggests that it may contribute to profoundly transforming the public sectors of low-income countries.

14. Mokdad, A. H., Colson, K. E., Zúñiga-Brenes, P., Ríos-Zertuche, D., Palmisano, E. B., Alfaro-Porras, E., ... & Gillespie, C. W. (2015). Salud Mesoamérica 2015 Initiative: Design, implementation, and baseline findings. *Population Health Metrics*, 13(1), 1. Retrieved from <https://pophealthmetrics.biomedcentral.com/articles/10.1186/s12963-015-0034-4>

Summary

Health has improved markedly in Mesoamerica, the region consisting of southern Mexico and Central America, over the past decade. Despite this progress, there remain substantial inequalities in health outcomes, access, and quality of medical care between and within countries. Poor, indigenous, and rural populations have considerably worse health indicators than national or regional averages. In an effort to address these health inequalities, the Salud Mesoamérica 2015 Initiative (SM2015), a results-based financing initiative, was established.

For each of the eight participating countries, health targets were set to measure the progress of improvements in maternal and child health produced by the Initiative. To establish a baseline, censuses of 90,000 households were conducted, 20,225 household interviews completed, and 479 health facilities surveyed in the poorest areas of Mesoamerica. Pairing health facility and household surveys allowed for linking barriers to care and health outcomes with health system infrastructure components and quality of health services.

Indicators varied significantly within and between countries. Anemia was most prevalent in Panama and least prevalent in Honduras. Anemia varied by age, with the highest levels observed among children aged 0 to 11 months in all settings. Belize had the highest proportion of institutional deliveries (99%), while Guatemala had the lowest (24%). The proportion of women with four antenatal care visits with a skilled attendant was highest in El Salvador (90%) and the lowest in Guatemala (20%). Availability of contraceptives also varied. The availability of condoms ranged from 83% in Nicaragua to 97% in Honduras. Oral contraceptive pills and injectable contraceptives were available in just 75% of facilities in Panama. IUDs were observed in only 21.5% of facilities surveyed in El Salvador.

These data provide a baseline of much-needed information for evidence-based action on health throughout Mesoamerica. Baseline estimates reflect large disparities in health indicators within and between countries and will facilitate the evaluation of interventions and investments deployed in the region over the next three to five years. SM2015's innovative monitoring and evaluation framework will allow health officials with limited resources to identify and target areas of greatest need.

15. O'Brien, T., & Kanbur, R. (2014). The operational dimensions of results-based financing. *Public Administration and Development*, 34(5), 345–358. Retrieved from <http://onlinelibrary.wiley.com/doi/10.1002/pad.1698/abstract>

Summary

As part of a growing focus on the effectiveness of development assistance from the World Bank and other agencies, new efforts are being made to relate development finance more closely to outcomes achieved rather than to inputs used, through the results-based financing approach. The authors provide a framework for analyzing the operational dimensions of results-based financing, including the conditions that suit this approach, and how best to define, measure, and report results. Some of the early World Bank experience with this approach is reviewed. Noting that this approach is as yet not fully tested, evaluative issues for future research are suggested while highlighting strengths and challenges in the range of techniques adopted so far.

16. Oxman, A. D., & Fretheim, A. (2009). Can paying for results help to achieve the Millennium Development Goals? A critical review of selected evaluations of results-based financing. *Journal of Evidence-Based Medicine*, 2(3), 184–195. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/21349012>

Summary

Results-based financing (RBF) refers to the transfer of money or material goods conditional on taking a measurable action or achieving a predetermined performance target. RBF is being promoted for helping to achieve the Millennium Development Goals (MDGs).

This study undertook a critical appraisal of selected evaluations of RBF schemes in the health sector in low and middle-income countries (LMIC). In addition, key informants were interviewed to identify literature relevant to the use of RBF in the health sector in LMIC, key examples, evaluations, and other key informants.

The use of RBF in LMIC has commonly been a part of a package that may include increased funding, technical support, training, changes in management, and new information systems. It is not possible to disentangle the effects of financial incentives as one element of RBF schemes, and there is very limited evidence of RBF per se having an effect. RBF schemes can have unintended effects.

When RBF schemes are used, they should be designed carefully, including the level at which they are targeted, the choice of targets and indicators, the type and magnitude of incentives, the proportion of financing that is paid based on results, and the ancillary components of the scheme. For RBF to be effective, it must be part of an appropriate package of interventions, and technical capacity or support must be available. RBF schemes should be monitored for possible unintended effects and evaluated using rigorous study designs.

17. Pronyk, P. M., Nemser, B., Maliqi, B., Springstubb, N., Sera, D., Karimov, R., ... & Leads, U. A. (2016). The UN Commission on Life Saving Commodities 3 years on: Global progress update and results of a multicountry assessment. *The Lancet Global Health*, 4(4), e276–e286. Retrieved from [http://www.thelancet.com/journals/langlo/article/PIIS2214-109X\(16\)00046-2/abstract](http://www.thelancet.com/journals/langlo/article/PIIS2214-109X(16)00046-2/abstract)

Summary

In September, 2012, the UN Commission on Life Saving Commodities (UNCoLSC) outlined a plan to expand availability and access to 13 lifesaving commodities. Global and country progress was profiled against these recommendations between 2012 and 2015.

For 12 countries in sub-Saharan Africa that were off-track to achieve the Millennium Development Goals for maternal and child survival, key documents were reviewed and referenced data, and interviews conducted with ministry staff and partners to assess the status of the UNCoLSC recommendations. The RMNCH fund provided short-term catalytic financing to support country plans to advance the commodity agenda, with activities coded by UNCoLSC recommendation. The network of technical resource teams identified, addressed, and monitored progress against cross-cutting commodity-related challenges that needed coordinated global action.

In 2014 and 2015, child and maternal health commodities had fewer bottlenecks than reproductive and neonatal commodities. Common bottlenecks included regulatory challenges (ten of 12 countries); poor quality assurance (11 of 12 countries); insufficient staff training (more than half of facilities on average); and weak supply chains systems (11 of 12 countries), with stock-outs of priority commodities in about 40% of facilities on average. The RMNCH fund committed US\$175.7 million to 19 countries to support strategies addressing crucial gaps. \$68.2 million (39.0%) of the funds supported systems-strengthening interventions with the remainder split across reproductive, maternal, newborn, and child health. Health worker training (\$88.6 million, 50.4%), supply chain (\$53.3 million, 30.0%), and demand generation (\$21.1 million, 12.0%) were the major topics of focus. All priority commodities are now listed in the WHO Essential Medicines List; appropriate price reductions were secured; quality manufacturing was improved; a fast-track registration mechanism for prequalified products was established; and methods were developed for advocacy, quantification, demand generation, supply chain, and provider training. Slower progress was evident around regulatory harmonisation and quality assurance.

Much work is needed to achieve full implementation of the UNCoLSC recommendations. Coordinated efforts to secure price reductions beyond the 13 commodities and improve regulatory efficiency, quality, and supply chains are still needed alongside broader dissemination of work products.

18. Renmans, D., Holvoet, N., Orach, C. G., & Criel, B. (2016). Opening the “black box” of performance-based financing in low-and lower middle-income countries: A review of the literature. *Health Policy and Planning*, czw045. Retrieved from <https://academic.oup.com/heapol/article-abstract/31/9/1297/2452979/Opening-the-black-box-of-performance-based>

Summary

Although performance-based financing (PBF) receives increasing attention in the literature, a lot remains unknown about the exact mechanisms triggered by PBF arrangements. This article aims to summarize current knowledge on how PBF works, set out what still needs to be investigated and formulate recommendations for researchers and policymakers from donor and recipient countries alike. Drawing on an extensive systematic literature review of peer-reviewed journals, 35 relevant articles were analyzed. For guidance through this variety

of studies, and also to point out relevant issues and structure findings, a comprehensive analytical framework was used, based on eight dimensions. The review inter alia indicates that PBF is generally welcomed by the main actors (patients, health workers and health managers), yet what PBF actually entails is less straightforward. More research is needed on the exact mechanisms through which not only incentives but also ancillary components operate. This knowledge is essential if we really want to appreciate the effectiveness, desirability and appropriate format of PBF as one of the possible answers to the challenges in the health sector of low-and lower middle-income countries. A clear definition of the research constructs is a primordial starting point for such research.

19. Soeters, R., Peerenboom, P. B., Mushagalusa, P., & Kimanuka, C. (2011). Performance-based financing experiment improved health care in the Democratic Republic of Congo. *Health Affairs*, 30(8), 1518–1527. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/21821568>

Summary

In some low-income countries such as Cambodia and Rwanda, experimental performance-based payment systems have led to rapid improvements in access to health care and the quality of that care. Under this type of payment scheme, funders—including foreign governments and international aid programs—subsidize local health care providers for achieving certain benchmarks. The benchmarks can include such measures as child immunizations or childbirth in a health facility. In this article, the results of a performance-based payment experiment conducted in the Democratic Republic of Congo are reported. The Democratic Republic of Congo is one of the poorest countries in the world and has an extremely high level of child and maternal mortality. This study found that providing performance-based subsidies resulted in lower direct payments to health facilities for patients, who received comparable or better services and quality of care than those provided at a control group of facilities that were not financed in this way. The disparity occurred despite the fact that the districts receiving performance-based subsidies received external foreign assistance of approximately \$2 per capita per year, compared to the \$9–\$12 in external assistance received by the control districts. The experiment also revealed that performance-based financing mechanisms can be effective even in a troubled nation such as the Democratic Republic of Congo.

20. Turcotte-Tremblay, A. M., Spagnolo, J., De Allegri, M., & Ridde, V. (2016). Does performance-based financing increase value for money in low-and middle-income countries? A systematic review. *Health Economics Review*, 6(1), 30. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4967066/>

Summary

Governments of low- and middle-income countries (LMICs) are widely implementing performance-based financing (PBF) to improve healthcare services. However, it is unclear whether PBF provides good value for money compared to status quo or other interventions aimed at strengthening the healthcare system in LMICs. The objective of this systematic review is to identify and synthesize the existing literature that examines whether PBF represents an efficient manner of investing resources. PBF was considered to be efficient when improved care quality or quantity was achieved with equal or lower costs, or alternatively, when the same quality of care was achieved using less financial resources. A manual search of the reference lists of two recent systematic reviews on economic evaluations of PBF was conducted to identify articles that met our inclusion and exclusion criteria. Subsequently, a search strategy was developed with the help of a librarian. The following databases and

search engines were used: PubMed, EconLit, Google Scholar and Google. Experts on economic evaluations were consulted for validation of the selected studies. A total of seven articles from five LMICs were selected for this review. The overall strength of the evidence was found to be weak. None of the articles were full economic evaluations; they did not make clear connections between the costs and effects of PBF. Only one study reported using a randomized controlled trial, but issues with the randomization procedure were reported. Important alternative interventions to strengthen the capacities of the healthcare system have not been considered. Few studies examined the costs and consequences of PBF in the long term. Important costs and consequences were omitted from the evaluations. Few LMICs are represented in the literature, despite wide implementation. Lastly, most articles had at least one author employed by an organization involved in the implementation of PBF, thereby resulting in potential conflicts of interest. Stronger empirical evidence on whether PBF represents good value for money in LMICs is needed.

21. van de Looij, F., Mureyi, D., Sisimayi, C., Koot, J., Manangazira, P., & Musuka, N. (2015). Early evidence from results-based financing in rural Zimbabwe. *African Health Monitor*. Issue 20. Special Issue on Universal Health Coverage. Retrieved from <http://www.who.int/en/ahm/issue/20/articles/early-evidence-results-based-financing-rural-zimbabwe>

Summary

Results-based financing (RBF) is an innovative approach to health system financing which pays providers for verified outputs. In July 2011, through a World Bank grant, Zimbabwe commenced an RBF project to improve utilization of quality maternal, neonatal and child health (MNCH) services. This article discusses its early results. A statistical analysis of intervention districts and control districts shows that RBF districts demonstrate higher increases in utilization levels for the MNCH services than control districts. Month-on-month growth rates for antenatal care, perinatal referrals and growth monitoring are statistically significant after the intervention, whilst they were not before the intervention and no significant trend was found in control districts. Qualitative study provides insight in the mechanisms through which RBF contributed to better performance: the use of contracts, increased autonomy of health facilities, increased community involvement, intrinsic motivation of health-care workers, existence of a reliable health information system, abolishment of user fees, improved supervision of health facilities, separation of functions, and the Government of Zimbabwe's results-based management (RBM) policy

22. Witter, S., Toonen, J., Meessen, B., Kagubare, J., Fritsche, G., & Vaughan, K. (2013). Performance-based financing as a health system reform: Mapping the key dimensions for monitoring and evaluation. *BMC Health Services Research*, 13(1), 1. Retrieved from <http://bmchealthservres.biomedcentral.com/articles/10.1186/1472-6963-13-367>

Summary

Performance-based financing is increasingly being applied in a variety of contexts, with the expectation that it can improve the performance of health systems. However, while there is a growing literature on implementation issues and effects on outputs, there has been relatively little focus on interactions between PBF and health systems and how these should be studied. This paper aims to contribute to filling that gap by developing a framework for assessing the interactions between PBF and health systems, focusing on low and

middle income countries. In doing so, it elaborates a general framework for monitoring and evaluating health system reforms in general.

This paper is based on an exploratory literature review and on the work of a group of academics and PBF practitioners. The group developed ideas for the monitoring and evaluation framework through exchange of emails and working documents. Ideas were further refined through discussion at the Health Systems Research symposium in Beijing in October 2012, through comments from members of the online PBF Community of Practice and Beijing participants, and through discussion with PBF experts in Bergen in June 2013.

The paper starts with a discussion of definitions, to clarify the core concept of PBF and how the different terms are used. It then develops a framework for monitoring its interactions with the health system, structured around five domains of context, the development process, design, implementation and effects. Some of the key questions for monitoring and evaluation are highlighted, and a systematic approach to monitoring effects proposed, structured according to the health system pillars, but also according to inputs, processes and outputs.

The paper lays out a broad framework within which indicators can be prioritised for monitoring and evaluation of PBF or other health system reforms. It highlights the dynamic linkages between the domains and the different pillars. All of these are also framed within inter-sectoral and wider societal contexts. It highlights the importance of differentiating short term and long term effects, and also effects (intended and unintended) at different levels of the health system, and for different sectors and areas of the country. Outstanding work will include using and refining the framework and agreeing on the most important hypotheses to test using it, in relation to PBF but also other purchasing and provider payment reforms, as well as appropriate research methods to use for this task.

23. Zeng, W., Cros, M., Wright, K. D., & Shepard, D. S. (2012). Impact of performance-based financing on primary health care services in Haiti. *Health Policy and Planning*, czs099. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/23107831>

Summary

To strengthen Haiti's primary health care (PHC) system, the country first piloted performance-based financing (PBF) in 1999 and subsequently expanded the approach to most internationally funded non-government organizations. PBF complements support (training and technical assistance). This study evaluates (a) the separate impact of PBF and international support on PHC's service delivery; (b) the combined impact of PBF and technical assistance on PHC's service delivery; and (c) the costs of PBF implementation in Haiti. To minimize the risk of facilities neglecting potential non-incentivized services, the incentivized indicators were randomly chosen at the end of each year. Quantities of key services were obtained from four departments for 217 health centres (15 with PBF and 202 without) from 2008 through 2010, computed quarterly growth rates and analysed the results using a difference-in-differences approach by comparing the growth of incentivized and non-incentivized services between PBF and non-PBF facilities. To interpret the statistical analyses, staff in four facilities were also interviewed. Whereas international support added 39% to base costs of PHC, incentive payments added only 6%. Support alone increased the quantities of PHC services over 3 years by 35% (2.7%/quarter). However, support plus incentives increased these amounts by 87% over 3 years (5.7%/quarter) compared with facilities with neither input. Incentives alone were associated with a net 39% increase over this period, and more than doubled the growth of services ($P < 0.05$). Interview findings found no adverse impacts

and, in fact, indicated beneficial impacts on quality. Incentives proved to be a relatively inexpensive, well accepted and very effective complement to support, suggesting that a small amount of money, strategically used, can substantially improve PHC. Haiti's experience, after more than a decade of use, indicates that incentives are an effective tool to strengthen PHC.

GRAY LITERATURE

1. Bertrand, J. T., & Escudero, G. (2002). *Compendium of indicators for evaluating reproductive health programs* (Vol. 6). Chapel Hill, NC: MEASURE Evaluation, University of North Carolina. Retrieved from <https://www.measureevaluation.org/resources/publications/ms-02-06>

Summary

The general objective of this *Compendium* is to encourage program evaluation and improve the quality of work in this area. To this end, the *Compendium* provides a comprehensive listing of the most widely used indicators for evaluating reproductive health programs in developing countries that is likely pertinent to several different audiences (including managers, in-country evaluation specialists, social science researchers and students). Indicators are organized according to a revised version of the conceptual framework originally developed under the EVALUATION Project. The *Compendium* is organized in three parts. Part I provides an overview of the document, as well as the basic concepts in program evaluation. The rest of the volume presents a menu of indicators (including the definition, data requirements, data sources, purpose and issues), organized in two sections: those that cross-cut programmatic areas (described in Part II of the volume) and those that are specific to the different programmatic areas that comprise reproductive health (Part II of this volume).

2. Brenzel, L., Measham, A., Naimoli, J., Batson, A., Bredenkamp, C., & Skolnik, R. (2009). *Taking stock: World Bank experience with results-based financing (RBF) for health*. Washington, DC: The World Bank. Retrieved from <http://documents.worldbank.org/curated/en/998271468331022932/Taking-stock-World-Bank-experience-with-Results-Based-Financing-RBF-for-health>

Summary

This paper provides a summary of “Taking Stock: World Bank Experience with Results-Based Financing (RBF) for Health” which identified twenty-four World Bank-supported projects in seventeen countries with substantial RBF efforts during FY 95-08. The paper reviews Health, Nutrition, and Population (HNP) unit project lending to identify the extent and nature of World Bank support for RBF for health, in order to draw lessons for strengthening design, implementation, monitoring and evaluation of Bank projects with RBF activities in the future. This summary describes the rationale for the exercise, methods used, major findings, project outcomes and lessons learned from the review of World Bank project documents.

3. Canavan, A., Toonen, J., & Elovainio, R. (2008). *Performance based financing: An international review of the literature*. Amsterdam: The Netherlands: KIT Development Policy and Practice. Retrieved from <http://www.bibalex.org/search4dev/files/305434/135297.pdf>

Summary

Health research evidence from developing countries points to the challenges that are implicit in under resourced health sectors with associated lack of infrastructure, human resource capacity and supplies resulting in low productivity of service providers and poor healthcare utilization. Efforts by international development assistance has focused on investing funds (input based) to invigorate poorly functioning public health systems in developing countries over the decades. Public providers who are paid a low government salary have little

incentive to provide more or better care. This has led to an enquiry by donors and implementing agencies on how to support public health systems through adoption of reward or incentive based approaches. There are varied definitions used to describe the levels of incentives and performance rewards, whether organizational which includes: RBF; “results based performance”, P4P; (payment for performance) and PBF; performance based financing. For the purpose of this review, “performance based financing” will be adopted as the working terminology. Performance Based Financing (PBF) is predicated on the assumption that linking incentives to performance will contribute to improvement in access, quality and equity of service outputs. In some instances, NGOs are fund holders, who in turn establish performance based contracts with district level administrations or with other non-government entities. In other countries (Tanzania and Zambia for example) the fund holder is a government entity that channels the NGO money while Rwanda now has a government fund holder. The contracts in all cases employ a business plan whereby health worker incentives are tied to performance, based on an agreed set of indicators. PBF is currently viewed as a promising and innovative strategy to tackle issues related to improved access, utilization, and provider performance². In this literature review, incentive based approaches adopted in developing countries over the past decade will be explored, with a focus on the contribution of Performance Based Financing (PBF) to productivity, quality of health care and ultimately on the performance of health providers. Section One outlines the various definitions that are applicable to a wide range of performance based incentive schemes. Section Two reviews the institutional approaches that have been deployed by NGOs in collaboration with country level stakeholders, with a specific focus on the costs of introducing PBF using diverse operational approaches. Section Three explores the results that have been reported including both quantitative and qualitative effects on health service delivery and human resources. Section Four identifies the monitoring and evaluation tools that have been used to measure the results of PBF. Section Five offers a concluding summary with a proposed research agenda for future work.

4. Cogill, B. (2001). Anthropometric indicators measurement guide. Washington, DC.: United States Agency for International Development. Retrieved from <http://www.fantaproject.org/tools/anthropometry-guide>

Summary

This series of Title II Generic Indicator Guides has been developed by the Food and Nutrition Technical Assistance (FANTA) Project, and its predecessor projects (LINKAGES and IMPACT), as part of USAID’s support to develop monitoring and evaluation systems for use in Title II programs. This guide provides information on the Anthropometric Impact Indicators and the Annual Monitoring Indicators for Maternal and Child Health/Child Survival (MCH/CS) and income-related Title II activities, a subset of the P.L. 480 Title II Generic Performance Indicators for Development Activities.

The guide draws extensively from materials from the Anthropometry Resource Center, funded by the FAO/SADC project GCP/RAF/284/NET, Development of a Regional Food Security and Nutrition Information System, particularly the UN publication, How to Weigh and Measure Children: Assessing the Nutritional Status of Young Children in Household Surveys; and the WHO publication, Physical Status: The Use and Interpretation of Anthropometry. It is intended to provide the technical basis for the indicators and the recommended method for collecting, analyzing and reporting on the indicators.

- Eichler, R. (2006). Can “pay for performance” increase utilization by the poor and improve the quality of health services. Background papers for the Working Group on Performance Based Incentives. Washington, DC: Center for Global Development. Retrieved from <http://www.hrhresourcecenter.org/node/506>

Summary

This paper was prepared as background for the Working Group on Performance Based Incentives and begins by defining and describing “pay-for-performance (P4P)” approaches designed for consumers, individual health care providers, service delivery institutions, and subnational levels of countries. The focus is on demand- and supply-side financial and material (examples: food, travel vouchers) incentives that can be used to improve utilization and quality of ambulatory health care services, especially for the poor, including those interventions that link payment or material goods to indicators of performance (e.g. increased immunization coverage) or defined actions (e.g. TB patient presents to take medicine) that are closely correlated with improved health outcomes. Not included are approaches that transfer funds or goods to consumers or providers in ways that are not conditional on some measurable indicator of performance as well as other interventions aimed at improving performance such as provider training or health education. The paper also presents evidence of two basic, related problems: (1) health service under-utilization by the poor; and (2) substandard quality of services available to the poor. It also discusses determinants of demand and supply and principal agent theory, the relationship among elements of health systems, and the links between those elements and P4P applications, suggesting a framework for use in the evaluation and categorization of P4P interventions. Brief descriptions of a selected sample of P4P cases are also presented in the Annex. The paper concludes by providing broad unanswered questions that constitute a possible agenda that the working group could address.

- Fritsche, György Béla, Robert Soeters, and Bruno Meessen. (2014). Performance-based financing toolkit. Washington, DC: World Bank. License: Creative Commons Attribution CC BY 3.0. Retrieved from <https://openknowledge.worldbank.org/handle/10986/17194>

Summary

This toolkit addresses the questions what and why, while focusing on the answer to how it can be done. The toolkit is pervaded by answers to the first question, while explaining the “how to”: the process, the planning, the design, and the implementation of PBF schemes. It is written and reviewed by practitioners who have experimented with various methods and who have designed, implemented, witnessed, and evaluated its effects. Methods and approaches in PBF evolve continuously. Even though the toolkit provides guidance based on experience, the experience itself is based on trial and error and constant testing, assessing, and reassessing. This approach is why the toolkit is not meant as a final product but, rather, conceived as an organized and structured one-stop shop for the forms, tools, spreadsheets, contracts, terms of reference, performance frameworks, and other documents to implement PBF approaches in low- and lower- middle- income countries. The toolkit is written by implementers for implementers and attempts to capture the current state of affairs and best practices, while attempting to stay abreast by updating the methods, experiences, and tools used.

The introduction to the toolkit includes a short history of PBF, a discussion of terminology, and a simplified example of what PBF looks like for a health center. Most chapters contain a mix of conceptual information and practical “how to” guidance. The grouping was categorized as first, elements that consider facility- level phenomena, such as services, quality, setting of the fees, equity, and autonomy, and second, a collection of

higher- level issues, such as governance and data analysis, as well as technical assistance. Part 1 (chapters 1– 8) deals with facility- level design issues, including the specific services to purchase, verification and counter-verification mechanisms, verifying and rewarding of quality of services, setting of the unit price, financial risk forecasting, equity, autonomy, payments and financial management, and performance frameworks for the health administration. Part 2 (chapters 9– 16) gives attention to design structures and issues relevant for implementation, including investment units, health facility management and how to improve it, governance, data capture, data analysis, technical assistance requirements, design of a manual, and pilot testing. Part 3 (chapter 17) addresses the current evidence on PBF schemes and contrasts the approaches in lower- and middle- income countries and Organisation for Economic Co- operation and Development (OECD) countries.

7. Gage AJ, Ali D, Suzuki C. (2005). A guide for monitoring and evaluating child health programs. Chapel Hill, NC: MEASURE Evaluation, University of North Carolina. Retrieved from <https://www.measureevaluation.org/resources/publications/ms-05-15>

Summary

This guide provides a comprehensive listing of the most widely used indicators for monitoring and evaluating child health programs in developing countries. The guide uses a generic conceptual framework which maps the pathways through which programs achieve results and, as such, constitutes a logical framework for developing a monitoring and evaluation plan with appropriate indicators. The indicators are then organized into eight chapters. Chapters 2 through 8 describe indicators that are relevant to specific programmatic areas of child health. Chapter 9 presents mortality indicators. Essential core indicators that are relevant for monitoring and evaluation in multiple programmatic areas are cross-referenced. Many of the program areas covered in the guide contain more detailed frameworks that explain the pathways for program effects specific to different technical intervention areas.

8. Gertler, P. J., & Giovagnoli, P. I. (2014). Rewarding provider performance to enable a healthy start to life: Evidence from Argentina's Plan Nacer. World Bank Policy Research Working Paper, (6884). Retrieved from <http://documents.worldbank.org/curated/en/910221468002421288/Rewarding-provider-performance-to-enable-a-healthy-start-to-life-evidence-from-Argentinas-Plan-Nacer>

Summary

Argentina's Plan Nacer provides insurance for maternal and child health care to uninsured families. The program allocates funding to provinces based on enrollment of beneficiaries and adds performance incentives based on indicators of the use and quality of maternal and child health care services and health outcomes. The provinces use these resources to pay health facilities to provide maternal and child health care services to beneficiaries. This paper analyzes the impact of Plan Nacer on birth outcomes. The analysis uses data from the universe of birth records in seven Argentine provinces for 2004 to 2008 and exploits the geographic phasing in of Plan Nacer over time. The paper finds that the program increases the use and quality of prenatal care as measured by the number of visits and the probability of receiving a tetanus vaccine. Beneficiaries' probability of low birth-weight is estimated to be reduced by 19 percent. Beneficiaries have a 74 percent lower chance of in-hospital neonatal mortality in larger facilities and approximately half this reduction comes from preventing low birth weight and half from better postnatal care. The analysis finds that the cost of saving a disability-adjusted

life year through the program was \$814, which is highly cost-effective compared with Argentina's \$6,075 gross domestic product per capita over this period. Although there are small negative spillover effects on prenatal care utilization of non-beneficiary populations in clinics covered by Plan Nacer, no spillover is found on their birth outcomes.

9. Grittner, A. M. (2013). Results-based financing. Evidence from performance-based financing in the health sector. Bonn, Federal Republic of Germany: German Development Institute. Retrieved from <http://www.oecd.org/development/peer-reviews/Results-based-financing.pdf>

Summary

This paper contributes to investigating the experiences made with results-based funding as well as the unanswered question regarding the potential of results-based approaches to make development aid and domestic funds more effective and efficient. It focuses on performance-based financing (PBF), which is a type of results-based financing (RBF), as opposed to results-based aid (RBA). The paper reviews the targeting mechanisms, incentive structure, effectiveness and the efficiency of performance-based financing in the health sector through study of the experiences and data from PBF programmes in 13 developing countries in Africa, Asia and South America. It was found that from the 13 experiences studied in the present paper, five targeted explicitly poor areas or households, whereas seven had the more general goal of increasing access to and quality of basic healthcare services. When setting monetary incentives for good performance, PBF tends to focus on outputs rather than on health outcomes, and on quantity rather than on quality. Most schemes set target indicators at the level of healthcare supply or healthcare coverage, but at least 5 out of the 13 schemes studied also used indicators capturing impact. In contrast, only three programmes set performance targets for good quality of healthcare delivery.

The available qualitative and quantitative evaluations of the schemes studied in this paper suggest that PBF may be more effective in improving healthcare supply and healthcare coverage than other funding schemes. This applies mainly to the targeted indicators. However, there is little evidence that these improvements in health outputs and outcomes are achieved through the results orientation of the programmes as opposed to additional funding and other contextual factors, because rigorous impact evaluations are still lacking. Evidence of the impact of PBF on the quality of healthcare delivery and on the efficiency of PBF is also insufficient. Even though there is some suggestive evidence that PBF may be more cost-effective than other funding schemes, a lack of crucial financial information makes it difficult to evaluate the efficiency of PBF.

All in all, better and more monitoring of experiences as well as more research are needed in order to evaluate the potential of PBF in particular, and of RBF in general. In the future research agenda, efforts should particularly focus on investigating the incentive structure of RBF more thoroughly – including non-monetary and perverse incentives –, on evaluating the effectiveness and efficiency of schemes more rigorously, and on studying the long-term effects of RBF.

10. MEASURE Evaluation. (n.d.). Family planning and reproductive health indicators database—MEASURE Evaluation. Chapel Hill, NC: MEASURE Evaluation, University of North Carolina. Retrieved from https://www.measureevaluation.org/prh/rh_indicators

Summary

The Family Planning/Reproductive Health (FP/RH) Indicators Database is an update of the Compendium of Indicators for Evaluating Reproductive Health Programs. The Indicator Database was developed and is managed by the MEASURE Evaluation Population and Reproductive Health (PRH) project. Although funded by the United States Agency for International Development (USAID), it applies to family planning and reproductive health programs sponsored by a variety of funding agencies, governments, or NGOs worldwide. Specifically, the database provides a menu of indicators to be used selectively as part of the evaluation of national programs, regional programs, and country projects. Users of the database are encouraged to use the indicators as a template for country- or project-specific indicators, to be modified as necessary. The Family Planning/Reproductive Health (FP/RH) Indicators Database is a dynamic site, being updated as-needed as family planning and reproductive health research and programming changes and evolves in response to current initiatives, such as Family Planning 2020, or to new government and donor priorities and policies, such as USAID's Evaluation Policy and its Gender Equality and Female Empowerment policy.

11. Morgan, L. (2010). Performance incentives in global health: Potential and pitfalls. Results-based financing (RBF) for health: feature. Washington, DC: World Bank, 2-4. Retrieved from <http://documents.worldbank.org/curated/en/260981468150303844/Performance-incentives-in-global-health-potential-and-pitfalls>

Summary

This report summarizes the growing interest in results-based financing, with much information derived from Rena Eichler and Ruth Levine, *Performance Incentives for Global Health: Potential and Pitfalls* (Washington, DC: Center for Global Development, 2009). The report describes how the RBF funding approach differs from traditional input-based financing in addition to its potential for improving health outcomes while also creating positive spillover effects such as strengthened health systems, empowered individuals and innovation. It also discusses key features to consider in the design, implementation and evaluation of RBF approaches in order to avoid potential pitfalls and unintended consequences.

12. Musgrove, P. (2011). Financial and other rewards for good performance or results: A short glossary. Washington, DC: World Bank, 1-12. Retrieved from https://olc.worldbank.org/sites/default/files/Musgrove_2011_3.pdf

Summary

This report offers clarification on key terms associated with result-based financing as well as distinguishing features of similar concepts used to describe funding approaches focused on paying for good performance or results. It is a shorter version “Financial and Other Rewards for Good Performance or Results, a Guided Tour of Concepts and Terms and a Short Glossary” by Philip Musgrove (World Bank 2011).

13. Musgrove, P. (2011). Financial and other rewards for good performance or results: A guided tour of concepts and terms and a short glossary. Washington, DC: World Bank, 1-12. Retrieved from https://www.rbhealth.org/sites/rbf/files/RBFglossarylongrevised_0.pdf

Summary

Results-Based Financing (RBF) for health has been defined as "a cash payment or non-monetary transfer made to a national or sub-national government, manager, provider, payer or consumer of health services after predefined results have been attained and verified. Payment is conditional on measurable actions being undertaken." (www.rbhealth.org). RBF is an umbrella term because the definition is general and characterizes various programs in many countries. Different labels exist for essentially the same concept or are associated with different incentives and payment arrangements. This glossary describes how different terms are used and points out significant distinctions among types of RBF health programs.

14. Naimoli, J. F., & Vergeer, P. (2010). A series of snapshots of experiences in verifying performance linked to financial incentives for results-based financing (RBF) programs from selected countries. Washington, DC: World Bank. Retrieved from https://www.rbhealth.org/sites/rbf/files/RBFVerification_at_a_glance.pdf

Summary

This report provides a summary snapshot of experiences in verifying performance for results-based financing (RBF) Programs in 10 settings. Snapshots are provided for 4 World Bank-supported countries (i.e. Afghanistan, Argentina, Cambodia, and Rwanda); 2 NGOs in low-income countries (i.e. Cordaid in Burundi and Management Sciences for Health in Haiti); 1 industrialized country (U.S.A.: Medicare); as well as 3 performance-based Global Health Partnerships (GHPs) – the GAVI Alliance, the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM), and the Global Partnership on Output-Based Aid (GPOBA). The snapshots describe the rationale for why verification had been introduced as well as some minimal description of how the process was carried out, where, by whom, using what methods, and, with what effect. Together, the collection of snapshots in this report offers a rich, albeit preliminary, collection of experiences with verification, in a diverse range of settings, under different financing mechanisms.

15. Oxman, A. D., & Fretheim, A. (2008). An overview of research on the effects of results-based financing. Oslo, Norway: Norwegian Knowledge Centre for the Health Services. Retrieved from http://www.focusintl.com/RBM094-Rapport_08_16_Results-based%20financing.pdf

Summary

Norway is the lead promoter of results-based financing (RBF) as one of five actions being taken as part of the Global Campaign for the Health Millennium Development Goals and plans to support the use of RBF through the World Bank and in bilateral agreements with selected countries focusing on achieving the Millennium Development Goals (MDGs) of reducing child and maternal mortality (MDG 4 and 5). RBF-schemes can be targeted at different levels: recipients of healthcare, individual providers of healthcare, healthcare facilities, private sector organisations, public sector organisations, sub-national governments, and national governments.

This report consists of an overview of systematic reviews and a critical appraisal of four evaluations of RBF schemes in the health sector in low and middle-income countries (LMIC).

Ten systematic reviews that met the inclusion criteria for this report were summarised. In addition, four evaluations of RBF schemes in LMIC were critically appraised, including financial incentives targeted at patients, individual providers, organisations, and governments. There are few rigorous studies of RBF and overall the evidence of its effects is weak. Financial incentives targeting recipients of healthcare and individual healthcare professionals appear to be effective in the short run for simple and distinct, well-defined behavioural goals. There is less evidence that financial incentives can sustain long-term changes. The use of RBF in LMIC has commonly been as part of a package that may include increased funding, technical support, training, changes in management, and new information systems. It is not possible to disentangle the effects of RBF and there is very limited quantitative evidence of RBF per se having an effect, other than in the context of conditional cash transfers to poor and disadvantaged groups in Latin America to motivate preventive care.

16. Pan American Health Organization (PAHO) (2010). Regional initiative for the elimination of mother-to-child transmission of HIV and congenital syphilis in Latin America and the Caribbean. Washington, D.C.: PAHO. Retrieved from https://www.unicef.org/lac/Regional_Monitoring_Strategy.pdf

Summary

PAHO/WHO and UNICEF have laid out technical strategies and are providing countries with tools to support the Regional Initiative for the Elimination of Mother-to-Child Transmission of HIV and Congenital Syphilis. This integrated strategy calls for coherent and comprehensive surveillance and monitoring and evaluation (M&E) systems at the country level that will permit establishing a baseline situation and measure progress toward elimination. This regional monitoring strategy is a companion document to the recommendations provided for the programmatic integration and scale up of prevention of mother-to-child transmission of HIV and congenital syphilis and the clinical guidance in support to this programmatic approach.

The document provides a basic foundation and guidance for tracking progress toward the Regional Initiative for the Elimination of Mother-to-Child Transmission of HIV and Congenital Syphilis as a public health problem. It is intended for national AIDS and sexually transmitted infection (STI) program managers, maternal and child health program managers, and M&E specialists in Latin America and the Caribbean. The document provides a basic set of indicators that should be present in countries' information systems, as well as a structured description for generation and interpretation of each of the essential regional indicators at the national level. Each indicator is accompanied by an indicator reference sheet that provides detailed information on measurement, data sources, and frequency.

17. Savedoff, W. D., & Partner, S. (2010). Basic economics of results-based financing in health. Results-Based Financing for Health. Washington, DC: World Bank. Retrieved from <https://www.rbfhealth.org/resource/basic-economics-results-based-financing-health>

Summary

The growing attention and experimentation with RBF has led to increasing clarity about its main features, and evidence is mounting with regard to the approach's strengths and limitations. This paper provides an economic foundation for understanding RBF programs, classifying them, and exploring their strengths and weaknesses.

18. Sibomana, S., & Reveillon, M. (2015). Improving health system efficiency. Burundi: Performance based financing of priority health services. Geneva, Switzerland: World Health Organization. Retrieved from http://www.who.int/health_financing/documents/Efficiency_health_systems_Burundi/en/

Summary

This report presents an overview of performance based financing of priority health services in Burundi, in an effort to improve health system efficiency. Health financing reforms are analyzed within the historical, social and economic context of Burundi's health system.

This analysis focuses on three most recent reforms: the policy of free health care for children under five years and pregnant women; performance-based financing; and the introduction of a precursor medical insurance card – the “Carte d'assistance médicale” (CAM). It also includes discussion of other schemes, such as civil-service health insurance – the “Mutuelle de la fonction publique” (MFP) – and the community-based health-insurance schemes. The pilot phases of PBF are discussed, including the integration of free health care (i.e. the user-fee exemption policy for children and pregnant women) into the PBF system, with the report providing an analysis of the impact on the health system, health outputs and outcomes, in addition to the remaining challenges and lessons learned.

19. The AIDSTAR-Two Project. (2011). The PBF handbook: Designing and implementing effective performance-based financing programs. Version 1.0. Cambridge, MA: Management Sciences for Health. Retrieved from <https://www.msh.org/resources/the-pbf-handbook-designing-and-implementing-effective-performance-based-financing-programs>

Summary

This PBF handbook presents a comprehensive overview of PBF from both the funders' and the implementers' perspectives in an effort to help facilitate the design, implementation, and evaluation of PBF programs that enhance service delivery and create positive health outcomes. The handbook is designed for use by both program design officers at US Government (USG) agencies at the central and country levels as well as for PBF implementers at national and local levels. Although the handbook provides an overview of PBF in general, the implementation section focuses on supply-side PBF, specifically through performance-based contracting (PBC), performance grants, and memoranda of understanding (MOUs).

20. Toonen, J., Canavan, A., Vergeer, P., & Elovainio, R. (2009). Learning lessons on implementing performance based financing from a multi-country evaluation. Amsterdam, The Netherlands: KIT (Royal Tropical Institute). Retrieved from http://www.who.int/health_financing/documents/performance_based_financing_synthesis_report/en/

Summary

This synthesis report explores the lessons learned on design, implementation and effects of financial incentives in the form of performance based financing in the health sector, as supported in Sub-Saharan Africa by the two Dutch NGO's Cordaid and HealthNet TPO. Towards this aim a multi-country study was undertaken led by the Royal Tropical Institute of the Netherlands (KIT) in collaboration with World Health Organization (WHO) Geneva and the implementing agencies in DRC, Burundi, Tanzania and Zambia. This synthesis report is based

on distilling the evidence and experiences from the countries studied, thereby presenting a meta-analysis of the results and providing lessons that may incite the partners involved to adapt their policies and practice. Overall, this study shows that PBF is a promising approach, but that more research and critical reflection are necessary to enable PBF to continue to adapt to each context and to evaluate if it is indeed the most effective approach for delivery of improved health services. The methodology of introducing the PBF approach requires operational research and field-testing of different approaches to understand which one leads to the most sustainable and successful results. The research agenda defines the priority areas that call for more evidence based analysis in order to strengthen the approach while ensuring that it becomes embedded within the health system.

21. United States Agency for International Development (August 2014). Integrated Health project (IHP) Results-based Financing Program. The Democratic republic of Congo. IHP RBF Manual (Draft)

Summary

This manual seeks to address the concerns of other reference works and documents on RBF, which often tend to be theoretical or general in nature, and are written for health funding program managers and designers. It is the result of internal work to design the IHP RBF model, discussions with the appropriate entities in the Ministry of Health, USAID and other stakeholders who work on RBF in the Democratic Republic of the Congo (DRC).

The DRC has selected Results-Based Financing (RBF) in order to reach its goals for improving health system performance. In compliance with the National Health Development Plan (NHDP 2011-2015), and USAID's objectives, USAID's Integrated Health Project in the DRC (IHP) has selected RBF as a strategy that will allow it to improve the quality, access and availability of the Minimum package of activities (MPA) and Complementary package of activities (CPA) services in the target Health Zones. The WHO's 2008 World Health Report recommended that primary health care be improved through four reforms (i.e. reform of services, reform of universal coverage, reform of leadership and reform of public policy) which correspond to those that were undertaken in the DRC through the Health Systems Strengthening Strategy (HSSS). The HSSS constitutes the health sector's contribution to effective and efficient progress toward reaching the Millennium Development Goals (MDGs) and these reforms relate simultaneously to governance, health financing and services. Since 2006, implementation of HSSS has resulted in best practices that need to be capitalized on, but it has also highlighted various problems that are of great concern to the government, represented by the Ministry of Public Health (MSP).

This manual relies on the HSSS, the NHDP, national directives for implementation of the RBF, the Ministry of Health's RBF operationalization guide, MSH's RBF experiences worldwide and the experiences of other RBF stakeholders in the DRC. It gives greater attention to the operational and procedural aspects, in a straightforward and practical style, focusing on IHP's specific context. The manual is intended for the various RBF players, in order to facilitate the implementation of RBF in the IHP project to help improve quality, access and management of health services.

22. USAID/Translating Research into Action (2016). Quality of Care in Performance-Based Incentives Programs. Mozambique Case Study. Retrieved from <http://www.tractionproject.org/sites/default/files/Mozambique%20Case%20Study%20edit%207.7.16.pdf>

Summary

The subject of this case study is a Performance-Based Financing (PBF) pilot program in Mozambique, funded by the US Centers for Disease Control and Prevention (CDC) and implemented by the Elizabeth Glaser Pediatric AIDS Foundation (EGPAF). This program is the largest and longest running PBF program in Mozambique and is one of the only PBF programs globally with a clinical focus on HIV/AIDS and tuberculosis outcomes. Data for this case study was gathered through document reviews and in-depth interviews with 3 PBF field coordinators, 2 verifiers from the Provincial Directorates of Health (DPS), 1 rural hospital provider, and 1 rural health center provider in Nampula and Gaza provinces.

The case study report describes the institutional arrangement of the pilot program in Mozambique, including the key stakeholders, verification process for the quantity and quality of services, incentive distribution to beneficiaries and the package of services under the PBF scheme. The assessment approach for measuring quality of care is also described – including the area of foci and number of indicators within the separate quality checklists. The report concludes with a description of the main challenges and lessons learned.

23. USAID/Translating Research into Action (2016). Quality of Care in Performance-Based Incentives Programs. Nigeria Case Study. Retrieved from [https://www.google.com/webhp?sourceid=chrome-instant&ion=1&espv=2&ie=UTF-8#q=Translating+Research+Into+Action+\(2016\).+Quality+of+Care+in+Performance-Based+Incentives+Programs.+Nigeria+Case+Study](https://www.google.com/webhp?sourceid=chrome-instant&ion=1&espv=2&ie=UTF-8#q=Translating+Research+Into+Action+(2016).+Quality+of+Care+in+Performance-Based+Incentives+Programs.+Nigeria+Case+Study)

Summary

The subject of this case study is a World Bank-funded performance-based financing (PBF) program implemented by the Government of Nigeria (GoN), called the Nigeria States Health Investment Project. Nigeria provides an interesting case, as the most populous country in Africa continues to face staggering maternal and child mortality rates. The World Bank team is conducting an impact evaluation of the PBF program that compares outcomes achieved at PBF facilities to those achieved at facilities with simple cash inputs. The GoN has prioritized making adjustments based on outcomes of the evaluation to push facilities to continually improve. Data for this case study were gathered through document reviews and in-depth interviews with project leaders.

The case study report describes the unique design aspect of this pilot which uses an additional control element to test the effect of PBF payments (i.e. a PBF approach has been applied in half of all Local Government Authorities (LGAs) in each state with the other half of each state's LGAs receive Decentralized Facility Financing (DFF)). The report also describes the key stakeholders, payment regulation and quality verification processes, incentive distribution to beneficiaries and the range of services provided both in health centers (primary facilities) and hospitals (secondary facilities). The assessment approach for measuring quality of care is also described – including the three categories of quality indicators assessed (i.e. structural, process and output) and the checklist revisions made over the years. The report concludes with a description of the main challenges and lessons learned.

24. Vergeer, P., Rogers, D., Brennan, R., Sarcar, S. (2010). Identifying indicators for performance-based contracting (pbc) is key: The case of Liberia. Results-based financing for health. Washington, DC: World Bank. Retrieved from <https://www.rbhealth.org/resource/identifying-indicators-performance-based-contracting-pbc-key-case-liberia>

Summary

This case study describes the rationale and process followed in selecting indicators for the PBC of NGOs through the Rebuilding Basic Health Services (RBHS) project in Liberia. The PBC model used in Liberia contracts NGOs to manage and support Ministry of Health and Social Welfare (MOHSW) health facilities but with the additional aim of building the MOHSW capacity in the process. The report describes the iterative, technical process of performance indicator selection, to be informed by consideration of local/national monitoring priorities in addition to political interests, due to competing priorities of stakeholders, and time constraints. It also describes the use of both performance indicators (which are linked to payment) and monitoring indicators, and the how final selection was determined based on feasibility, costs of validation, potential for unintended outcomes, and the extent of NGO control and influence over supply, availability and/or outcome. The report concludes with a discussion of lessons learned regarding PBC design and implementation, including the utility of impact indicators and the benefits of a phased approach to indicator selection for evaluation.

25. Vermeersch, C., Rothenbuhler, E., & Sturdy, J. (2012). Impact evaluation toolkit: Measuring the impact of results-based financing on maternal and child health. Washington, DC: World Bank. Retrieved from http://siteresources.worldbank.org/INTIMPEVALTK/Resources/IE_Toolkit_2012.08.21_ENG.pdf

Summary

The Toolkit was developed with funding from the Health Results Innovation Trust Fund (HRITF). The objective of HRITF is to design, implement and evaluate sustainable results-based financing (RBF) pilot programs that improve maternal and child health outcomes for accelerating progress towards reaching MDGs 1c, 4 & 5. The Impact Evaluation Toolkit is a hands-on guide on how to design and implement impact evaluations. While many parts of the toolkit can apply to impact evaluation in general, the focus of the toolkit is to help evaluate the impact Results-Based Financing (RBF) projects in the health sector on maternal and child health. The Toolkit is intended to support Task Team Leaders (TTLs), principal investigators (Principal Investigators), researchers, survey firms, government stakeholders and other in-country impact evaluation team members as they design and implement impact evaluations. The Toolkit contains eight modules that address different stages of the impact evaluation cycle. Each module contains Tools to help implement the corresponding stage in the impact evaluation. Throughout the toolkit, Country Spotlights illustrate real challenges and lessons learned in actual impact evaluations of RBF programs. Spotlights, questionnaires, example indicators, and other useful documents and tools are featured in their entirety on the Toolkit website.

26. World Health Organization (WHO). (2010). Monitoring the building blocks of health systems: A handbook of indicators and their measurement strategies. Geneva, Switzerland: World Health Organization. Retrieved from <http://www.who.int/healthinfo/systems/monitoring/en/>

Summary

The handbook discusses each building block separately according to a common format, and, for each component or building block, identifies a parsimonious set of indicators and related measurement strategies. The handbook does not address the measurement strategies and indicators across the entire results chain of the common monitoring and evaluation framework but rather focuses on systems “inputs,” “processes” and “outputs” as they relate to each of the six building blocks of health systems.

The selection of indicators was guided by the need to detect change and show progress in health systems strengthening. The indicators were initially identified by a small working group consisting of agency representatives and technical experts and then subsequently shared more broadly with country experts, and supported with case studies and reviews of country experiences. The handbook describes indicators, measurement approaches and strategies that (1) permit the establishment of country health system statistical profiles; (2) permit the monitoring of health systems and guides country and partner investments; (3) highlight gaps in terms of data availability and quality, pointing to needed investments in measurement strategies; and (4) contribute to a global consensus on how to monitor and benchmark health systems strengthening.

This handbook does not attempt to cover all components of the health system or deal with the various monitoring and evaluation frameworks. Instead, it is divided into six sections and structured around the WHO framework that describes health systems in terms of six core components or “building blocks”: (i) service delivery, (ii) health workforce, (iii) health information systems, (iv) access to essential medicines, (v) financing, and (vi) leadership/governance. Proposed “core indicators” are supplemented, where necessary, by additional indicators that may be used depending on the country health system attributes and needs, reflecting the scope and complexity involved in trying to measure multiple subsystem components.

27. World Health Organization (WHO). (2010). Nutrition landscape information system (NLIS). Country profile indicators: Interpretation guide. Geneva, Switzerland: WHO. Retrieved from http://www.who.int/nutrition/nlis_interpretationguide_isbn9789241599955/en/

Summary

The Nutrition Landscape Information System (NLIS) is one of three components of the Landscape Analysis on Readiness to Accelerate Action in Nutrition. Linking dynamically all existing WHO Global Nutrition Databases, as well as other existing food and nutrition-related data from partner agencies, NLIS was developed as a web-based tool, with an aim to identify, collect and organize those data systematically from various sources as well as to monitor any updates as new data become available. NLIS provides nutrition and nutrition-related health and development data in the form of automated country profiles and user-defined downloadable data.

This Indicator Interpretation Guide provides information on all nutrition-related indicators in standardized form. For each indicator, the Guide gives a general understanding and scientific definition, a description of consequences or implications, including cut-off-values for public health significance where these have been established, and reference to the source of information and suggested further reading.

28. World Health Organization (WHO). (2011) Monitoring, evaluation and review of national health strategies: A country-led platform for information and accountability. Geneva, Switzerland: International Health Partnership+ and WHO. Retrieved from <http://apps.who.int/iris/handle/10665/85877>

Summary

This document provides guidance to countries and partners for strengthening monitoring, evaluation and review (M&E) of national health plans and strategies (NHS). The way in which M&E is done is unique to each country, therefore this document is deliberately generic, setting out the essential attributes and characteristics for areas considered to be the foundation of a sound monitoring, evaluation and review platform for a national health strategy. Monitoring and evaluation includes a comprehensive framework that addresses indicator selection, related data sources, and analysis and synthesis practices, including quality assessment, performance review, communication and use. The document also provides an illustrative basket of indicators for monitoring health sector progress and performance, in addition to illustrative core indicators for maternal, new born and child health programme reviews along with relevant metadata and data sources.

29. World Health Organization (WHO). (2014). Consultation on improving measurement of the quality of maternal, newborn and child care in health facilities. Geneva, Switzerland: WHO. Retrieved from http://www.who.int/maternal_child_adolescent/documents/measuring-care-quality/en/

Summary

Global consultations have been held to prepare indicators in the area of maternal, newborn and child health. A list of potential indicators for measuring and monitoring quality of care was drawn up at expert meetings in 2010 and 2011, convened by the WHO Department of Maternal, Newborn, Child and Adolescent Health (MCA) and the Partnership for Maternal, Newborn and Child Health (PMNCH) in collaboration with the WHO departments of Reproductive Health and Research (RHR), Health Statistics and Information Systems (HSI) and Patient Safety and Quality Improvement (PSQ). The aim of the meeting was to achieve consensus on core indicators for global measurement and reporting on the quality of care provided for mothers, newborns and children in health facilities that could be used during the final years of work on meeting the Millennium Development Goals.

Participants agreed on a set of global core indicators for measuring and reporting the quality of maternal, newborn and child care and on the tools, methods and processes required. The existence of a set of global core indicators does not, however, mean that all other “indicators” are ignored or that the proposed global indicators are sufficient in themselves for subnational work to improve quality. These indicators should complement global coverage indicators and be considered markers of important aspects of the quality of health care for comparison within and across countries and to indicate the need for monitoring and improving the quality of health care for mothers, newborns and children. These indicators should be complementary and potential sources of areas for improvement. At subnational level (e.g. district or facility), additional complementary measures of quality of care are likely to be necessary to support continuous improvement, to be linked to a broader set of care processes for improving outcomes for mothers, newborns and children .

The purpose of quality indicators is to support continuous improvement in care, often called quality improvement. As global experience increases with health care processes, some authorities prefer the term “process improvement”. Issues of structure or resources are important in lower- and middle-income countries,

but the limiting factor is usually financial, with few options for other approaches to improvement. Better outcomes are certainly the goal of quality improvement, but these outcomes are achieved by improving the processes that lead to the outcome of interest. Most authorities would define quality of care processes in broad terms, to include not only the effectiveness of care (the degree to which it is based on science) but also its efficiency, patient-centeredness, accessibility, safety and timeliness.

30. World Health Organization (WHO). (2015). Global reference list of 100 core health indicators, 2015. Geneva, Switzerland: WHO. Retrieved from <http://www.who.int/healthinfo/indicators/2015/en/>

Summary

The *Global Reference List* of 100 Core Health Indicators for results monitoring is a standard set of 100 core indicators prioritized by the global community to provide concise information on the health situation and trends, including responses at national and global levels. The *Global Reference List* contains indicators of relevance to country, regional and global reporting across the spectrum of global health priorities relating to the post-2015 health goals of the Sustainable Development Goals. It is not an exclusive list of indicators and is not intended to limit information collection only to that which meets management and programmatic needs. Rather, the list is intended as a general reference and guide for standard indicators and definitions that countries can use for monitoring in accordance with their own health priorities and capacity.

The *Global Reference List* is a means to an end and aims to contribute to the reduction of reporting requirements and to promote greater alignment with, and investment in, one country-led health sector platform for results and accountability that forms the basis for global reporting. Indicators are presented according to multiple dimensions: (1) domains (i.e. health status, risk factors, service coverage and health systems); (2) subdomains (i.e. communicable diseases (HIV/AIDS, sexually transmitted infections [STIs], tuberculosis [TB], malaria, neglected tropical diseases, outbreaks, epidemic diseases), reproductive, maternal, newborn, child and adolescent health (including sexual health and reproductive rights and immunization), non-communicable diseases (including chronic disease, health promotion, nutrition, mental health and substance abuse), injuries and violence and the environment; and (3) levels of the results chain framework (input, output, outcome and impact), as defined for the International Health Partnership (IHP+) technical monitoring and evaluation (M&E) framework.

31. World Health Organization (WHO). (2016). Standards for improving quality of maternal and newborn care in health facilities. Geneva, Switzerland: WHO. Retrieved from http://www.who.int/maternal_child_adolescent/documents/improving-maternal-newborn-care-quality/en/

Summary

This paper presents the strategic directions through which WHO's Department of Maternal, Newborn, Child and Adolescent Health (MNCAH) will address the key challenges and take the lead in formulating the Organization's contributions to attaining MDGs 4 and 5. It highlights the linkages of MNCAH with other health areas, goals and targets, in particular those related to: reproductive health goals; MDG 1: Eradicate extreme hunger and poverty; MDG 3 Promote gender equality and empower women; MDG 6: Combat HIV/AIDS, malaria and other diseases; and the broader agenda for women, children and adolescents beyond

2015. MNCAH will act as the platform for the equitable delivery of quality, integrated health services for mothers, newborns, children and adolescents.

32. World Health Organization (WHO). (2016). WHO recommendations on antenatal care for a positive pregnancy experience. Geneva, Switzerland: WHO. Retrieved from http://www.who.int/reproductivehealth/publications/maternal_perinatal_health/anc-positive-pregnancy-experience/en/

Summary

The World Health Organization (WHO) envisions a world where every pregnant woman and newborn receives quality care throughout the pregnancy, childbirth and the postnatal period. Within the continuum of reproductive health care, antenatal care (ANC) provides a platform for important health-care functions, including health promotion, screening and diagnosis, and disease prevention. It has been established that by implementing timely and appropriate evidence-based practices, ANC can save lives. Crucially, ANC also provides the opportunity to communicate with and support women, families and communities at a critical time in the course of a woman's life. This comprehensive WHO guideline on routine ANC for pregnant women and adolescent girls provides recommendations to complement existing WHO guidelines on the management of specific pregnancy-related complications. The guidance is intended to reflect and respond to the complex nature of the issues surrounding the practice and delivery of ANC, and to prioritize person-centred health and well-being – not only the prevention of death and morbidity – in accordance with a human rights-based approach. The scope of this guideline was informed by a systematic review of women's views, which shows that women want a positive pregnancy experience from ANC. The document highlights the importance of providing effective communication about physiological, biomedical, behavioural and sociocultural issues, and effective support, including social, cultural, emotional and psychological support, to pregnant women in a respectful way. These communication and support functions of ANC are key, not only to saving lives, but to improving lives, health-care utilization and quality of care. These ANC recommendations are intended to inform the development of relevant health-care policies and clinical protocols.

The guideline was developed using standard operating procedures in accordance with the process described in the WHO handbook for guideline development, including use of the DECIDE (Developing and Evaluating Communication Strategies to support Informed Decisions and Practice based on Evidence) framework by the Guideline Development Group (GDG). It includes 39 recommendations related to five types of interventions: A. Nutritional interventions, B. Maternal and fetal assessment, C. Preventive measures, D. Interventions for common physiological symptoms, and E. Health system interventions to improve utilization and quality of ANC. Interventions are either recommended, not recommended, or recommended under certain conditions based on the GDG's judgements according to the DECIDE criteria, which informed both the direction and context, if any, of the recommendation.

WORKING PAPER

MEASURE Evaluation

University of North Carolina at Chapel Hill

400 Meadowmont Village Circle, 3rd Floor

Chapel Hill, North Carolina 27517

Phone: +1-919-445-9359 • measure@unc.edu

www.measureevaluation.org

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