INTEGRATION OF IMMUNIZATION AND FAMILY PLANNING SERVICES: AN ANNOTATED BIBLIOGRAPHY: v.11.27.12


Summary: In early 1992, a two-phased pilot project was implemented in rural Bangladesh. Phase 1 integrated a micro-credit program for poor women with a family planning and expanded program of immunization (EPI). Phase 2 integrated with an essential services package (ESP) in reproductive and maternal and child.

- **Key Findings:** Data on the project show that there was a significant increase in contraceptive use and a decline in fertility since the initiation of the first phase of the project. There also was an increase in the dissemination of the first phase of the project. There also has been an increase in the dissemination of information on, and utilization of, ESP medical technologies in the intervention community at large.


Summary: The presence of both integrated and non-integrated programmes in many countries suggests there may be benefits to either approach, but the relative merits of integration in various contexts and for different interventions have not been systematically analysed and documented. In this paper we present findings of a systematic review that explores a broad range of evidence on: (i) the extent and nature of the integration of targeted health programs that emphasize specific interventions into critical health systems functions, (ii) how the integration or non-integration of health programs into critical health systems functions in different contexts has influenced program success, (iii) how contextual factors have affected the extent to which these programs were integrated into critical health systems functions.

- **Key Findings:** Our analysis shows few instances where there is full integration of a health intervention or where an intervention is completely non-integrated. Instead, there exists a highly heterogeneous picture both for the nature and also for the extent of integration. Health systems combine both non-integrated and integrated interventions, but the balance of these interventions varies considerably.

Briggs CJ and Garner P. 2006. Strategies for integrating primary health services in middle-and low-income countries at the point of delivery. Cochrane Database
Summary: Strategies to integrate primary health care aim to bring together inputs, organization, management and delivery of particular service functions to make them more efficient, and accessible to the service user. This study examined the effectiveness of integration strategies at the point of delivery with the objective, to assess the effects of strategies to integrate primary health care services on producing a more coherent product and improving health care delivery and health status. This review searched the Cochrane Effective Practice and Organization of Care Group specialized register, MEDLINE, EMBASE, Socio Files, Popline, HealthStar, Cinahl, Cab Health, International Bibliography of the Social Sciences, and reference lists of articles. As well as the Internet and World Health Organization (WHO) library database, hand searched relevant WHO publications and contacted experts in the field.

- **Key Findings:** Three cluster randomized trials and two controlled before and after studies were included, with three types of comparison: integration by adding on an additional component to an existing service (family planning); integrated services versus single special services (for sex workers); integrated delivery systems versus a vertical service (for family planning); and packages of enhanced primary child care services (integrated management of childhood illnesses) vs. routine child care. Few studies of good quality, large and with rigorous study design have been carried out to investigate strategies to promote service integration in low and middle income countries. All describe the service supply side, and none examine or measure aspects of the demand side. Future studies must also assess the client's view, as this will influence uptake of integration strategies and their effectiveness on community health.


Summary: Systematic screening is a simple procedure allowing providers to address multiple needs of a client during a single visit and has been proven successful in operations research. In 2009, postpartum systematic screening (PPSS) covering postnatal care, antenatal care, FP (including counseling on postpartum FP), immunization and other relevant services was piloted in Northern Nigeria and an evaluation was conducted. The evaluation aimed to determine the effectiveness of PPSS as a means to increase service use, particularly postpartum FP. The evaluation used pre- and post-intervention approach and sources of data included: observations of provider-client interactions, provider interviews, client exit interviews and service statistics.

- **Key Findings:** Results indicated that with the PPSS checklist, clients attending immunization, newborn care and pediatric/sick baby services were more likely to be screened for FP, postnatal care and immunization services (17% vs. 68%, 13% vs. 57% and 47% and 89%, respectively). In response to high unmet need of FP (88%), the majority (73%) of trained providers knew at least three FP methods which are suitable for postpartum women and all of them were providing FP counseling to pregnant or postpartum women. While FP referral increased dramatically, few
women (15%) said they would go for referrals on the same day. The results demonstrated the feasibility and practicality of this integrated approach but more needs to be done to address referral and potential scale-up issues.


**Summary:** This paper discusses the process of integrating child survival strategies and other health services with immunization in Africa. Immunization is arguably the most successful health program throughout the continent, making it the logical vehicle for add-on services. Strong health systems are the best way of delivering cost-effective child survival interventions in a most sustainable manner.

- **Key Findings:** While the data to support integration are limited, the information at hand suggests the effectiveness of the strategy. Where immunization performance is strong, immunization contacts may be excellent vehicles for additional interventions such as de-worming or Integrated Management of Childhood Illness (IMCI). But where an immunization service is struggling, adding another child survival intervention on to immunization might be the straw that breaks its back. Health managers have a wide range of options for adding on to immunization services, but the best choice will depend very much on local situations.


**Summary:** In Liberia, MCHIP and the MOHSW have designed a pilot project integrating family planning and routine infant immunization services. The approach involves training vaccinators to provide a few short, targeted FP messages and same-day FP referrals to mothers bringing their infants to the health facility for vaccination. The emphasis of the approach is co-located provision of same-day services, with the vaccinators serving as the critical referral link between points of service delivery. A mid-process assessment and 2-day refresher trainings in each county were scheduled for August 2012 in order to address implementation challenges and identify any necessary programmatic adjustments that could enhance the approach for the duration of the pilot phase of the project. This report details key findings and recommendations that arose from the process assessment and refresher training.

- **Key Findings:** Key challenges identified during the process assessment included FP and EPI commodity stock-outs, client privacy at the EPI station, staffing shortages and long wait times for client, and persisting client views that FP is not suitable for women with small infants. In response to the process assessment findings, a number of recommendations for program adjustments were made.


**Summary:** In 2007, USAID/BASICS and the Rwandan Ministry of Health developed and pre-tested job aids for service providers that were designed to improve communication with mothers during vaccination encounters.

- **Key Findings:** The messages included in the job aids promoted improved awareness of birth spacing and increased uptake of family planning services, from 21% to 36% according to a small pre/post survey. The project also increased awareness about the importance of preventing mother-to-child transmission (PMTCT) of HIV.


**Summary:** In Madagascar, unmet need to family planning is estimated as 23.5%. While women may have limited contact with the healthcare system for themselves, 74% of their infants receive at least some of their immunizations during their first year of life, and in urban settings and some regions, this percentage is even higher.

- **Key Findings:** Immunization services in Madagascar could serve as a prime opportunity for family planning integration. With funding from the United States Agency for International Development (USAID), Family Health International (FHI) worked with the National Institute for Public and Community Health to design an assessment to examine the feasibility of integrating family planning into immunization services.


**Summary:** To address the high unmet need for family planning (FP) among women during the extended postpartum period, research was completed in Ghana and Zambia to determine if integrating FP messages and referrals into early child immunization visits could increase contraceptive use among this group of women. Child immunization providers were trained to use a job aid designed to increase the quantity and quality of referrals made for FP services, which was ultimately expected to increase FP use in the postpartum period. A cluster randomized control study design was used to test this integrated approach. Data were collected through pre- and post-test surveys with female clients and through in-depth interviews with providers. The study assessed: a) client knowledge about Lactational Amenorrhea Method (LAM) and other types of guidance on risk of pregnancy, b) referrals for FP services, and c) levels of non-condom, modern FP method use.
Key Findings: There were no positive results in the first two areas following the intervention. The intervention did not lead to a statistically significant contraceptive uptake. Small increases in contraceptive uptake in Zambia did occur in the intervention group, but this finding was not statistically significant. It was found that immunization providers did not always use the job aid consistently and when they did, not in the manner prescribed in the study design (i.e. in one-to-one discussions). However, all 30 immunization providers interviewed felt that giving FP information to mothers was important and should be a part of their job. More work is needed to understand the most effective messages to give to women (and potentially men) during immunization contacts and elsewhere during the postpartum period about FP and the risk of pregnancy. Challenges in implementing the intervention suggest that a different approach may be more appropriate and effective in the immunization clinic setting.


Summary: FHI 360 aimed to assess the quality of integrating family planning into immunization services and to develop recommendations for strengthening integrated service delivery among women in the extended postpartum period in the India state of Jharkhand. FHI 360 and CARE India conducted a cross-sectional descriptive study to assess the quality of integrated services provided under the National Rural Health Mission (NRHM) in Lohardaga district of Jharkhand.

Key Findings: Approximately one-quarter of mothers interviewed were at risk of pregnancy. Most could not correctly perceive their risk of pregnancy, believing their return to fertility was tied solely to the return of menses. Providers reported discussing spacing of pregnancy and family planning methods with mothers during group counseling sessions. The providers reviewed some elements of the lactational amenorrhea method (LAM) but could not accurately identify and counsel women on all three LAM criteria. Mothers reported receiving integrated FP information or services much less frequently than providers reported offering them. Approximately one-third of the women reported ever discussing family planning methods or the importance of spacing during immunization services. Less than 5% reported receiving any family planning information or services during their most recent immunization visit. The service-delivery locations were crowded and lacked private spaces for family planning services. Most locations did not have basic medical supplies, and family planning commodities were absent in many locations. Providers and managers cited insufficient family planning training and a lack of guidelines for providing integrated services.

Summary: In the intervention, routine child immunization providers gave concise messages to women during group education sessions, distributed brochures, and used a screening tool with all mothers to assess pregnancy risk using criteria from the Lactational Amenorrhea Method (LAM). The screening tool also instructed vaccinators to give a brief counseling message depending upon a mother's pregnancy risk classification, including a referral for same-day family planning services for those at such risk. All facilities in the study offered family planning provision on the same day, at the same time, and in the same building as immunization services. The study used a cluster randomized, two-group, separate sample, pre/post-test design in 14 randomly selected health facilities with over 800 women included in both the baseline and follow-up groups, as well as an overall total of 118 providers interviewed. The facilities were from all areas of the country. The post-test data collection occurred after a 12-month intervention.

- Key Findings: The key finding in the study concerned change in contraceptive use over time. At baseline, contraceptive prevalence in the intervention sites was 49% and increased to 57% at follow-up. In the control sites, prevalence at baseline was 58% and declined to 51% at follow-up. The 8% increase in the intervention together with the 7% decrease in the control resulted in a 15% difference between the intervention and control groups when comparing baseline to follow-up results. This change was statistically significant (p<0.05).


Summary: This advocacy brief discusses the rationale for integrating family planning and immunization services, identifies possible service delivery models, and provides a brief overview of existing evidence on the topic.


Summary: DHS data (2003-2007) from five sub-Saharan African countries were used to calculate missed opportunities to promote family planning at the time of infant immunization, and to promote infant immunization during antenatal care; and the potential benefit of service integration on coverage rates of infant immunization and family planning services. Unmet need for family planning among women who brought their child for the first dose of DPT1 ranged from 27.9% (DRC) to 45.3% (Uganda). Among women who attended at least one antenatal care visit, 10.0% (Kenya) to 22.7% (DRC) did not subsequently bring their child for DPT1.

- Key Findings: If family planning services were provided to women when they brought their child for infant immunization, overall unmet need for family planning could decrease by 3.8 (DRC, from 24.4 to 20.6%) to 8.9 (Uganda, from 40.6 to 31.7%) percentage points. Likewise, if infant immunization were effectively promoted to all women who attended antenatal care visits, DPT1 coverage could increase by 8.8 (Mali, from 83 to 91.8%) to 21.3 percentage points (DRC, from 70.9 to 92.2%).
conclusion, integrating antenatal care, family planning and infant immunization services has the potential to increase coverage of both infant immunization and family planning services.


Summary: Vaccine-preventable infections are common in adults and associated with significant morbidity and mortality. Since 2005, the Advisory Committee on Immunization Practices (ACIP) has released more than 15 recommendations governing the use of new vaccines, as well as recommendations for regimen changes for use of older ones, in adults. Understanding these changes and incorporating them into practice is essential to protect adults from vaccine-preventable infections.

 Key Findings: Because many women receive care in obstetric and gynecologic practices, integrating these services into reproductive health care provides an opportunity to offer vaccination to many women who otherwise might not be offered these recommended vaccines.


Summary: The purpose of this study is to examine the relationship between MCH service utilization and contraceptive use in five countries: Bolivia, Guatemala, Indonesia, Morocco, and Tanzania. The analysis is carried out at the level of the individual woman, with contraceptive-use status modeled as a function of: (1) the availability, quality, and packaging of MCH and family planning services; (2) community- and individual level determinants of health service and contraceptive use; and (3) intensity of prior MCH service use. Data for the analysis come from DHS data on women of reproductive age linked with data from service-availability surveys. We use full-information, maximum-likelihood regression techniques to control for the effects of unobserved heterogeneity that might otherwise bias our estimates.

 Key Findings: In three of the five countries (Morocco, Guatemala, and Indonesia) the results of the analysis suggest that the intensity of MCH service use is positively associated with subsequent contraceptive use among women, even after controlling for observed and unobserved individual- and community-level factors. This result lends support to the proposition that, at least in the context of these three countries, the intensity of MCH service per se use does have a “causal” impact on subsequent contraceptive use, even after controlling for factors that “predispose” sample women to use health care services.

Summary: Quality of care is currently construed to mean matching population needs with service provision. Improvements in African services are valued when there is a constellation of multiple services provided in a fixed center. In Togo, a simple intervention was developed to link childhood immunization and family planning services. Before immunizing each child, the service provider would make three family planning statements to the child's mother. The statements were salient and easy to remember: “Madame, your child is still young, and you should be concerned about having another pregnancy too soon.” “This clinic provides family planning services that can help you delay your next pregnancy.” And, “You should visit the family planning services after the immunization today for more information.” Clinic staff were trained in a day and a half orientation session. The referral message was evaluated with a quasi-experimental design. Impact was measured in terms of knowledge of family planning methods and availability of family planning in the clinic, intention to use a contraceptive method, and the history of contraceptive use. Sixteen urban and rural clinics were involved. The sample included 1000 randomly selected women who had just had their children immunized. The pretest was conducted in January, 1992, and the posttest was conducted in August, 1992, 6 months after the intervention in the study. Service statistics were also collected from 9 months prior to the intervention until September, 1992. Pretest and post test women were similar demographically. Recall levels were also similar.

Key Findings: The results indicated that control group persons did not show any change in their awareness of family service availability in the clinic. The increase in the study group was from 40% to 58%. Difference between awareness in the control and study groups was 8% before the intervention and 22% after. Women desiring a longer birth-spacing period were more likely to be aware of service availability. The mean number of acceptors in the study group increased significantly from 200 to 307; average monthly number of family planning users also increased significantly from 1035 to 1311, which was a significant difference from control group users. Both groups showed significant increases in number of vaccines administered monthly in the study period.


Summary: As an intervention against diarrhea, promotion of breastfeeding has been suggested by the World Health Organization (WHO). This study from Guinea Bissau we tested the possibilities of promoting breastfeeding at a local health centre. A total of 1250 children were allocated randomly into two groups. Mothers in the intervention group were given health education according to WHO’s recommendations about exclusive breastfeeding for at least the first 4 months, prolonged breastfeeding and family planning methods.

Key Findings: At 4 months of age, introduction of weaning food was delayed in the intervention group (risk rate 1.18 [95% CI 1.03-1.38]) and more mothers had an IUD inserted (risk rate 2.45 [1.27-4.70]). The median length of breastfeeding was 23 months in both groups. There was no difference in the number of children weaned early. Although exclusive breastfeeding was promoted by the intervention, early weaning of children in special risk groups was not avoided. An evaluation of the impact of the WHO recommendations in different settings is warranted.
Summary: Integrating family planning services with other health services may be an effective way to reduce unmet need. However, greater understanding of the evidence on integration is needed. Studies that evaluated the integration of family planning with any other type of health service were identified by searching five databases. To be included, studies had to have: been published in English between 1994 and 2009; used either a single-group pre- and posttest design or a two-group control or comparison design; and reported a family planning-related behavioral or reproductive health outcome.

Key Findings: Nine studies met the inclusion criteria. The integration interventions ranged from simple referrals between providers of existing services to fully integrated, community-based delivery of education and services. One evaluation used a quasi-experimental design; two used case-control comparison designs; two used combination designs; and the rest used either a single-group pre- and posttest design or a two-group cross-sectional design. Seven studies found improvements in family planning-related outcomes, although not all reported the significance of these changes; another reported mixed results and one found no effect. Of the studies that examined providers’, clients’ or community members’ perspectives of integration, all reported overall satisfaction. No studies provided an economic analysis.

The evidence supporting the integration of family planning with other health services remains weak, and well-designed evaluation research is still needed. Future research should report outcomes for all health areas being integrated and should investigate in more detail the perspectives of providers, clients and community members and assess the cost-effectiveness of integration.


Summary: In an effort to more systematically understand mechanisms of effective maternal, newborn and child health and family planning (MNCH/FP) integration, ACCESS-FP carried out an assessment of an integrated program in Northern Nigeria. Although FP services are made available to all women, a specific aspect of the program was to integrate messages and services tailored for the needs of women in their first year postpartum. This assessment examined perceptions of policymakers, providers and community members with regard to integrated MNCH/FP services, as well as factors facilitating and negating the use of these services.

Key Findings: From the point of view of providers and clients, all services were not considered equal. Providers saw it as a gateway for other services, articulating the perception as the beginning of a cycle. In terms of priority MNCH services, labor and delivery was not ranked high in importance among services by either service providers or women’s groups. Providers and policymakers agreed with the approach of incorporating FP with routine MNCH. They attributed increases in client satisfaction and increases in service use (particularly of FP) to this systematic
Integration. Women did not appear to be daunted by the relatively complex service schedules. Barriers for integrated services included the issue of staff time identified by policymakers and providers. The findings from this assessment indicate that an approach that systematically increases MNCH/FP integration is feasible and can have a positive effect on service use, particularly FP, even in a very conservative environment.


**Summary:** Tetanus is responsible for 550,000 neonatal deaths globally each year. Tetanus toxoid vaccines are provided through the World Health Organization and the United Nations Children’s Fund for national immunization programs to prevent infant deaths from tetanus. The vaccines are manufactured and controlled under strict standards.

- **Key Findings:** Rumors have circulated recently in Mexico, Tanzania, Nicaragua and the Philippines that WHO and UNICEF are using women as guinea-pigs to test a contraceptive vaccine given to them under the guise of tetanus toxoid vaccine. These rumors, apparently initiated by so-called pro-life' groups, are completely untrue. The vaccines do not contain contraceptive vaccines or any other substance which interferes with fertility or pregnancy and their labeling accurately describes their actual contents. The false claims made by these groups have had an adverse impact on immunization programs in all four countries.


**Summary:** To improve the health and survival of mothers and infants in the postnatal period, the Ministry of Health (MOH) in Kenya increased both the recommended timing and content of postnatal services a women and her infant should receive to at least three assessments within the first six weeks after childbirth. The objectives of the study were develop and introduce a strengthened postnatal care package into one hospital and four health centers in one district, to document the feasibility, acceptability and quality of care of the strengthened postnatal care, and to evaluate the effectiveness of the postnatal package on women’s reproductive health behaviors.

A postnatal care–family planning (PNC-FP) orientation package for providers was developed by ACCESS-FP, DRH and FRONTIERS. This incorporated relevant maternal and newborn health care services in the postnatal period with a specific focus on postpartum family planning. The three day orientation training included staff from the maternity and MCH-FP units from the four health facilities, as well as provincial and district RH trainers-supervisors.

- **Key findings:**
  - Facilities were prepared or needed minimal adjustments to provide strengthened PNC and postpartum family planning services.
  - Provider knowledge improved in maternal and newborn care.
• Overall quality of care improved, especially in counseling for family planning and in ensuring the mother had a physical checkup during the 48 hour, two week and six week consultations.

• Substantial improvements in uptake of family planning postpartum were noted.

• Providers are both satisfied and confident with the care they give to postpartum women.

• Postpartum women are willing to come for the increased number of postnatal checkups and to bring their infants; they were also significantly more likely to recommend the services to a friend.

• Postpartum women now start using FP methods much earlier (i.e., within two months) after the intervention.


**Summary:** Long-acting reversible contraception (LARC) is underused in many countries in sub-Saharan Africa. Many previous attempts to increase uptake of this important class of contraception have not been successful. This program in Zambia employed 18 dedicated providers of LARC, placed them in high volume public sector facilities and collected routine, anonymous information over a 14-month period. The research team tallied uptake of LARC, analyzed user characteristics to see what populations were reached by the program and compared this to nationally representative data. We also estimated costs per couple-year of protection of the program.

- **Key Findings:** In a 14-month period, 33,609 clients chose either a subdermal implant (66%) or an intrauterine device (34%). The program reached a younger and lower parity population compared to nationally representative surveys of Zambian women using contraception. The estimated program costs, including the value of donated commodities, averaged $13.0 per couple-year of protection. By having the necessary time, skills and materials — as well as a mandate to both generate informed demand and provide quality services — dedicated providers of LARC can expand contraceptive choice. This new approach shows what can be achieved in a short period and in a region of the world where uptake of LARC is limited.


**Summary:** Outreach services are used systematically to deliver immunization and health services to individuals with insufficient access to health facilities in lower-income countries. Currently, the topic of integrated service delivery during immunization outreach lacks the attention paid to integration at fixed sites or during campaigns. Published and gray literature in public health databases and on organization websites were reviewed, yielding 33 articles and gray literature documents for a literature review of experience integrating other services with routine immunization at outreach sessions.

- **Key Findings:** The current policy climate favors service integration as a strategy for increasing the equity and efficiency of important health interventions. However, integration may also present some risk to well-established and resourced
Interventions, such as immunization, which must be recognized as programs compete for limited resources. Experience reveals integration opportunities in planning and intersectoral coordination, training and supervision, community participation, pooled funding, and monitoring. The reviewed literature indicates that successful integration of health interventions with immunization at routine outreach sessions requires well-planned and implemented steps. It also highlights the need for additional studies or feedback on planning and implementing integrated outreach services in lower-income countries.


Summary: A key component of Rwanda’s primary health care (PHC) strategy is the Expanded Program of Immunizations (EPI) that began during 1980. The EPI is fully integrated within the maternal and child health care (MCH) system, offering childhood immunization on demand as part of the regular delivery of MCH well-baby and curative services. Staff who provide EPI services are not trained in the provision of family planning (FP) services, however. Immunizations are offered at fixed MCH centers (termed fixed centers) and by mobile teams that circuit remote areas once a month. These mobile teams provide only immunization services and refer all other well-baby and nonemergency curative care to the nearest clinic or community health agent. This existing system could also provide FP services, since both the FP and EPI program are priority components of the MOH’s MCH delivery system. Women who attend clinic services for their infants’ immunizations are also in the postpartum period, which is a critical time for providing FP advice and services. This has led to a study of two approaches to the integration of FP within the EPI. In the first, FP information and counseling (IEC) will become a regular part of each immunization session in a sample of fixed centers. In the second, FP IEC and services will become a regular part of each immunization session in a sample of fixed centers and mobile teams. A sample of fixed centers and mobile teams where the EPI and FP services are unaffected by the study’s interventions will be drawn as a control. EPI staff who have not been trained in FP will be trained by the Office of Population. The interventions will be implemented for a year to allow the inclusion of women who may be breastfeeding at the time of the EPI and may accept FP after weaning. A pre-intervention survey was made of 1200 EPI clients and a similar survey will be undertaken immediately after the 12-month-period to ascertain any changes in the knowledge, attitudes, and practices of the target population. Service statistics will provide monthly indications of the numbers of acceptors served.


Summary: The integration of family planning (FP) within other preventive health care services is an explicit goal of the Togolese Ministry of Health. Since the populations served by the Expanded Program of Immunizations (EPI) and by FP programs are, to a great extent, the same, a horizontally integrated FP program could be developed by linking these services. Enhancing service delivery requires identifying the optimal time for introducing FP during EPI consultation. In this study a random sample of maternal and child health clinics was divided into four groups, with one serving as a control and three, categorized by
the type and timing of childhood immunization provided by the EPI, horizontally integrating FP services. FP information, education, and communication (IEC) occurred during the immunization session and included one-on-one counseling as well as group talks. A pre/post-test interview with 500 clients per study group measured changes in their knowledge, attitudes, and practice (KAP) and satisfaction. Medical records revealed the effect of the three interventions on the number of FP consultations, new acceptors, and immunization sessions conducted.

- **Key Findings:** Awareness of FP service availability increased among study clients as did the number of new acceptors of oral contraceptives, injectables, or IUDs (from an average 200 to 307 clients/month). This remained relatively unchanged in the control group. The difference between the test and control groups grew significantly during the test period. Approximately 50% of the test clinics’ new acceptors stated that they had been referred by the EPI provider. Additional simplified messages in established clinical IEC practices was met with initial resistance by EPI providers, however, and required considerable effort before it was adopted by all of the EPI staff. However, use of the referral message increased awareness and use of FP services by EPI clients with no negative impact on EPI services.


**Summary:** In many developing countries, postpartum women have little contact with the formal health care system. The full utilization of health facilities is often hampered by a variety of socio cultural, operational, and logistic barriers. However, where full service clinics offer the Expanded Program of Immunization (EPI) and growth monitoring activities, mothers are in regular and continuing contact with the health care system and a unique opportunity exists to integrate family planning (FP) services. This operations research study, was designed to test the feasibility of such an integration in Kinshasa, Zaire. The overall objective was to make FP more available and accessible to postpartum women. The study, implemented in a polyclinic run by the university hospital system in Kinshasa, examined the extent to which the integration of FP with EPI and growth monitoring affects contraceptive knowledge and use. A quasi-experimental, time-series design was used to collect data and measure outcomes. Data on contraceptive knowledge were collected at regular intervals from all women who were already attending the facility and from those who began attending during the study period.

- **Key Findings:** During the 4-month period of April to July, 1991, 14% of 533 clients accepted FP services. The monthly trend in acceptance increased rapidly, from 3% in April to 43% in July. The program began with an emphasis on group education, but the emphasis shifted to counseling and service provision. Although this initial trend was encouraging, civil disturbances in Zaire interrupted the implementation of the study.

**Summary**: In the past five years, family planning has received limited donor support and government attention in Mali. Women of reproductive age are largely unaware of the health benefits of family planning, and knowledge of family planning methods is low. As a result, contraceptive usage among all population segments, including women residing in urban areas and women who have secondary education or higher, has stagnated or declined. With support from the Dutch Government under the Strategic Alliance with International Non-Governmental Organisations (SALIN), PSI/Mali is currently addressing the estimated 30% unmet need for family planning in Mali by raising awareness among women of reproductive age at clinic immunization days for children under 1, and providing them with high-quality family planning services.


**Summary**: The year after a woman gives birth presents a rising risk of an unwanted conception and an often frustrated desire for contraceptive protection. At present, contraceptive use levels during this period fall short, resulting in unplanned pregnancies and unwanted childbearing.

Data from 27 surveys conducted as part of the Demographic and Health Surveys series between 1993 and 1996 are analyzed to assess intentions to practice contraception and unmet need for it, both in the first year after birth. Unmet need is partly redefined here to focus on future wishes rather than on past pregnancies and births. Across the 27 countries, there is much unsatisfied interest in, and unmet need for, contraception. Unweighted country averages indicate that two-thirds of women who are within one year of their last birth have an unmet need for contraception, and nearly 40% say they plan to use a method in the next 12 months but are not currently doing so. Moreover, of all unmet need, on average nearly two-fifths fall among women who have given birth within the past year. Similarly, nearly two in five women intending to use a method are within a year of their last birth. The two groups—those with an unmet need and those intending to use a method—overlap; their common members include nearly all of those intending to use a method and about two-thirds of those with an unmet need (which is the larger group of the two). Only trivial proportions of both of these groups want another birth within two years. Between 50% and 60% of pregnant women make prenatal visits or have contact with health care providers at or soon after delivery, and additional contacts occur for infant care and other health services.

Women who have recently given birth need augmented attention from family planning and reproductive health programs if they are to reduce their numbers of unwanted births and abortions and to lengthen subsequent birth intervals. Prenatal visits, delivery services and subsequent health system contacts are promising avenues for reaching postpartum women with an unmet need for and a desire to use family planning services.

Summary: The final report is presented of a study conducted in Rwanda in 1992–93 to determine whether offering family planning information and services at the same time that women bring their children for immunization would result in increased contraceptive usage. Eight hundred and forty-six women were given a pretest in July 1992, and 3084 women completed a post-test in August and September 1993. Service statistics were compared for the twelve months of the intervention from July 1992 to June 1993 to determine whether women attending health facilities with integrated family planning and expanded program of immunization (EPI) programs had higher acceptance rates for family planning than women in the control facilities where family planning and EPI activities remained separate. The study was affected to some degree by the civil war and political turmoil in Rwanda, but some conclusions were possible nonetheless.

Key Findings: Pretest results indicated that women attending the facilities were aware of the family planning and vaccination programs. One hundred percent of the women bringing their children to be immunized knew at least one of the six illnesses covered, and over 98% knew more than one contraceptive method. The pretest showed that 100% of women in the study group wanted at least one more child. After the intervention, around 30% stated they wanted no more children. Few positive changes in contraceptive usage were reported, but there was a decline in contraceptive usage in the entire country after November 1991 associated with the political crisis. Service statistics indicated a greater increase in new acceptors in the group with integrated family planning and EPI services. The post-test showed that 71% of health workers and nearly 90% of clients were satisfied with the integrated program. The study demonstrated that integration of family planning and immunization services is feasible and desirable. Before the services can be integrated in all health facilities in Rwanda, however, it will be necessary to assure the availability of adequate supplies.


Summary: Integration of routine vaccination and other maternal and child health services is becoming more common and the services being integrated more diverse. Yet knowledge gaps remain regarding community members and health workers acceptance, priorities, and concerns related to integration. Qualitative health worker interviews and community focus groups were conducted in 4 African countries (Kenya, Mali, Ethiopia, and Cameroon).

Key Findings: Integration was generally well accepted by both community members and health workers. Most integrated services were perceived positively by the communities, although perceptions around socially sensitive services (eg, family planning and human immunodeficiency virus) differed by country. Integration benefits reported by both community members and health workers across countries included opportunity to receive multiple services at one visit, time and transportation cost savings, increased service utilization, maximized health worker efficiency, and reduced reporting requirements. Concerns related to integration included being labor intensive, inadequate staff to implement, inadequately trained staff, in addition to a number of more broad health system issues (eg, stockouts, wait...
Communities generally supported integration, and integrated services may have the potential to increase service utilization and possibly even reduce the stigma of certain services. Some concerns expressed related to health system issues rather than integration, per se, and should be addressed as part of a wider approach to improve health services. Improved planning and patient flow and increasing the number and training of health staff may help to mitigate logistical challenges of integrating services.


Summary: Does the utilization of modern maternal and child health (MCH) services influence subsequent contraceptive use? The answer to this question holds important implications for proposals which advocate MCH and family planning service integration. This study uses data from the 1995/6 Guatemalan Demographic Health Survey and its 1997 Providers Census to test the influence of MCH service utilization on individual contraceptive use decisions. We use a full-information maximum likelihood regression model to control for unobserved heterogeneity. This model produces estimates of the MCH effect, independent of individual women's underlying receptiveness to MCH and contraceptive messages.

Key Findings: The results of the analysis indicate that the intensity of MCH service use is indeed positively associated with subsequent contraceptive use among Guatemalan women, even after controlling for observed and unobserved individual-, household-, and community-level factors. Importantly, this finding holds even after controlling for the unobserved factors that 'predispose' some women to use both types of services. Simulations reveal that, for these Guatemalan women, key determinants such as age and primary schooling work indirectly through MCH service use to increase contraceptive utilization.


Summary: The goal of this report is to guide decision-makers, at the global, regional and country levels, in making investments that would reap the greatest returns for individuals and societies. The report presents new analysis on the costs and benefits of investing in two key components of sexual and reproductive health care: family planning and maternal and newborn health services.

Key Findings: The key findings of the report are that maternal deaths in developing countries could be slashed by 70% and newborn deaths cut nearly in half if the world doubled investment in family planning and pregnancy-related care. And investments in family planning boost the overall effectiveness of every dollar spent on the provision of pregnancy-related and newborn health care. Simultaneously investing in both family planning and maternal and newborn services can achieve the same dramatic outcomes for $1.5 billion less than investing in maternal and newborn health services alone.
TSHIP. Family Planning and Immunization Integration: A Case Study of Shuni Dispensary, Dange Shuni LGA, Sokoto State, Nigeria. 2011.

Summary: Shuni Dispensary is a health facility located in Dange Shuni local government authority (LGA), Sokoto State. The health facility is manned by four community health extension workers (CHEWs) (1 male, 3 females) and 1 female midwife. The health facility provides different MNCH/ FP/RH services to clients such as antenatal care (ANC), normal delivery, routine immunization (RI), family planning (FP), management of diarrhoea, uncomplicated malaria, acute respiratory tract infections and other minor ailments. One of the CHEWs is responsible for providing both immunization and family planning services. The services are provided on different session days. For example, on Monday the health facility provides ANC services, while on Tuesday immunization services are provided to under-fives and on Wednesday, the health facility provides family planning services. However, diarrhoeal, malaria management, and delivery services and treatment of minor ailments are provided on all work days.

- **Key Findings:** Clients remain accessible to all services on each of the specified days. A major limiting factor to not scheduling immunization all working days or most days of the week is due to the lack of refrigerators at the facilities to store vaccines. However, the service providers use vaccine carriers to make the antigens available on days when they are providing FP and ANC services.


Summary: USAID convened a technical consultation conference in March 2011 for experts in the fields of Family Planning (FP), Maternal, Neonatal, Child Health (MNCH), and Nutrition to present evidence and discuss strategies on integration, following on a successful series of meetings on FP integration into HIV/AIDS services.

The key purposes of the FP-MNCH-Nutrition Integration Technical Consultation were to:
- Assess the existing evidence on the application of integrated FP-MNCH-Nutrition models, processes, and tools that include best practices that support an effective integrated approach;
- Identify evidence gaps;
- Prepare a report on the findings of the meeting and the extent to which the evidence for integration enhances service coverage, quality, effectiveness, equity, use, and health outcomes;
- Initiate next steps toward the development of a learning agenda, including recommendations for research, documentation, and follow-on actions.

- **Key Findings:** It was not possible to determine the impact of any of the projects, and each cited the need to continue studying FP-immunization integration with rigorous study designs. Coverage of FP services likely increased, as the facilities which began providing FP in addition to immunization services had not been offering them consistently or at all prior to the interventions. Current data did not show whether the women served had received FP services at other locations; however, most interventions took place at multiple health facilities and reached hundreds or thousands of women who had unmet need for FP. All projects showed positive effects through some FP indicators, although more research must be conducted to attribute
Importantly, there were no negative effects on immunization services in any intervention. Integration cost was not available for any project, although costs will be evaluated in Mali, and the Nigerian case cited minimal additional resources as a key finding.


Summary: In 2007, USAID awarded the Extending Service Delivery (ESD) Project an associate award to support Burundi’s Maternal and Child Health Project (MCHP). In October 2008, ESD was awarded a second USAID-funded associate award to develop and test “Flexible Family Planning, Reproductive Health and Gender-Based Models for Transition Situations” in both Burundi and the Bukavu region of the Democratic Republic of Congo (DRC).

MCHP covers five districts, 63 health centers and three hospitals in Kayanza and Muyinga. The two main strategies used in its implementation include creating demand for services, and building the capacity of the health system to effectively respond to this demand.

Project activities—the development of policies and service delivery guidelines, improvement in quality of care through revised training curricula and targeted provider training and community mobilization—have strengthened the country’s existing health infrastructure and provision of quality MCH and reproductive health and family planning services. The project has also used core funds to incorporate healthy timing and spacing of pregnancy (HTSP) and family planning into MCH project activities.

ESD’s assistance has focused on improving MCH through:

- Prevention and treatment of childhood illnesses, specifically malaria, diarrhea, and acute respiratory illness;
- Maternal and young child nutrition;
- Birth preparedness and maternity services;
- Treatment of obstetric complications;
- Immunizations, including polio;
- Improving Burundi’s strategic information capacity;
- Improving household-level water, sanitation and hygiene; and
- Integrating HTSP and family planning into MCH activities at national, district, health facility and community levels.


Summary: As a basic health service that aims to make contact with 100% of children—and their caretakers—on at least five occasions in the first year of life, routine immunization has the potential to offer health benefits that extend beyond protection against vaccine-
preventable diseases. Yet health statistics suggest that most programs may not have realized this potential:

- In one Sahelian country, only 35% of the population was reported as having access to health services, yet vaccination coverage for BCG (the first vaccine given) was 77%.
- In one east African country, almost 90% of infants receive three doses of DTP vaccine, yet the maternal mortality rate is one of the highest in the world.
- In another nearby country, a combination of routine immunization coverage rates over 90% and periodic mass measles campaigns have resulted in fewer than 100 cases of measles per year—yet only 10% of children in this malaria-endemic country sleep under insecticide-treated bednets.

This publication explores some aspects of integrating or “linking” vaccination services with other health services and interventions: what criteria must be met to make this effective, what is practical for program managers to do, and why it is in their interest.


Summary: In 2002, the Reaching Every District (RED) approach was developed and introduced by WHO, the United Nations Children’s Fund (UNICEF) and other partners in the GAVI Alliance to improve immunization systems in areas with low coverage. Far from being a programme, or separate initiative, the approach outlines five operational components that are specifically aimed at improving coverage in every district: re-establishment of regular outreach services; supportive supervision: on-site training; community links with service delivery; monitoring and use of data for action; better planning and management of human and financial resources.

Since 2003, 53 developing countries have started implementing RED to various degrees, mostly in Africa and south and south-east Asia. All 53 countries belong to the groups of lower income and lower-middle income countries, as per World Bank classification. In 2005, an evaluation of five countries in Africa that had implemented RED found that, in four of the five countries, immunization coverage had increased since the implementation of RED, and that the proportion of districts with DTP3 (three-dose diphtheria, tetanus and pertussis vaccine) coverage above 80% had more than doubled.

Key Findings: The report notes that outreach services, one of the five components of RED, were often used to deliver other interventions beyond immunization, such as Vitamin A, antihelminthic drugs or insecticide-treated bed nets. This indicates that implementation of RED components may start to have an impact beyond immunization services alone.

Summary: This article aims to assess benefits, challenges and characteristics of integrating child and maternal health services with immunization programs. A literature review used journal databases and grey literature. Papers meeting the inclusion criteria were rated for the quality of methodology and relevant information was systematically abstracted. Integrated services were vitamin A supplementation, bednet distribution, deworming tablet distribution, Intermittent Preventive Therapy for infants and referrals for family planning services. Two key characteristics of success were compatibility between interventions and presence of a strong immunization service prior to integration. Overburdened staff, unequal resource allocation and logistical difficulties were mentioned as risks of integration, whereas rapid uptake of the linked intervention and less competition for resources were listed as two key benefits of integration.

Key findings: The theoretical strengths of integrating other health services with immunization services remain to be rigorously proved in practice. When additional interventions are carefully selected for compatibility and when they receive adequate support, coverage of these interventions may improve, provided immunization coverage is already high. Evidence for the effectiveness of integration in increasing efficiency of resource use was insufficient and most benefits and challenges were not statistically quantified. More substantive information about the costs of integrated vs. vertical programs and full documentation of the impacts of integration on immunization services should be published.

Wallace A, Ryman T, and Dietz V. Experiences Integrating Delivery of Maternal and Child Health Services With Childhood Immunization Programs: Systematic Review Update. The Journal of Infectious Diseases 2012; 205:S6–19

Summary: The World Health Organization and the United Nations Children’s Fund promote integration of maternal and child health (MCH) and immunization services as a strategy to strengthen immunization programs. We updated our previous review of integrated programs and reviewed reports of integration of MCH services with immunization programs at the service delivery level. Published and unpublished reports of interventions integrating MCH and immunization service delivery were reviewed by searching journal databases and Web sites and by contacting organizations.

Key Findings: Among 27 integrated activities, interventions included hearing screening, human immunodeficiency virus services, vitamin A supplementation, deworming tablet administration, malaria treatment, bednet distribution, family planning, growth monitoring, and health education. When reported, linked intervention coverage increased, though not to the level of the corresponding immunization coverage in all cases. Logistical difficulties, time-intensive interventions ill-suited for campaign delivery, concern for harming existing services, inadequate overlap of target age groups, and low immunization coverage were identified as challenges. Results of this review reinforce our 2005 review findings, including importance of intervention compatibility and focus on immunization program strength. Ensuring proper planning and awareness of compatibility of service delivery requirements were found to be important. The review revealed gaps in information about costs, comparison to vertical delivery, and impact on all integrated interventions that future studies should aim to address.
Summary: This Technical Brief is intended as a practical aid for people involved in discussions about integrated health services. Integrated health services means different things to different people, and it is important to be clear about how the term is being used. The brief proposes one working definition, the focus of which is providing the 'right care' in the 'right place'. Integrated service delivery is “the organization and management of health services so that people get the care they need, when they need it, in ways that are user-friendly, achieve the desired results and provide value for money.”

Key findings:

“Integration” is used by different people to mean different things. Combined with the fact that this is an issue which arouses strong feelings, there is clearly much scope for misunderstanding and fruitless polarization. In practice, however, integration can be broken down into a series of practical questions about who does what at what level(s) of a health system. Being clear about these questions can be the basis for constructive discussions about the development of integrated health services.