

FP & Immunization

What is the promising high-impact practice in family planning?

Offer family planning information and services proactively to women in the extended postpartum period during routine child immunization contacts. The extended postpartum period is defined as the 12 months following a birth (Statement for Collective Action for Postpartum Family Planning, 2012).

Background

Most women in the extended postpartum period want to delay or avoid future pregnancies but many are not using a modern contraceptive method (*Ross and Winfrey, 2001*). An analysis of data from 17 countries illustrated that unmet need for contraception among this population is very high, ranging from 45% to more than 80% of postpartum women (*Borda and Winfrey, 2008*). Family planning allows couples to have the number of children they desire and to achieve healthy timing and spacing of pregnancies¹ in turn improving maternal and child health. Closely spaced pregnancies can pose serious health risks to mothers and their children (WHO, 2007a). Pregnancies spaced less than 18 to 24 months apart have been associated with an increased risk of preterm birth; low birth weight; fetal, early neonatal, and infant death; and adverse maternal health outcomes (Conde-Agudelo et al., 2012). From a public health perspective, it is crucial to take advantage of every contact with pregnant and postpartum women to offer them family planning counseling and services.

Both immunization and family planning services are important components of primary health care. Child immunizations are one of the most equitable and well-used health services globally, and the recommended vaccination and primary health care intervention schedule in the first year of an infant's life calls for multiple health care contacts. Ensuring that family planning counseling and services are linked to infant vaccination contacts through well-managed primary health care services has the potential to reach mothers with family planning information and services at a critical time—the 12 months following birth. A modeling exercise using data from

¹ Healthy timing and spacing of pregnancies includes the recommendation that for the health of the mother and the baby, couples should wait at least 24 months, but not more than 5 years, after a live birth to conceive again. See <http://www.esdproj.org>.



Sandipan Majumdar, Courtesy of Photoshare

“The fact that a mother comes for her child[’s] treatment and finds treatment for herself...is significant for me.”
– Community Health Worker in Ethiopia (quoted in Ryman et al., 2012)

five countries in sub-Saharan Africa demonstrated that reaching postpartum women through immunization contacts could decrease overall unmet need for family planning by 3.8 to 8.9 percentage points (Gavin et al., 2011).

This brief focuses primarily on *deliberate* efforts to integrate the two services, rather than on services offered at the same location coincidentally without intentional efforts to connect them. Services are considered deliberately integrated if policy requires it or if programs explicitly promote linkages. Family planning and immunization integration can refer to either “combined service provision,” when both services are offered on the same day and at the same location, or “single service provision plus referral,” when either family planning or immunization services are provided along with education, screening, or referrals for the other service. This brief also focuses on integrating the two services through *routine* immunization contacts rather than during immunization campaigns, which are not recommended as platforms for integrated services. Integrated service delivery may take place within both public and private sector facilities or through social franchise outlets.

Offering family planning services to postpartum women through infant immunization contacts is one of several *promising* “high-impact practices in family planning” (HIPs) identified by a technical advisory group of international experts. A promising practice has limited evidence, with more information needed to fully document implementation experience and impact. The advisory group recommends these interventions be promoted widely, provided that they are implemented within the context of research and are carefully evaluated in terms of both impact and process (HIP, 2013). For more information about HIPs, see <http://www.fphighimpactpractices.org/about>.

Why is this practice important?

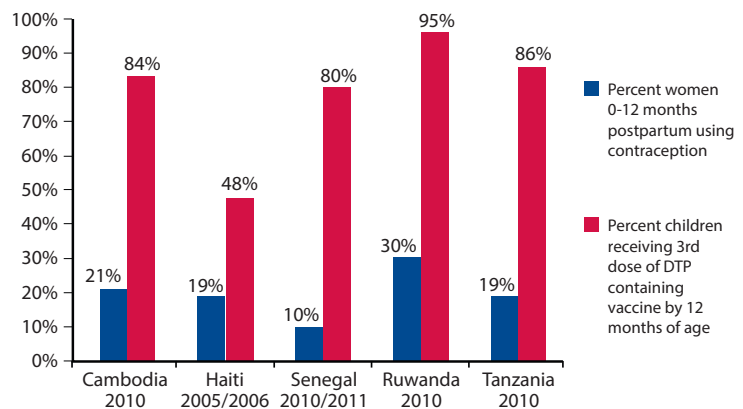
Immunization services have broad reach.

In many resource-constrained settings, immunization services are the cornerstone of the primary health care system (Andre et al., 2008), with a majority of women seeking immunization services for their children. In 2011, infant immunization coverage was 71% in sub-Saharan Africa and 75% in South Asia (as measured by the estimated delivery of DTP3²) (UNICEF, 2013).

Immunization programs aim to achieve high coverage among all population segments, regardless of wealth, sex, or location. An analysis across 68 countries showed that women are often more likely

to access routine infant immunization services than family planning services (DFID, 2010). Similarly, Figure 1 shows the percent of women up to 12 months postpartum currently using any modern contraceptive method compared to the percent of children who received their third dose of DTP-containing vaccine by age one year in selected countries. The relatively high use of immunization services during this period indicates that this

Figure 1. Percentage of Women 0-12 Months Postpartum Using Contraception, and Percentage of Children Who Received DTP3-Containing Vaccine by 12 Months of Age.



Source: Demographic and Health Surveys

² DTP3: Third dose of diphtheria toxoid, tetanus toxoid, and pertussis vaccine. Coverage with three doses of DTP vaccine often is used as a proxy for a fully immunized child.

platform may offer an ideal opportunity to reach large numbers of postpartum women with family planning messages, counseling, and services.

Child immunization services involve multiple and timely contacts with mothers during the first year postpartum. The WHO-recommended routine immunization schedule includes vaccinations at birth, 6 weeks, 10 weeks, 14 weeks, and 9 months (WHO, 2010). The return of menses during the postpartum period often serves as a prompt for women to initiate family planning. However, women can become pregnant prior to the return of menses and timing of return to fertility is unpredictable. Because women's risk of pregnancy increases over time after delivery, multiple contacts between mothers and providers during this period are particularly important (*FHI 360, 2012b*).

Integration: A Guiding Principle of the Global Vaccine Action Plan

The Global Vaccine Action Plan states that six principles have guided its development, including integration: "Strong immunization systems, which are part of the broader health systems and closely coordinated with other primary health care delivery programmes, are essential for achieving immunization goals." (*Decade of Vaccines Collaboration, 2012*)

Evidence suggests that an integrated model is acceptable to clients and service providers. In an assessment conducted in Madagascar, almost all women who were interviewed expressed interest in receiving family planning services during immunization visits. Likewise, 74% of providers and 89% of managers were supportive of integrating family planning services with immunization (Dulli et al., 2010). In Ghana and Zambia, immunization providers overwhelmingly reported being motivated to provide mothers with family planning information and referrals and felt that providing this kind of information was a part of their job (FHI, 2010). An assessment in four countries between 2009 and 2010 found that most health workers and community members have a positive perception of integration, although reactions differed by country, with mothers in Mali expressing concern about privacy and stigma associated with family planning use (*Ryman et al., 2012*).

Increasing access to postpartum family planning contributes to achievement of child health goals. The objectives of immunization and family planning programs are mutually supportive. Recent modeling data suggest that in 2008, 1.2 million infant deaths were averted globally by preventing unintended pregnancies, and another 640,000 newborn deaths would be prevented each year if all women desiring contraception were served (Singh et al., 2009). The 2012 Roadmap for Child Survival Call to Action recognizes that "preventing these [child] deaths requires addressing underlying risk factors such as poor nutrition and inadequate birth spacing intervals" (Child Survival Call to Action, 2012). In addition, using immunization programs as a platform for the delivery of other health services reinforces the value of immunization and provides opportunities to strengthen primary health care systems overall.

What is the impact?

In many countries, various maternal and child health services—including family planning—are being integrated with immunization programs to varying degrees (WHO, 2007b; Ryman et al., 2012; Rademacher et al., 2011). Several recent systematic reviews, however, concluded that few studies on the impact of integrating family planning and immunization have been carried out. Authors also noted that a great deal of variability exists in how and where services have been integrated, and that information about the costs of integrated approaches has not been systematically reported in the literature (*Wallace et al., 2012a; Kuhlmann et al., 2010; Briggs and Garner, 2006*). Figure 2 presents the two categories of integration models and key

cross-cutting components. Available evidence on the integration of family planning and immunization is summarized in Table 1 below.

Table 1. Selected findings from studies on integration of family planning with routine childhood immunization services

Country (total sample size)	Contraceptive Use	Effect on Immunization Utilization	Reference
Ghana (N=2763)	NSSC	Not measured	(Vance et al., 2013)
Philippines (N=3767)	+	Analysis underway	(Herrin et al., 2012)
Rwanda (N=1654)	+	NSSC	(FHI 360, 2012b)
Togo (N=2161)	+	NSSC	(Huntington & Aplogan, 1994)
Zambia (N=6219)	NSSC	Not measured	(Vance et al., 2013)

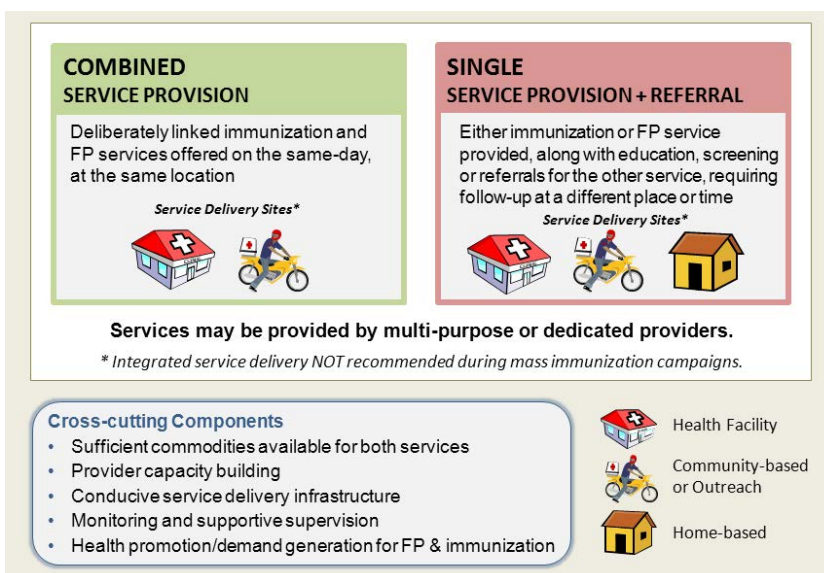
NSSC: No statistically significant change

+ indicates statistically significant positive change at the .01 level or higher

Combined Service Provision: A

distinguishing feature of this model is the availability of co-located, same-day family planning services during routine immunization visits. This approach may involve using group talks, individualized screening, or brief motivational messages that link the two services. Four quasi-experimental studies in Ghana, Rwanda, Togo and Zambia tested the effects of this model. The studies in Rwanda and Togo demonstrated a statistically significant increase in contraceptive use with no change in use of immunization services. In Ghana and Zambia, the intervention did not lead to a statistically significant increase in contraceptive uptake and the two studies did not collect data on the effect of integration on immunization and other infant health and nutrition services (see Table 1) (Huntington & Aplogan, 1994; FHI 360, 2012b; Vance et al., 2013). Process data from Ghana and Zambia indicated that the model was not implemented as planned. In Zambia, information on family planning was often given in group talks rather than one-on-one, and in Ghana, messages were not delivered consistently (Vance et al., 2013).

Figure 2: Family Planning (FP) and Immunization Integrated Service Delivery Models



Single Service Provision Plus Referral: This model, which involves the provision of offsite referrals or referrals requiring a follow-up visit at the same location, may be most appropriate where co-located services are not feasible. In a study in the Philippines, women waiting for immunization services at health stations were screened for family planning needs and offered family planning referrals, typically at the same facilities but on a different day. Results indicated a statistically significant increase in use of a modern family planning method with a net 8% difference observed between the intervention and control groups from pre- to post-test (Herrin et al, 2012).³

³ There were a small number of Rural Health Units included in the study, and at these locations, services were typically provided on the same day and in the same location.

Broader community-based programs that offer family planning services and information about immunizations to postpartum women may also be effective at increasing family planning uptake (*Douthwaite & Ward, 2005; Amin et al., 2001; Ahmed et al., 2012*).

How to do it: Tips from implementation experience

Based on programmatic experience, the following strategies can help facilitate successful integration of family planning and immunization services.

- **Integrate family planning services into routine immunization services rather than mass campaigns.** Mass immunization campaigns have been used as a successful platform to provide some health services, such as insecticide-treated bed nets. Immunization experts have expressed strong caution, however, against using this channel for integrating family planning, as immunization campaigns often occur episodically, are often chaotic in nature, and are highly donor-dependent and typically disease-specific (*FHI 360 & MCHIP, 2010*). Family planning provision requires continuous services, including counseling to support continuation and address side effects, resupply of methods, and follow-up care. Provision of family planning education is also not appropriate during immunization campaigns because past experience shows that there is high risk of misinformation being circulated during these events. Integration models can be designed to offer family planning services during routine immunization services offered at fixed facilities or through community outreach programs (*FHI 360 & MCHIP, 2010*).
- **The impact of integration on both services should be monitored to measure its effect on service delivery and health outcomes.** It is of special importance to the immunization community to ensure that integrating family planning with immunization does not have a detrimental effect on immunization outcomes. In the Rwanda and Togo studies described above, the intervention did not negatively affect the number of immunizations provided (*Huntington et al., 1994; FHI 360, 2012b*). Although some providers in a recent assessment expressed concern about integration potentially being time- and labor-intensive (*Ryman et al., 2012*), a study on integration showed that health workers overestimated the time it actually took to deliver services in an integrated model (*Wallace et al., 2012b*). It is essential that monitoring of both immunization and family planning indicators be an integral component of efforts to integrate services. (Recommendations for indicators to monitor will be available on the [Family Planning and Immunization Integration Toolkit](#) on the K4Health website.)
- **Systematic Screening, an evidence-based approach to comprehensively assess clients' needs for services, can support integrated service delivery.** A postpartum version of the Systematic Screening tool was used in Nigeria by facility-level service providers to offer information and same-day referrals (for family planning, immunization, and other relevant services) to postpartum women. The approach increased screening and referrals for family planning, yet few women reported they would go for same-day services. Based on service statistics, there appeared to be a slight increase in couple-years of protection during the intervention period. However, stock-outs of family planning commodities were an issue at the focus facilities (*Charurat et al., 2010*).
- **The use of a dedicated family planning provider, as part of a combined service provision model, may help increase family planning use, including long-acting methods.** In Mali, dedicated providers who were only responsible for providing family planning services discussed a range of contraceptive methods with clients waiting for immunizations, including both short- and long-acting methods. Women were then offered contraceptive methods, including an IUD or implant, at a subsidized price on the same day and at the same clinic. A program assessment showed that 24.6% of women who received information during

immunization visits chose to have an IUD or implant inserted that day. The intervention also successfully reached younger women; 48% of implant acceptors were under the age of 25 between 2010 and 2011 (*PSI, 2012*). Decisions regarding whether to use a dedicated provider or a multi-purpose worker will depend on the overall service structure, volume of clients, and other context-specific considerations.

- **Functioning health systems are needed to support integrated service delivery.** Studies have shown that integrated models are most successful when immunization programs have high coverage rates, sufficiently trained staff, an adequate supervision and monitoring system, and stakeholder support (Wallace et al., 2009; Clements et al., 2008; Partapuri et al., 2012). An assessment of integrated services in the Indian state of Jharkhand demonstrated the need for standard operating procedures that are incorporated into service delivery policies and trainings for providers. This assessment, as well as other studies, has highlighted that there must be sufficient contraceptives available, adequate infrastructure including private space for counseling, user-friendly communication tools, and sufficient training for family planning providers on postpartum family planning (*FHI, 2010; FHI 360, 2012a*).
- **Political and community support are critical to building a supportive environment for integration.** Negative rumors about connections between vaccines and contraceptives have threatened or halted immunization programs. In various countries, there have been incidents where political, religious, or community groups have claimed that vaccines were actually contraceptives or sterilizing agents (*Larson, et al., 2011; Milstein, et al., 1995*). Governments, donors, and service delivery groups must work together to ensure stakeholder support, and to implement strategies to avoid or quickly address negative perceptions of integration. As part of a community-based program in Nigeria, support for an integrated approach was generated through existing community structures, including ward development committees, as well as through outreach in markets, places of worship, and at the household level (*TSHIP, 2011*).
- **If vaccinators provide family planning education, screening, or referrals during immunization contacts, keep messages simple and reinforce provider communication skills.** Field experience has shown that immunization contacts are often very brief and vaccinators may lack effective communication skills (*REACH, 1993*). In order to use immunization contacts as a successful platform to provide education about family planning consider investments to strengthen vaccinators' communication skill, and develop and test simple, user-friendly tools and job aids to ensure consistent message delivery. Unless they are multi-purpose workers trained in family planning counseling, vaccinators should only be asked to give brief family planning messages and referrals, and not to provide in-depth family planning counseling. In Liberia, a simple job aid was developed for vaccinators. In intervention sites in two counties, the numbers of new contraceptive users increased by 73% and 90% (comparing the intervention period of March-November 2012 with March-November of 2011) (*MCHIP, 2013*).
- **Ensure clear and effective referral systems.** When family planning and immunization services are provided by different service providers, it is important to develop straightforward referral processes, so that clients are clear about where to go and are seen for both services without significant delay. A combined service provision approach in Liberia revealed that a high proportion of women who accepted family planning referrals saw the provider on the same day, and a high proportion of those women accepted a contraceptive method during that same visit. Factors associated with women not following through on same-day referrals included long waits to see the family planning provider, unclear paths from the vaccination station to the family planning room, and client concerns about confidentiality. Some clients also mentioned a hesitation to accept a family planning method on the same day due to preferences to either consult with their partner first, or wait until their child grows older before choosing a method. Take-home materials may be beneficial in these cases. Many clients reported sharing these materials with spouses and partners (*MCHIP, 2013*).

Priority Research Questions

- How do different integrated models impact both family planning and immunization and associated infant and child health outcomes?
- How does integrated service delivery affect quality of service provision?
- Does integration enhance equity by enabling programs to reach new or underserved immunization clients and contraceptive users, including among different age groups?
- Does integration lead to cost-savings or other efficiencies in terms of organization of care or deployment of staff resources?
- How is the success or failure of integrated service delivery affected by contextual factors within the service setting and community?

Factors That Facilitate Successful Integration

- Adequate provider training and supervision
- Policies that support integration
- Adequate immunization and family planning commodities available, including a range of contraceptive options and free or subsidized services
- A robust health information system that collects information on both services
- Strategically designed, field-tested communication materials and job aids

Factors That Inhibit Successful Integration

- Weak referral systems and follow-up
- Lack of supportive supervision
- Unsustainable workloads for providers
- Staff turnover and shortages
- Inadequate provider knowledge or skills
- Commodity stock-outs
- Lack of collaboration between vertical programs or funders

Source: Adapted from USAID's FP-MNCH-NUTRITION Integration Technical Consultation, Conference Report. March 30, 2011.

Tools

Family Planning and Immunization Integration Toolkit and related toolkits, such as Postpartum Family Planning and Healthy Timing and Spacing of Pregnancy. <http://www.k4health.org/toolkits>

For more information about HIPs, please contact the HIP team at USAID at fphp@k4health.org.

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These references include the sources most helpful in the preparation of this brief. A complete list can be found at <http://www.fphighimpactpractices.org/>.

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