INTEGRATED DELIVERY OF IMMUNIZATION SERVICES WITH ADDITIONAL HEALTH INTERVENTIONS

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Ad-Hoc Working Group Meeting IVIR-AC, June 2014

Objectives

- Discuss current evidence regarding integrated delivery involving immunization services in developing countries
- Identify practical actions and recommendations for integrated delivery
- Identify potential gaps for future research
- Focus in this presentation: Integration at point of delivery with routine immunization services and campaigns

Background

Defining Integration and Rationale for Use with Immunization Services

Rationale for Integration & Immunization Services

- Immunization programs strong relative to other MCH programs
  - Coverage reaching >80% of children <1 year of age
  - Relatively equitable distribution
- Overlapping target groups (infants, mothers) with interventions requiring scale-up
- Multiple contacts during first 2 years of life when other interventions also critically effective
- New vaccines targeting diseases requiring multiple interventions for complete control / elimination
Global Health Frameworks, Guidelines & Integrated Delivery with Immunizations

- GIVS, Objective 3
  - Integrated delivery of MCH interventions

- GVAP, Objective 4
  - Platform for other interventions and vice-versa
  - Emphasis with pneumonia, diarrhea, cervical cancer vaccines

- GAPPD
  - Deliver packages of interventions in a continuum of care

- WHO Guidelines for ARV Use for HIV
  - HIV screening and testing during immunization visits

Key Research Questions

1. Benefits and risks?
2. Characteristics of successful integrated programs?
3. Lessons / recommendations from integration studies?

Current Evidence

Evidence on Integrated Delivery of Immunization Services

- CDC/GID systematic reviews
  - 1979 – 2011 studies (grey and peer-reviewed)

- CDC-sponsored JID integration supplement (2012)
  - Articles on safe water, “comprehensive integration”, DHS analysis, EPI contact method, child health weeks etc
  - http://jid.oxfordjournals.org/content/205/suppl_1.toc

- Post-review studies (2012-present)
About The Systematic Reviews

- Peer & grey literature databases
- First review: January 1979-June 2005
- Second review: 2000 - 2011

Objectives:
- Answer which programs integrate, how integrated delivery is structured, benefits, challenges, characteristics of success, outcomes and research limitations
- Number of studies reviewed
  - 59 studies on 46 integrated projects

Post-Review Studies

- PMTCT/RI integration study (2011-12)
  - Tanzania
- WASH/RI integration study (2011)
  - Kenya
- Family Planning/RI integration studies (2013-14)
  - Ghana, Rwanda
- Comprehensive integration project (2010-11)
  - Cameroon, Ethiopia, Mali
- DHS analysis of potential benefits of integration (2012)
  - Global

Current Evidence Outputs

Integration Service Delivery Models

- Combined routine service provision
  - Using routine contact to deliver another health intervention, same facility, same day (33% of systematic review studies)

- Single routine service provision + referral
  - Using routine contact to inform or screen for other services available, follow-up visit, same or another facility (16%)

- Combined campaign service provision
  - Using time-limited activity (campaign, child health week) to deliver additional health interventions (51%)

References:
2. Wallace A, Dietz V. Experiences integrating delivery of maternal and child health services with childhood immunization programs: Systematic review update. 2012 JID, 205(s6):19
Interventions Linked to Immunizations

<table>
<thead>
<tr>
<th>Intervention Linked with Immunization Services</th>
<th>Example countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family Planning</td>
<td>Ethiopia, Burundi, India, Ghana, Rwanda, Madagascar*</td>
</tr>
<tr>
<td>Intermittent Preventive Treatment of Infants (IPTi)</td>
<td>Tanzania, Ghana, Madagascar*</td>
</tr>
<tr>
<td>Vitamin A Supplementation</td>
<td>Indonesia, Ghana, India, Peru, Guinea-Bissau, Ethiopia</td>
</tr>
<tr>
<td>Deworming tablets</td>
<td>Togo*, Zambia*, Mali*, Mexico*, Cameroon</td>
</tr>
<tr>
<td>Bednets</td>
<td>Togo, Zambia, Ghana, Malawi, Cameroon</td>
</tr>
<tr>
<td>HIV testing and counseling</td>
<td>Tanzania, South Africa, Zimbabwe</td>
</tr>
<tr>
<td>Hearing screening</td>
<td>Nigeria, South Africa</td>
</tr>
<tr>
<td>Growth monitoring</td>
<td>India, Philippines, Ethiopia, Madagascar*</td>
</tr>
<tr>
<td>Safe water interventions</td>
<td>Kenya</td>
</tr>
<tr>
<td>Health education (Breastfeeding, nutrition)</td>
<td>India, Philippines</td>
</tr>
</tbody>
</table>

*Integrated campaign or child health week; otherwise, study used routine delivery

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Study Design Quality

- Majority of study designs observational
  - 44% used pre/post design
- Control groups uncommon (10%)
- Trials with coverage outcomes uncommon (3 studies)  
  - Most trial studies examined clinical outcomes of linking IPTi
- 19% documented impacts on costs, resources
- Few report impacts on immunization services
  - 12% reported pre AND post vaccination coverage
  - 7% reported only pre OR post vaccination coverage
- Most pre/post studies (91%) reported linked intervention change in coverage

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Did Linked Intervention Coverage Reach Vaccination Coverage Levels?

Hypotheses:
- ‘Simpler’ interventions (Vitamin A, deworming) appear to more easily reached vaccination coverage levels
- Interventions requiring more behavior change had greater differences (bednet ownership vs usage)

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Identified Benefits

- Most papers do not discuss benefits
  - Benefits mentioned but not quantified
- Rapid uptake of linked intervention compared to previous uptake speed
  - Fast uptake of IMCI attributed to existing community trust in EPI
- Decreased competition for resources
  - 4 studies (campaigns with multiple interventions)
- Time-saving strategy for beneficiary, health system
  - 4 studies (campaigns with multiple interventions)
Identified Challenges

- **Community acceptability**
  - Variable levels of behavior change needed for certain interventions
    - Bednet use, water treatment use, family planning adherence
  - Stigma & unintended consequences
    - PMTCT services with routine immunizations
    - Community concerns / stigma of certain interventions vary widely by country

- **Supply chain complexity**
  - Linked intervention commodities may not be available with same reliability as vaccinations

- Measuring outcomes
  - How to measure quality and outcome of combined services

- Potential service quality impacts
  - Increased workload and potential reduction of quantity/quality of immunization services

- Variable complexity of delivery
  - Multiple components can create additional delays and complexity when not well planned with good patient flow procedures
  - Vaccination sessions generally rapid; other interventions may break this patient flow

Challenge – Delivery Time Differences Between Interventions

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Observed Duration to Deliver Intervention (in minutes:seconds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family planning (IUD method)</td>
<td>7:40</td>
</tr>
<tr>
<td>Breastfeeding education</td>
<td>8:00</td>
</tr>
<tr>
<td>HIV prevention/counseling</td>
<td>9:00</td>
</tr>
<tr>
<td>Sick infant treatment</td>
<td>3:00</td>
</tr>
<tr>
<td>Anemia care</td>
<td>10:30</td>
</tr>
<tr>
<td>Newborn care promotion</td>
<td>26:00</td>
</tr>
<tr>
<td>Birth vaccine distribution</td>
<td>1:40</td>
</tr>
<tr>
<td>Infant growth monitoring</td>
<td>4:40</td>
</tr>
<tr>
<td>Family planning (insertion method)</td>
<td>5:30</td>
</tr>
<tr>
<td>Infant vaccination</td>
<td>20:01</td>
</tr>
<tr>
<td>Vitamin A supplementation</td>
<td>37:00</td>
</tr>
</tbody>
</table>

*Wallace A, Ryan T et al. Strengthening evidence-based planning of integrated service delivery through local measures of health intervention delivery times. JID 2012: 205;S1

Lessons For Implementation

- Multiple challenges not integration-specific
  - Well-functioning health systems needed: supply, human resources
  - Two weak services ≠ one strong integrated service

- Manage expectations on speed of success
  - Integration not a magic bullet for overcoming coverage barriers
  - Strategy requires extensive planning, resources, managerial buy-in

- Integration country/context specific
  - Do not integrate time-intensive or sensitive services into campaigns
  - Consider community-level stigma with certain services

- Mix of integrated and non-integrated activities needed
  - Use dedicated providers for certain services (behavior change)

- M&E should track appropriate outcomes & processes
Key Gaps

Key Knowledge Gaps, Areas For Future Research and Study Design Considerations

Where are the Remaining Gaps?

- Existing research studies still minimal for the complete answer
  - Yet question is no longer whether but how and when to integrate

- Suggested priority research questions*
  - How does integrated delivery affect quality of service provision?
  - Does integration lead to cost-savings and other efficiencies in organization and use of human resources?
  - How is the success or failure of integrated delivery affected by contextual factors (e.g. health system strength, stigma) within the service setting and community?
  - How do we ‘optimize’ integrated service delivery via patient flow measures, thoughtful packaging of services, ensured confidentiality of services and acceptable workloads?

*Suggested priority research questions developed during FP/EPI Working Group discussions and CDC routine immunization research review

Suggested Topic Areas for Research

- PMTCT
  - Increasingly common, not well-documented

- ANC – EPI linkages
  - Particularly of use in countries with ANC coverage higher than EPI coverage

- Non-infant immunization opportunities
  - Maternal immunization
  - Immunizations after first year of life (HPV, booster doses, MCV2, TT)

- Assessing role / lessons for integration of other health system components
  - Integrated data management, monitoring; supervision; supply

Study Design Considerations

- Strengthened study designs:
  - Data on process indicators based on identified benefits, challenges
  - Implementation research trials where possible
  - Quasi-experimental designs

- Encourage publication of both unsuccessful and successful projects
  - Many integration experiences not documented

- Suggested guidelines for indicators to measure in integration studies and designs to use
  - See example of FP-EPI Working Group documents at:
Considerations for Full IVIR meeting

- Recommended areas for research
- Presentation of specific study findings of critical interest, e.g.:
  - HIV
  - Family planning
- Country lessons on implementing comprehensive integrated packages similar to those in GAPPD
  - Ethiopia, Zambia, Ghana

Conclusions

- Very real benefits exist
  - Coverage can rapidly improve for simple, more compatible interventions
- Integrated delivery does not solve all problems
  - Poorly performing programs don’t necessarily become good programs with integrated delivery alone
  - Clear & realistic expectations of outcomes necessary
- Proper planning is crucial
  - Clear understanding of and mitigation against potential negative impacts
  - Map out patient flow, operating procedures

Acknowledgements

- Margie Watkins, CDC
- Samir Sodha, CDC
- Vance Dietz, CDC

Thank You!
Topics To Assess in Integration Studies*

- Coverage of each intervention
  - How to measure for each intervention appropriately and fairly
- Quality of services
  - Measuring quality difficult but track supervision frequency as proxy of quality
- Acceptability
  - Evaluation can confirm that added efficiency of integrated service delivery has not unintentionally reduced demand or acceptance of services offered
- Complexity
  - Evaluation can determine whether complexity introduction with integration is not excessive but remains consistent with program, healthcare worker and population capacities
- Unintended consequences
  - Problems with a component service inadvertently harm perceptions about other services and should be monitored

*Schuchat A, De Cock K.  The value of science in integration of services.  JID 2012:205

Studies of Interventions Linked to Immunizations

<table>
<thead>
<tr>
<th>Program linking to Immunization Services</th>
<th>Example countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family Planning (FP) - family planning services linked within same facility at time of routine or campaign immunization contact</td>
<td>Tanzania, Uganda, Malawi, Rwanda, Ethiopia, Madagascar</td>
</tr>
<tr>
<td>International Preventive Treatment of Infants (IPTi) - give anti-malarial treatment at time of routine or campaign immunization contact</td>
<td>Tanzania, Ghana, Mozambique, Malawi</td>
</tr>
<tr>
<td>Vitamin A Supplementation (VAS) - give vitamin A tablets at time of routine or campaign immunization contact</td>
<td>Ethiopia, Uganda, India, Peru, Guinea Bissau, Ghana</td>
</tr>
<tr>
<td>Interventions (IVW) - give vitamin A tablets at time of routine or campaign immunization contact</td>
<td>Togo, Zambia, Malawi, Senegal, Ghana, Mali, Cameroon</td>
</tr>
<tr>
<td>Bednets (ITN) - distribute net at time of routine or campaign immunization contact</td>
<td>Togo, Zambia, Mali, Senegal, Ghana, Mauritania, Cameroon</td>
</tr>
<tr>
<td>HIV testing and counseling - provide HIV testing at routine and mother during a routine vaccination visit</td>
<td>Tanzania, South Africa, Zimbabwe</td>
</tr>
<tr>
<td>Nutrition and growth monitoring - weigh child at routine visits to assess growth and measure birth weight</td>
<td>Nigeria, South Africa, Bangladesh</td>
</tr>
<tr>
<td>Safe water - offer hygiene kits and education to the caregiver by nurse or community member during an infant immunization visit</td>
<td>Kenya</td>
</tr>
</tbody>
</table>

Outcomes from integration studies (I)

<table>
<thead>
<tr>
<th>Country</th>
<th>Delivery type</th>
<th>Immunization coverage change</th>
<th>Linked intervention change</th>
<th>Intervention length</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zambia</td>
<td>Campaign</td>
<td>Fully immunized: 18%</td>
<td>ITN ownership: 63%</td>
<td>1 week</td>
</tr>
<tr>
<td>Togo</td>
<td>Campaign</td>
<td>Measles coverage: 17%</td>
<td>ITN ownership: 61%</td>
<td>1 week</td>
</tr>
<tr>
<td>Ghana</td>
<td>Campaign</td>
<td>Measles coverage: 17%</td>
<td>ITN ownership: 75%</td>
<td>1 week</td>
</tr>
<tr>
<td>Mali</td>
<td>Routine</td>
<td>Measles coverage: 13%</td>
<td>ITN ownership: 86%</td>
<td>3 years</td>
</tr>
<tr>
<td>Senegal</td>
<td>Routine</td>
<td>Measles coverage: 13%</td>
<td>ITN ownership: 86%</td>
<td>3 years</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>Referral</td>
<td>Measles coverage: 1%</td>
<td>Family planning acceptance: 4%</td>
<td>1 year</td>
</tr>
<tr>
<td>Togo</td>
<td>Referral</td>
<td>Measles coverage: 1%</td>
<td>Family planning acceptance: 27%</td>
<td>2 months</td>
</tr>
<tr>
<td>Burundi</td>
<td>Referral</td>
<td>Measles coverage: 0%</td>
<td>Family planning acceptance: 5%</td>
<td>3 months</td>
</tr>
</tbody>
</table>

*integrated campaign as child health week; otherwise, study used routine delivery
Outcomes from integration studies (II)

<table>
<thead>
<tr>
<th>Setting</th>
<th>Project</th>
<th>Title</th>
<th>Description</th>
<th>Evaluation</th>
</tr>
</thead>
</table>
| Tanzania | Action Against Worms | Campaign | Integrating insecticide treated net distribution as part of the Togo Child Health Project in Waza, Tchamba, Kribi, and Sibatou, north-western Region | ITN ownership: 6.3% pre and 65% post.  1 month post: 99.5% still had ITN.  6 months post: 97.7% had ITN.  Equity ratio: 0.17 pre and 0.79 post.  ITN use: 44% in dry season; 38% in rainy season.
| Mozambique | The Expanded Programme on Immunisation | Routine immunization activities in the Republic of Mozambique | No effect on weight; small improvement in length.
| India | Microbe cops | Single-channel counselling | Those with only 1 channel counseled: 56% through EPI.  Significant improvement in coverage for VAS and Deworming (>90%).
| South Africa | Action Against Worms | Campaign | Integrating HIV clinical services into primary health care in Rwanda: a measure of cost effectiveness analysis of insecticide treated net ownership and usage in Niger after a nationwide integrated child transmission prevention programme at immunization clinics: the case for universal screening
| Tanzania | Action Against Worms | Campaign | Preventing mother-to-child transmission of HIV in Tanzania through the integration of PMCT into EPI clinics: a cluster randomized trial | 37% of infants with HIV.  Mother varied by age = 16%

Outcomes from integration studies (III)

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<th>Evaluation</th>
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Next Steps

- Studies under discussion
  - "Optimizing" integrated delivery
    - Improving patient flow for integrated delivery in Tanzania
    - Calculating health facility resource needs & gap based on planned delivery of an integrated package of interventions (proposed)
  - PMTCT/EPI integration
    - Re-assess if any negative changes in coverage were short-term due to “start-up” challenges

The Comprehensive Integration Project
Study Background

Rationale
- Multiple demonstration projects recently conducted
- Research question shifting from “whether to do integration” to “how to do integration”
- Evidence & tools still needed to assist countries in designing and rolling out a comprehensive health package
- Observations that systematic issues likely played a critical role to success of integrated delivery
  - Supply for all commodities; sufficient HRH; facility layout

Objectives
- Develop methods to gather local information to assist in scaling up integrated delivery activities and health packages
  - Quantify resources to deliver health interventions in an integrated manner at scale
  - Assess community and health worker perceptions of integrated services to identify perceived benefits and concerns

Study Site Selection

- 1 country per sub-region in Africa
  - Mali (December 2009)
  - Ethiopia (February 2010)
  - Cameroon (March 2010)
- Per country, ≥2 districts purposefully selected to increase diversity of findings
- Selected by local MOH, WHO and CDC staff
  - 1 urban, 1 rural district
  - 2 health facilities per district
  - 1 outreach site

Data Collection

- Interviews
  - Immunization staff at national, district, & facility levels
  - Key informants e.g., community leaders, chiefs, women’s groups
  - Exit interviews with mothers (Mali only)

- Focus Groups (FG)
  - Decision-makers on infant receiving health services
    - Mothers, fathers, & mothers-in-law

- Time Observations
  - 30 maternal and child health interventions
  - Interventions broken down into tasks
  - Time for each task measured by stopwatch

Findings:
Mali FGs & Interviews

Integration benefits:
- Convenient for mothers
- Efficient, cost-saving
- Increased utilization of services
- Reduced disease

Integration concerns:
- Increased wait times
- Ability of HWs to manage other services
- Ability of mother to retain info
- Stockouts
- Stigma of HIV & FP services – preferred if not offered with EPI

EPI widely accepted; primary reason to visit HF
Preferred quick, high-impact services (e.g., VitA, ITNs)
Findings: Ethiopia FGs & Interviews

- Highly integrated health system with 16 services delivered by “Health Extension Workers” (HEWs)

Integration benefits:
- All satisfied with integration
- Education seen as important
  - Some concern about retention of multiple messages
- Neither stigma nor privacy issues were raised - reports of services being less stigmatized when integrated

Integration concerns:
- Stockouts
- Inadequate staff
- Desire to improve current services before further integration - although interest in integration of nutrition services

Findings: Cameroon FGs & Interviews

- Health education important – multiple messages can be confusing
- Requests for additional services included: FP, nutrition/food incentives, ITNs, and HIV services

Integration benefits:
- Multiple services at one time
- Efficient, cost-saving
- Treatment more holistic
- Confidentiality better protected
- Staff efficiency maximized
- Reduced reporting forms

Integration concerns:
- Workload - time required for giving multiple services
- Inadequate staff
- Wait times for beneficiaries

Findings: Time Observations

- 425 beneficiary visits observed across all 3 countries
- 11 of 30 interventions had >5 observations
- 2 tasks consumed the majority of intervention visits (mean % time):
  - 22% for providing education
  - 27% for record-keeping

Findings: Mean Intervention Delivery Duration

- Vitamin A supplementation (n=37)
- Infant vaccination (n=201)
- Family planning (recurrent method) (n=34)
- Infant growth monitoring (n=46)
- Family planning (IUD method) (n=7)
- Antenatal care (n=103)
- Breathing care promotion (n=29)
- HUD treatment (n=14)
- HIV prevention/counseling (n=9)
- Breast feeding education (n=48)
- Infant vaccination (n=201)
- Sick infant treatment (n=34)
- Newborn care promotion (n=29)
Conclusions:
FGs & Interviews

Similarities across countries:
- EPI widely accepted & trusted
- Integration viewed positively
  - Mothers liked multiple services at one time
  - Mothers viewed addition of other services as incentive
  - Interest in integration of nutrition services
- Concerns were generally health system issues exacerbated by integration (e.g., stockouts, HW capacity, wait times)
- Education interventions mentioned as very critical – concern about multiple message retention

Differences between countries:
- Privacy & stigma issues

Conclusions:
Time Observations

- Vaccinations are much shorter in duration relative to most interventions proposed for integration
- In planning integrated services, consider:
  - Longer beneficiary wait times
  - Realistic expectations on vaccinator workload
  - Staffing modifications
  - Patient flow changes
Objective
- Improve identification and follow up of HIV exposed & infected infants using routine immunization visits

Key questions
- What is impact of integrating services on both immunization and HIV services?

Study design
- 8 health facilities piloted the integrated intervention
- April 2009 – September 2011
- Mid-term assessment in August 2011

Key Results: Midterm Assessment
- 7500~ infants attended 1st month vaccination visit
  - 99% of mothers had documented HIV status
    - 330 HEIs identified, 300 HEIs enrolled
      - At 6 month follow-up: 74% remained enrolled, 46% remained on CTX
      - 20 tested HIV+, 13 initiated ART
- 1st month vaccination decreased although there was variability among study sites
  - Of 8 study sites, compared to rest of district, vaccination decreased >5% at 4 sites for DPT1 and at 6 sites for OPV1
- Qualitative summary
  - Mothers and health workers want integrated services to scale up
  - Issues around fear of HIV testing, stigma, confidentiality, patient flow, spousal acceptance
  - Rural sites had the most challenges

Key Assessment Recommendations
- Recommendations relevant to today’s discussion
  - Health sector:
    - Provide counseling during ANC visits to ensure mothers understand that HIV testing is not required to receive other services (i.e. EPI)
    - Restructure facilities and patient flow to ensure confidentiality during service delivery
    - Reduce waiting times by delivering all of the integrated services during the first contact with health provider at site
    - Provide training to health workers to
      - Ensure the infant receives vaccinations regardless of the mother’s acceptance of HIV testing
      - Promote the benefits of integrated services and to reduce stigma of HIV testing in the community
  - Community:
    - Utilize village leaders as advocates for family-centered HIV counseling and testing
Lessons Learned for FP & Immunization Integration Activities

- Many highlighted challenges are systematic issues not directly related to integration
  - Commodity supply chains; HRH availability; HRH skill; existing stigma of certain health conditions
- Community concerns vary by location and will affect success
- Comprehensive monitoring/reporting systems for both research studies and programmatic activities are needed
  - Monitor & report performance of all linked interventions
- Patient flow critical for speed and confidentiality as integrated packages scale up

WASH/EPI STUDY

- Objective
  - Improve access to safe drinking water and increase immunization coverage
- Intervention
  - Pilot distribution of “hygiene kit” at immunization session visits to improve coverage of all interventions
    - Hygiene kit: WaterGuard and soap
  - Intervention: March 2009 to Feb 2010
- Assessment
  - Baseline and follow-up coverage surveys
- Key results
  - Marginal change in immunization coverage (>90% pre and post)
  - Presence of soap high at baseline and did not change
  - Increase in reported use of WaterGuard
  - No apparent actual change in use of WaterGuard (as measured by chlorine levels in drinking water)

DHS analysis of potential value-add of integrating services with EPI

- Objective
  - Determine the coverage of 5 non-vaccine interventions which could be delivered during a routine vaccination visit
- Methods
  - Analysis of DHS data from 28 sub-Saharan African countries
- Key findings
  - In 74% (range, 49%-92%) of cases where mothers had unmet need for contraception, the child had received measles vaccination
  - The potential increase in coverage if integration occurred
    - Median % of mothers using contraceptives among those who do not want to become pregnant in the next 2 years could reach 78% (range, 51%-94%)
  - Likely coverage if integration occurred
    - Intention to use contraception in future varied considerably between countries
    - Based on estimates, 46% (range, 20%-81%) of women would likely use modern contraceptives if offered with infant’s vaccinations
GID & Integration Research

- **2004/2005**
  - GID began integration research after publication of the Global Immunization Vision and Strategy promoted integration in 2004
  - Landscape analysis of immunization and integration: literature review of articles from 1980-2005
    - Multiple research gaps led to demonstration projects
- **2005-2011**
  - GID partners on multiple integration demonstration projects
  - Comprehensive integration project – capstone integration project to address broader decision-making issues related to integrated delivery
- **2011**
  - Publication of CDC-sponsored supplement to share findings from multiple demonstration projects, updated reviews, DHS analyses

GID's Recent Integration Work

- PMTCT/RI integration study
  - Tanzania
- WASH/RI integration study
  - Kenya
- Malaria control / RI integration studies
  - Malawi, Indonesia
- Child Health Weeks assessments
  - Nigeria, Somalia
- Comprehensive integration project
  - Cameroon, Ethiopia, Mali
- Literature reviews and DHS analyses
  - Global
EPI & Family Planning Work

- Attempted demonstration study in 2008 with CDC Reproductive Health colleagues
  - Ethiopia, Zambia, Uganda, Malawi explored
- Study designs
  - FP referrals during infant immunization visit
- Varying challenges hindered study
  - Concerns among EPI staff about FP acceptance
  - MOH staff already felt they were integrating FP & EPI
  - Maintaining commodity supply was key bottleneck instead
  - Desire to determine how integration is working; cost-effectiveness of approach; what additional resources are needed to support effective integration; community perceptions

Rationale for integration (review)

- Potential benefits
  - Improve efficiency and reduce redundancy/cost
  - Improve user satisfaction and convenience
  - Benefit to other programs
    - Reach and coverage of immunizations is often greater than other health programs
    - Routine immunizations are among the most equitably delivered
    - Reduce stigma
  - Benefit to EPI
    - Increase demand for immunization

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Approach to Assessing Integration
Limitations to Fully Understanding the Integration Strategy

- Lack of well-designed studies
  - Very little economic impact information
  - Use of control groups
  - Better documentation of impact on immunization services

- Unsuccessful projects may not be reported
  - Many anecdotal stories of integrated projects

- Few interventions scientifically analyzed

Article references

- DHS analysis
  - Anand et al. Building on Success—Potential to Improve Coverage of Multiple Health Interventions Through Integrated Delivery With Routine Childhood Vaccination. 2012 JID, 205:S56-62

- PMTCT integration
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