A FORECASTING GUIDE FOR NEW & UNDERUSED METHODS OF FAMILY PLANNING:

What to Do When There is No Trend Data?

Victoria Jennings, Georgetown University’s Institute for Reproductive Health Reproductive Health Supplies Coalition’s Membership Meeting Paris, France | October 4, 2012
NUMs Guide Development

**Partnership:**
- Close collaboration between IRH, JSI and PSI with support from the RHSC’s SSWG and Caucus for New and Underused RH Technologies

**Data collection:**
- 25 key informant interviews with global experts and country programs
- Analysis of data from forecasts done or received by the USAID | DELIVER PROJECT and from the Procurement Planning and Monitoring Report (PPMR) from 2006-2010
- Review of existing forecasting guides and tools to assess how NUMs are addressed, if at all

**Review process:**
- **Round 1** internal within IRH, JSI and PSI
- **Round 2** with field staff and global experts

**Dissemination:**
- Activities August-October: K4Health Toolkit launch, webinar, brown bags, RHSC presentations, listserv discussions
What are NUMs?

• **New FP methods** are new to a global or country market, and are currently available for procurement.

• **Underused FP methods** are not routinely available in the public, private, or social marketing sectors, and are not routinely procured by the major procurers. In country settings, underused technologies are those that are not present in that country’s RH program, despite their presence in a comparable country’s RH program.

Purpose of the NUMs Guide

• Offers a framework for building rational assumptions to support accurate forecasting for NUMs or any FP method where future demand is difficult to predict;

• Supports program managers as they plan to: (1) introduce a contraceptive technology for the first time in a country; and/or (2) position an underused method for scale-up; and

• Identifies common pitfalls in NUMs forecasting and recommends strategies to avoid them.
A Forecasting Guide for New and Underused Methods of Family Planning

DOWNLOAD PDF OF GUIDE HERE

Section 1: Background

Section 2: Context

Section 3: Forecasting for NUMs

Section 4: Common Pitfalls

Section 5: Tips from the Experts

Section 6: Taking the Discussion Forward

Section 7: Resources

Appendices
Causes of MAPE variability for NUMs vs. non-NUMs

<table>
<thead>
<tr>
<th>Median Absolute Percent Error (MAPE) in Forecasts by Method Type</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>New and underused methods (NUMs)</td>
<td>50%</td>
<td>145%</td>
<td>36%</td>
<td>77%</td>
</tr>
<tr>
<td>Other methods (condoms, pills, inject.)</td>
<td>22%</td>
<td>17%</td>
<td>32%</td>
<td>23.7%</td>
</tr>
<tr>
<td>Difference between NUMs and other methods:</td>
<td></td>
<td></td>
<td></td>
<td>53.5%</td>
</tr>
</tbody>
</table>

What is MAPE?
- The median absolute percent difference between actual consumption and forecast consumption

Factors that affect combined MAPE over time:
- Countries add new methods to the mix
- How long a country has been forecasting
  - But relationship to error is weak based on our data
The case of Mozambique and Malawi

IUD Forecast Error

<table>
<thead>
<tr>
<th></th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mozambique IUDs</td>
<td>-245%</td>
<td>0%</td>
<td>-250%</td>
<td>38%</td>
<td>36%</td>
</tr>
<tr>
<td>Median IUDs (8 countries)</td>
<td>-33%</td>
<td>0%</td>
<td>-36%</td>
<td>2%</td>
<td>19%</td>
</tr>
</tbody>
</table>

Note: real (not absolute) values are not used here to show directionality of the error – negative values indicate actuals lower than forecast; positive values indicate actuals higher than forecast.

Implant Forecast Error

<table>
<thead>
<tr>
<th></th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malawi Implants</td>
<td>-43%</td>
<td>N/A</td>
<td>-8%</td>
<td>30%</td>
<td>-780%</td>
</tr>
<tr>
<td>Median Implants (5 countries)</td>
<td>-11%</td>
<td>-82%</td>
<td>-8%</td>
<td>-13%</td>
<td>-94%</td>
</tr>
</tbody>
</table>
Recommended Process for NUMs Forecasting

1. **Gather data** from secondary sources that can support assumption-building and identify the limitations of the data.

2. **Build out assumptions** based on a contextual framework of factors that potentially influence the uptake of NUMs.

3. **Host an assumption-building workshop** with key stakeholders.

4. **Forecast!** And run a “reality check” on the quantification and distribution strategy.

5. **Establish and implement a monitoring plan.**
Key Take-Away: Use a Systems Approach to Build Assumptions

Take a systems approach to building assumptions when forecasting for NUMs (Step #2). For an accurate forecast, consider these 4 inter-related contextual demand factors:

- Client
- Provider
- Finance
- Availability
Assumption Building Tips per Demand Factor

CLIENT
- Define target group
- Assess client awareness, attitudes, knowledge, preferences, need, etc.
- Consider impact of promotion strategies
- Project growth in CPR

PROVIDER
- Assess provider knowledge, attitude, behavior, skills
- Consider training plan
- Are standard treatment guidelines in place and followed?

FINANCE
- Cost to client, facility, and program
- Government/donor commitment
- Competitive landscape

AVAILABILITY
- Lead time for ordering/shipping
- Product registration and/or pre-qualification
- Distribution strategy in country
- Integration into MIS
- # of service delivery points

Consider public and private sector implications
Common Pitfalls
COMMON PITFALL #1: Donor or program aspirations may lead to over-supply, wasted resources, or unmet goals.

FROM THE EXPERTS...

“Variability in forecasted versus actual demand can be caused by funding challenges, overly ambitious projections, and changes in program mandates. Also, delays in the implementation of training of service providers and the re-assignment of skilled staff to other duties led to missed consumption targets.”

- JSI, Ghana

GUIDANCE...

(Unbiased) external expertise should be sought to ensure that the forecast is realistic.

For example, talk to program managers from other projects and seek data from various secondary sources.
COMMON PITFALL #2: Reluctance to spend scarce resources on methods with uncertain appeal results in lack of choices.

FROM THE EXPERTS...

If procurement of contraceptives is determined nationally, NUMs may not be assigned appropriate forecasting numbers due to budgetary limits. **Countries may be reluctant to spend scarce resources on methods whose appeal to potential clients is unknown.**

- NUMs Guide

GUIDANCE...

Those with NUMs experience and/or knowledge should contribute to quantification workshops and decision-making, otherwise NUMs will be left out of the conversation. Ask, “what does the evidence tell us?”
COMMON PITFALL #3: Population- and needs-based forecasts tend to estimate higher quantities.

“Beware of overly optimistic target-setting as a basis for procurement decisions. Your forecast should be based on what women will reasonably use and not what policymakers want them to use or think they SHOULD use. Just because a family planning method is safe, effective, easy to use, that does not mean women will choose to use it.”

- JSI, Global

FROM THE EXPERTS…

GUIDANCE…

Establish various scenarios—optimistic, realistic, pessimistic. Make sure to take into consideration how clients and providers will react to the NUM.
COMMON PITFALL #4: Private sector experience is used as a basis for public sector projections.

FROM THE EXPERTS…

“With EC, there is a keen wish for privacy and anonymity—it is much more private to go to the pharmacy rather than relying on public sector clinic hours. Consider women’s preferences in forecasting, such as what are the easy access points?”

- IC EC, Kenya

GUIDANCE…

Consider the characteristics of the NUM and preferences of users to assess whether it will be successful in each sector.
COMMON PITFALL #5: Regulations and essential medicines/commodity lists may delay availability.

FROm THE EXPERTS…

“For the Sino-implant (II), it took a lot longer than expected to register the product in many countries. This delay had implications for the accuracy of our 5-year projection.”

- FHI 360, Global

GUIDANCE…

Plan for approvals and buy-in before procuring. Be realistic about how long adding a method to a list or getting product approval will take.
COMMON PITFALL #6: Weak supply chains can affect consumption.

FROM THE EXPERTS…

“Even with trained providers, motivated clients, and a supply of CycleBeads in the central warehouse, programs face issues tracking consumption when CycleBeads (as a new method) are not integrated into the national MIS. Additionally, staff at the regional and health center levels have difficulty ordering re-supply because CycleBeads are not included on the supply requisition form.”

- IRH, Global

GUIDANCE…

Consider supply chain issues, including data collection and distribution. Establish a short term and long term strategy to ensure that the method is truly integrated into the current distribution system.
Overlapping phases, not discrete steps...

Source: PATH’s product development process
Next Steps

• Disseminate through various channels:
  o Host webinar on October 24th, 12pm EST
  o Available for brown bags in Washington, DC
  o Feature on AccessRH
  o Develop advocacy brief to raise donor awareness
  o Send out on listserves: DELIVER, MSH Health Managers, RHSC, eDrug, etc.
  o Social media campaigns
  o Translating the guide into French and Spanish

• Other ideas?
The links

- K4Health Toolkit
  http://www.k4health.org/toolkits/NUMs-forecasting-guide

- PDF of Guide

- Submit a Tip
  http://tinyurl.com/Submit-a-Tip