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Commentary

When technical achievements aren't enough: Lessons learned from efforts to catalyze policy action on supply chain in Senegal ☆

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ABSTRACT

Before 2013, Senegal public health supply system was pull-based and fully public-run. Lengthy and recurrent stockouts of essential health products (incl. contraceptives) were the rule, not the exception as they used to strike more than 80% of public service delivery points (SDPs). Following a successful pilot in two districts in 2012, the Senegalese Ministry of Health and Social Action (MSAS) implemented the *Informed Push Model* (IPM) Project (2013–2016). In its first two years, IPM bridged key gaps and expanded the distribution of contraceptives by private third party logistics operators to all public SDPs in Senegal and nearly eliminated stockouts. However, the MSAS was slow to take ownership of the project. Understanding the roots of this reluctance, executing a range of targeted communication and advocacy efforts and preparing a strong transition plan are succeeding to push Government toward full ownership to enable the National Supply Pharmacy to distribute all health products going to SDPs, including vaccines, consistently with their Strategic Plan 2014–2018.

1. Introduction

Before 2013, the National Supply Pharmacy (PNA) was the sole distributor of health products within the public sector in Senegal. However, the PNA leveraged a distribution architecture that was incomplete—it stopped at the regional level, leaving Districts and service delivery points (SDPs) to travel to upper levels to collect their products. This pull-based supply system resulted in the fact that the Ministry of Health and Social Action (MSAS) did not have any data on product availability and consumption at SDP level. A survey conducted in 2011 revealed that more than 80% of SDPs faced recurrent and lengthy stockouts of FP products [1]. Regarding vaccines, stockout rates were much lower in Saint-Louis Region where Project Optimize[1] had introduced a "Mobile Warehouse" to distribute vaccines to health posts: 15% for diphtheria, tetanus and pertussis vaccine (DTP), 20% for measles and 27% for BCG in 2012 [2]. In all remaining 13 Regions, no data were available and one can suppose vaccine stockout rates were much higher there. The pull-based supply system was therefore a key contributor to gaps in FP product uptake and use resulting in a modern contraceptive prevalence rate (mCPR) as low as 12% despite unmet needs among married women remaining high (29%). In 2012, the reported official coverage for the 3rd dose of DTP was 83% nationwide [3] leaving unvaccinated almost one child out of five.

In line with the "National Health Development Plan" [4] and the "National Pharmaceutical Policy" [5], which both promote the full access of populations to pharmaceuticals, incl. contraceptives, Intrahealth[2] conducted in 2012 in collaboration with the MSAS a six-month pilot of a push-based supply system in two districts as part of the Senegalese Urban Health Intitative (ISSU), a project funded by the "Bill and Melinda Gates Foundation" (BMGF). Based on the successful outcome, the MSAS approved the implementation of the *Informed Push Model* (IPM) Project (2013–2016) by Intrahealth with the financial support of the BMGF and "MSD for Mothers" (MfM). In its first two years, IPM bridged key gaps and expanded the distribution of contraceptives by private third party logistics operators (3PLs) to all SDPs in Senegal and nearly eliminated stockouts.

Nevertheless, the Senegalese Government was slow to take ownership of the project, which delayed adoption (scale up). This article highlights the efforts deployed to understand the roots of this reluctance, to identify specific communications strategies and tactics for overcoming it and to catalyze policy action for the

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[1] Project Optimize was funded by the Bill & Melinda Gates Foundation and implemented by WHO and PATH (2007–2013) in 5 collaboration countries incl. Senegal (www.path.org/projects/project-optimize).

[2] Intrahealth International is an American NGO based in Chapel Hill in North Carolina (USA) with country offices in many places around the world (see www.intrahealth.org). The Senegal Office is running Project IPM.

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adoption of a transition plan for the sustainable transfer of IPM to the PNA by the MSAS and its technical and financial partners (TFPs).

2. Initial technical success, limited policy impact

Prior to 2013, the existing pull-based supply system was hampered by numerous drawbacks, including: non-actionable consumption data and poor forecasting of needs by SDP medical staff, little to no reliable transportation, and cash flow problems. Consequently, stockouts were the rule, not the exception. To address needs, MSAS switched to a supply system based on the IPM from mid-2013. It flowed as follows:

IPM established performance-based contracts with 3PLs, who visited each SDP monthly with a delivery truck loaded with contraceptives (Fig. 1). There, they counted stock levels, topped-up commodities based on consumption trends, and collected and transferred consumption data (using a tablet connected to an online platform that makes real-time data available to stakeholders at all levels of the health pyramid). Facilities were charged only for the stock that was consumed, and only after it has been consumed. With this shift, IPM eliminated the main causes of stockouts[6]. In Saint-Louis Region, the former Project Optimize had been distributing vaccines using a "Mobile Warehouse". In order to avoid disruptions, vaccines were included in IPM in this Region and benefitted from the same achievements.

In its first two years (2013–2015), the project expanded to all 1408 public SDPs while maintaining stockout rates below 2% and eliminating overstocks and risks of expiry; an ancillary benefit of IPM is to free SDP medical staff from supply chain management, thus allowing them to focus on their core medical responsibilities. The consumption of contraceptives rose by 108% – which helped increase the mCPR to 16% in 2013 and 20% in 2014. This success story yielded international recognition for Senegal, including the "*Aspen Institute's 2015 Resolve Award for Service Delivery*", which was awarded in May 2015 during the World Health Assembly in Geneva, Switzerland. More importantly, a robust cost-effectiveness analysis strongly favored IPM over the traditional pull-model.

The move toward sustainability is a goal that the "Plan Sénégal Emergent" [7] (2015–2035) is striving to reach through economic growth, political stability, value promotion (work, evaluation, accountability, etc.) and ensuring security. One of the objectives of this plan is to improve the access of populations to quality social services. Consequently, the funding of National Health Development Plan [8] (2009–2018) will rely for 88% on national resources (Government, Communities, Population) and only for 12% on external resources. Strengthening infrastructures, equipment and maintenance and improving the availability of drugs and health products are among the sectorial objectives of the PNDS. To demonstrate Government buy-in and move toward sustainability, PNA should have taken over from Intrahealth and donors the management and funding of IPM implementation in three Medical Regions (RMs) by end of Year One, five additional RMs by end of Year Two, and the remaining six RMs by the end of Year Three. However, despite the project's remarkable achievements year after year, this did not happen. Therefore, IPM remained fully dependent on Intrahealth for its implementation and on donors for its funding. Technical achievements on the ground, complemented by favorable cost effectiveness, were not sufficient to trigger policy action and greater financial as well as institutional ownership by the Senegalese Government. Thus, efforts quickly stalled and inaction threatened to re-widen gaps in contraceptive access and use.

3. A shift in approach

In an effort to understand why the Senegalese Government was reluctant to take ownership of the IPM approach, the IPM project recruited a communication officer and an advocacy consultant to assess various stakeholders' attitudes toward IPM, including deeply rooted expectations. Together, they aimed to craft an advocacy case to influence policy makers in favor of IPM. To do so, they reviewed all project and related documentation, identified and documented IPM best practices, and then conducted interviews (with the Minister herself, Representatives of TFP organizations, Directors and Coordinators of MSAS Directions and public health programs, Regional and District Medical Officers), and focus group discussions (with members of regional, district and SDP health committees, SDP nurses, project staff members and representatives of 3PLs). Interviewees and focus group participants responded to questions related to pertinence and achievements of the project, constraints faced, funding perspectives, etc. A strategic advocacy campaign involving various media was also organized to broadly sensitize decision-makers on the risks of letting the country regress to widespread and lengthy stockouts of health products in SDPs.

4. Assessing reluctance

Interviews, focus group discussions, and advocacy activities with various stakeholders unearthed four main issues likely driving Government reluctance:

a. A vertically – versus project horizontally – oriented

The IPM project dealt with only 11 family planning products. Although project metrics captured a high level of performance and cost-benefit, where was the evidence to show that the same performance could be achieved if and when the number of products increased? Typically, an SDP inventory contains 118 health products to cover the health needs of a given population catchment area. Across all levels (from Minister to Districts officials), stakeholders wanted evidence that the IPM approach could consistently carry not just FP product, but all 118 products to SDPs.

To produce such evidence, the project implemented three integrated-delivery scenario pilots in September 2015: (1) a fully public scenario in the Saint-Louis Region implemented by PNA from regional level to SDPs with 45 products (including vaccines), (2) a public-private partnership (PPP) scenario in the Fatick Region implemented by PNA from regional level to Districts and by private 3PLs from Districts to SPDs with 33 products, and (3) an intermediate scenario run in the Dakar, Thies, and Kaolack Regions and in which UN life saving commodities were distributed by PNA and contraceptives by 3PLs; in that scenario, PNA and 3PLs were working in parallel to enable PNA to learn the best practices from the private sector.

Soon after the launch of these integrative efforts, the IPM system derailed and national average stockout rates jumped to over 7% due to surge in stockouts of UN commodities in Dakar, Kaolack and Thies Regions. Corrective measures (involving an analysis of causes followed by on-site supervision and coaching) were immediately taken and the system rapidly adjusted to the increased load (Fig. 2). An evaluation performed in February 2016 showed the PPP scenario was not cheaper than the fully public one, but had the highest performance in terms of availability of both products and actionable consumption data.

Based on these findings, the National Technical Committee[3] recommended the PPP scenario (Fatick region) for countrywide scale up. The Minister confirmed this choice and requested that PNA and Intrahealth submit draft memorandums for her to sign to make the decision official.

[3] A committee set up by the Minister to advise her on health supply chain issues.