Bangladesh National Drug Formulary 2015 Launched

With technical assistance from the USAID-funded SIAPS Program, implemented by Management Sciences for Health (MSH), the Bangladesh National Drug Formulary (BDNF) 2015 (4th edition) was launched in September 2015 by the Honorable Minister, Mr. Mohammed Nasim, Ministry of Health and Family Welfare (MOHFW) and Member of Parliament (MP). SIAPS provided technical input to the revision and assisted in the publication of 10,000 copies. The BDNF, which serves as a ready reference for physicians, pharmacists, and other health care providers, contains key information for prescribing, dispensing, and administration of medicines, including general guidelines on indications, side effects/adverse events, doses, drug interactions, and contraindications.

Participants at the launching event for the BDNF.
Photo credit: SIAPS BD

This updated version specifically includes information on registered medicines and pharmaceutical companies in Bangladesh, which was absent in the previous edition published in 2006. Mr. Zahid Maleque, MP, Honorable State Minister, MOHFW, and Ms. Melissa Jones, Director, Office of Population, Health, Nutrition, and Education, USAID, attended the launch as special guests; more than 400 stakeholders, including pharmacists, clinicians, and representatives from the Directorate General of Drug Administration (DGDA), MOHFW, and the Pharmacy Council of Bangladesh participated. This book, distributed to physicians and other relevant stakeholders, will contribute to ensuring proper dosing regimens, appropriate and correct dispensing of medicines, and a decline in medication errors.
For the Directorate General of Family Planning (DGFP), unavailability of real-time logistics information from service delivery points (SDPs) has been a major challenge, often resulting in chronic, sporadic stock-outs of family planning (FP) commodities at the SDP level because supply chain managers are unaware of the stock situation. As a result, the potential risk of unwanted pregnancies is increased, and the lives of women and children are endangered.

To overcome this challenge, SIAPS worked with DGFP to develop the SDP dashboard module with easy-to-understand charts, maps, and tables to track SDP-level stock information for FP commodities. This module, incorporated in the web-based Logistics Management Information System (eLMIS), collects data on consumption and availability of FP commodities from SDPs, which is consolidated and entered into MOHFW’s Supply Chain Management Portal (SCMP) using Upazila Inventory Management System (UIMS) software (version 3).

At DGFP’s instruction, SIAPS recently rolled out this module in all sub-districts of Bangladesh (about 490). The roll-out, including the development of 72 master trainers and the enormous task of training 971 DGFP staff (male 82%, female 18%), was completed on June 11, 2015.

Now that DGFP officials can view real-time stock information and monitor over 29,000 SDPs across the country, transparency and efficiency of the FP commodities tracking system has been radically enhanced, and the performance of individual SDPs has also improved. DGFP can easily track stock on hand and the average monthly consumption of supplies; they can also map out potential vacant positions for proper human-resource planning and decision making on stock replenishment.

There is much excitement among DGFP officials—using this module means that a continuous supply of FP commodities can be ensured, thereby safeguarding women’s and children’s lives by allowing women to delay and limit pregnancies in a healthy manner.

“This excellent module not only enables us to compile and update SDP stock data accurately and easily, but allows managers to respond quickly and efficiently to avoid potential stock-outs of FP commodities,” commented Mr. Golam Md. Azom, Deputy Director, FP, and one of the master trainers of the SDP dashboard module.

Since the pilot and the nationwide roll-out of the SDP dashboard module, the stock-out rate for contraceptives has been sustained at less than 1% (as of December 2015; source: www.scmpbd.org).
HEALTH INFORMATION SYSTEM MAPPING ANALYSIS CONDUCTED

In Bangladesh, many health information system (HIS) tools are in use by different entities. MOHFW requested that SIAPS make a comprehensive HIS mapping analysis and provide strategic guidance to streamline all existing HIS tools and to strengthen the national health information system. In response, SIAPS mapped all existing and agreed IT initiatives (approximately 40 HIS tools). The assessment report was finalized in consultation with all relevant stakeholders (MOHFW, donors, and other implementing partners) and specific strategic recommendations were made. It was strongly suggested that the Government of Bangladesh (GOB)-owned District Health Information System, version 2 (DHIS2) platform should be used for national indicator reporting with a caution to avoid the overload of individual patient and logistics transactional data. The assessment also covered the functional linkages between DHIS2 and SCMP, an online central repository developed by SIAPS for all procurement and supply chain activities under the MOHFW.

Formation of a high-level technical working group at MOHFW to oversee overall HIS functions and policy as well as set standards to define interoperability protocols was also recommended in the report. This exercise will help MOHFW develop a national eHealth strategy that specifically provides guidelines on the analysis, collection, storage, and management of health information.

MOHFW GEARS UP TO TAKE OVER SCMP

SIAPS has submitted portal-related technical documents to the MOHFW that address the recommendations made in the assessment of MOHFW’s readiness to take over the SCMP. The additional secretary for development and medical education reviewed the progress against the timeline in the SCMP sustainability plan and endorsed the compiled progress report. As a next step, SIAPS will develop a pool of troubleshooters to resolve SCMP’s maintenance issues. At SIAPS’ request, MOHFW has already identified 12 ministry staff to be trained on the management and maintenance of the portal. The handover of the SCMP, which has been in use by the ministry and its directorates for procurement planning for the third consecutive year, is planned for June 2016.

DGDA PARTNERS WITH KOICA TO BOLSTER STAFF CAPACITY

As part of the ongoing effort to build sustainable capacity in DGDA, SIAPS facilitated a three-year partnership memorandum of understanding (MOU) between DGDA and the Korea International Cooperation Agency (KOICA). The MOU permits DGDA officials to participate in different trainings and workshops conducted by the Ministry of Food and Drug Safety (MFDS) of Korea. Accordingly, 15 officials were selected for the first training on biopharmaceutical regulation scheduled for November 12–26, 2015. To prepare the selected DGDA officials for the advanced training and to familiarize them with the curriculum, SIAPS facilitated a full-day workshop to develop their country report and presentation on medicine approval, good manufacturing practices, and national lot release of biopharmaceuticals as requested by the MFDS before they travel. In addition, they developed a draft action plan identifying the country’s current issues, identifying major challenges regarding safety management of biopharmaceuticals, and proposing alternatives and solutions to the identified issues and problems. As planned, DGDA attended the training in Korea in November and the action plan was finalized. SIAPS is currently supporting DGDA to implement the action plan.

ELECTRONIC LOGISTICS MANAGEMENT INFORMATION SYSTEM DEVELOPED FOR DGHS

SIAPS developed an eLMIS for the Directorate General of Health Services (DGHS) to ensure that medicines for maternal, newborn, and child health (MNCH) are available at SDPs. Prior to this, there was no standard LMIS in use at DGHS to report actual consumption rates from the SDPs and, consequently, the central-level decision makers had little or no visibility of data. At the request of DGHS, SIAPS incorporated the LMIS into the DHIS2 platform and conducted beta testing in Gazipur district in September 2015 to examine functionality. Training was given to the district’s 250 storekeepers, statisticians, sub-assistant community medical officers, and community health care providers on how to use the eLMIS tools to report priority MNCH medicines. Successively, the same hands-on training was given to an additional 969 DGHS staff from Pabna, Khulna, Faridpur, and Lakshmipur districts in
Tama, a resident of Parokhali village in Khulna district, was devastated when her 15-day-old daughter was diagnosed with pneumonia-related complications and needed treatment, including immediate oxygen support. Following the instructions of the local doctor, she and her husband rushed the newborn to Khulna Shishu (Children) Hospital (KSH), situated eight kilometers from her village and got her admitted. Thanks to the newly installed oxygen supply system at the hospital, baby Sangita received a steady flow of medical oxygen and recovered.

Tama says, “I am happy that we decided to bring my daughter to Khulna Shishu Hospital and start treatment. If the oxygen support had not been given to her in time, it could have become fatal.”

Tama is one of many mothers who expressed the same sentiment about how their children’s lives were saved through the uninterrupted oxygen supply they received at KSH. On average, 25-30 children daily receive oxygen support at KSH, which treats children in the southern part of Bangladesh.

This 285-bed secondary-level private hospital for neonates and children was established in 1980 by the local elites of Khulna with philanthropic objectives to provide specialized services, such as a newborn intensive care unit, incubators, surgery, and urology, along with pathological lab and diagnostic services, child nutrition, and routine Expanded Program of Immunization services. The hospital mainly runs on the revenue generated by the facility, but the government provides a nominal subsidy to adjust its yearly expenses. Need-based donations of medical equipment from local elites and others work as assets for the hospital.

In 2014, at the request of the local USAID Mission, the SIAPS Program, along with another USAID-funded project, the Social Marketing Company (SMC), jointly conducted an assessment of KSH to identify opportunities to make the hospital’s systems more capitlated and sustainable. The assessment showed that one of the major challenges for the hospital was its irregular and manual oxygen supply, which poses a potential risk to the lives of many newborns and children in danger.

To address this challenge, SIAPS commissioned a central oxygen supply mechanism within the hospital area to strengthen the hospital’s newborn and child health service delivery systems. SIAPS also helped KSH develop staff capacity and strengthen its medicine warehousing system. Such collaboration paved the way for SIAPS to build a successful public-private partnership that has the potential to speed up progress toward ending preventable child and maternal deaths (EPCMD).

SIAPS is now working to develop a long-term strategy with a capacity-building and sustainability plan for KSH and to introduce a web-based health information management system in the hospital to support evidence-based decision making to save more lives in the future.
December 2015 with the aim of rolling out the system. The trainees responded positively to the system and opined that it will help them improve priority MNCH medicines reporting. Presently, SIAPS is working with DGHS to address systems errors identified during the beta testing for smooth functionality of data entry.

**Innovative Approach Helps Peripheral TB Patients Get Quality Medicines**

To ensure the quality of tuberculosis (TB) medicines, it is important that they are kept in temperature-controlled storage (recommended temperature is below 25 °C). But at the peripheral levels, the TB drugs are generally kept at the directly observed treatment–short-course (DOTS) centers of upazila health complexes (UHC) or in the implementing partners’ TB facility, mostly in a wooden or steel almirah, neither of which is temperature controlled or ventilated. This creates problems in the summer when the temperature rises above 30 °C, risking the quality of the expensive and sensitive TB medicines. SIAPS came up with an innovative approach and facilitated commissioning of 102 medicine refrigerators for 94 DOTS centers in 14 selected districts. Government orders were issued by the National TB Control Program (NTP) to respective facilities to use the refrigerators for keeping TB medicines only. Storing TB medicines at the recommended temperature at peripheral levels ensures that quality, cost-effective medicines are distributed to TB patients.

**Development of the 4th HPNSDP is Underway**

The 4th Health, Population, and Nutrition Sector Development Program (HPNSDP) (2016-2021) under MOHFW is currently under development, and SIAPS, as a pharmaceutical system strengthening project, contributed significantly to two of HPNSDP’s key components, namely, improving health services and strengthening health systems. SIAPS led the procurement and supply chain management sub-thematic area of the sector development plan, facilitated a number of stakeholder consultations and technical meetings, and prepared the draft to be incorporated into the sector plan. Once the final sector plan is approved, it will play a crucial role in ensuring that SIAPS’ key interventions are sustained, bringing greater health impact. SIAPS is also actively participating in developing the result framework for the next sector program, led by the Program Management and Monitoring Unit.

**International Training Enhances MOHFW’s Official’s Procurement Capacity**

In August 2015, SIAPS facilitated a 10-day international training on procurement of goods and services for 15 MOHFW officials. This in-country training, conducted by SETYM International, Canada, was tailored to address the requirements of the MOHFW and to equip procurement officials of DGHS, DGFP, and the Procurement and Logistics Management Cell with enhanced skills and knowledge to better perform their day-to-day procurement activities.

The training provided in-depth knowledge on World Bank (WB) procurement guidelines for goods and services by combining classroom learning, group exercises, case studies, and open discussions. Through case studies, participants examined complex issues of the WB guidelines and identified errors commonly made in procurement planning, bidding document and proposal preparation, and proposal opening, as well as evaluation and learning how to avoid mistakes. A pre-training evaluation showed that participants lacked a clear understanding of WB procurement guidelines for goods and services, but the post-training evaluation revealed a marked improvement in the understanding of complex issues.
SOP Developed to Strengthen DGDA’s Post-Marketing Surveillance Capacity

SIAPS continued to support DGDA in strengthening their post-marketing surveillance capacity by developing a standard operating procedure (SOP) for the inspection and monitoring of medicinal products in pharmacy shops. The SOP also provides details on correct sampling methodology and quality management of samples collected by DGDA inspectors. A workshop on the SOP was conducted on September 16–17, 2015, for 75 DGDA officials, including the field inspectors and 15 officers from the National Control Laboratory, where these products are tested. The workshop, focusing on how the officials can utilize and implement the SOPs, created an opportunity for DGDA officials to exchange ideas, discuss their challenges in the field during inspections, and propose solutions to their senior management. The document was finalized, incorporating the feedback received from the participants and was disseminated to DGDA inspectors in February 2016.

SIAPS Extends Support to Bangladesh Country Coordination Mechanism

As requested by USAID, SIAPS extended its technical assistance to develop a website for the Bangladesh Country Coordination Mechanism (BCCM; www.bccmbd.org), a national multi-stakeholder partnership to access and oversee Global Fund financing that supports and complements Bangladesh’s national responses to HIV and AIDS, TB, and malaria. SIAPS also facilitated training for the Bangladesh country coordination team to manage and maintain the site after handover. The BCCM website, initially hosted by an MSH server, was transferred to the DGHS server, and the system, including technical documents, source codes, and cPanel, was successfully handed over to BCCM in December 2015. The website was launched by the Honorable Health Minister, Mr. Mohammed Nasim, MP.

Harmonization of Inventory Tools Improves DGHS’ Inventory Management

Dissimilarity of inventory management tools across the system has long been an identified issue for DGHS that has negatively impacted the directorate’s overall logistics management. To address this issue, SIAPS reviewed the existing inventory management tools with DGHS staff and other key stakeholders and came to a consensus to introduce standard tools at all levels. Following this, SIAPS facilitated the development and printing of uniform inventory management tools (stock registers, issue vouchers, indents and issue vouchers, bin cards) as approved by the director general of DGHS. Uniform inventory tools were distributed among DGHS facilities in 19 selected districts. A total of 306 (26 female) store officials working at various levels (district, sub-district, and union) in these districts received a two-day training on basic logistics management issues and how to use the newly developed inventory tools. The training participants hailed SIAPS’ effort in standardizing the inventory tools, remarking that having standardized forms and registers available at every tier of DGHS will make it easier to perform these types of inventory activities.

Ensuring Medicine Safety through Improved Pharmacovigilance

With assistance from the SIAPS Program, 30 public and private health facilities and 30 pharmaceutical manufacturers are now under DGDA’s pharmacovigilance (PV) program, in which designated focal persons are implementing adverse drug event (ADE) reporting activities. To monitor the progress and implementation status of ADE reporting, SIAPS and Adverse Drug Reaction Monitoring (ADRM) Cell members jointly visited all 30 hospitals and, as a result, more than 600 ADE reports were collected. In September 2015, SIAPS facilitated a technical session for the Adverse Drug Reaction Advisory Committee (ADRAC) members to evaluate the ADE reports and to recommend actions to be taken by DGDA. Consequently, ADRAC assessed 189 ADE reports with complete information and validated them for submission to the WHO database.

Furthering the effort to strengthen PV activities, SIAPS facilitated a one-day refresher training in December 2015 for 60 representatives from selected hospitals and pharmaceutical manufacturers to update them on the ongoing activities of the ADRM Cell and to identify existing challenges and gaps in the system. Participants took part in an active discussion to explore practical solutions to underreporting of ADEs. At the event, three hospital representatives shared their respective organizations’ PV activities. A presentation was also made to showcase best practices that could be adopted to strengthen PV all over the country.
Despite the concerted efforts of the NTP and its partners, TB still remains a considerable public health concern in Bangladesh. One of the most significant challenges for the NTP is maintaining accurate recording and up-to-date reporting of TB cases. Lack of reliable data weakens surveillance and performance, ultimately increasing the number of drug-resistant and multi-drug-resistant (MDR)-TB patients.

To assess the needs of NTP’s information management system, SIAPS collaborated with MOHFW and, after an option analysis, NTP adopted the web-based e-TB Manager (e-TBM; http://etbmanagerbd.org/) to better manage TB patients and medicines and generate key reports and indicators.

NTP, in partnership with WHO, piloted e-TBM at six sites in November 2010; it was then rolled out to 255 sites, including all MDR sites in Bangladesh.

In August 2015, NTP selected 20 districts (with full coverage of e-TBM in all sub-districts) as sentinel sites and notified these districts’ authorities that use of e-TBM was mandatory for both recording and reporting (TB10, TB11, and TB12) TB cases. NTP also introduced surveillance to monitor and improve data quality.

Pre-post analysis of the 20 districts’ site performance showed that 45,103 cases were entered into e-TBM against 50,836 registered cases on TB cards by December 2015. From the first to the fourth quarters of 2015, the difference in the number of registered cases between paper-based and electronically generated reports decreased from 21.7% to 8.3%, and performance rate data (timeliness, completeness, accuracy) improved by 26.8 percentage points.

To ensure smooth functioning of e-TBM, SIAPS facilitated training for 950 staff from NTP and TB partners and also developed 13 master trainers.

Md. Mominul Islam is the e-TBM focal person for Shingra sub-district in the Natore district who received training in 2014. Sharing his experience about using e-TBM, he said, “e-TBM allows me to record many cases in a minimum time and generate accurate reports, so I can now help more patients daily than I used to have when manual reporting was done.” Mominul happily added, “I can easily find out patient information from e-TBM, so if any TB patient fails to share previous treatment information, all I need to do is to open e-TBM, look for his records, and give medicines accordingly. I think e-TBM contributes a lot to [reducing the number of] drug-resistant TB patients.”

Master trainer providing on-the-job training during a field visit.
Photo credit: Abu Taleb, SIAPS BD
SMC’s Logistics Management Improves with SIAPS Assistance

The SMC, one of USAID’s implementing partners, requested the assistance of the SIAPS Program to improve their logistics management system. SIAPS facilitated a two-day training on logistics management for 20 SMC staff that focused on basic logistics issues such as inventory management, storage, distribution, transportation, LMIS, etc. Thanking SIAPS, SMC’s Managing Director Md. Ali Reza Khan said, “This training will definitely enhance the capacity of our employees engaged in logistics management.” One of the key outputs of the training was the development of a post-training action plan with a timeline for completing the planned and committed logistics activities. SIAPS will follow up with SMC to ensure that the post-training action plan is implemented.

Abstracts and Poster Presentations Showcasing SIAPS Bangladesh at International Forums in 2015

- Data-Driven Supply Planning and Decision Making Leads to Cost-Savings and Greater Access to Contraceptives at Service Delivery Points; International Conference on Realizing UHC Goals: Bangladesh Realities and Way Forward, 2015

- Use of a Web-Enabled Logistics Information System that Visualizes Data from Reproductive Health Service Delivery Points in Bangladesh: Initial Experience and Opportunities for Improved Decision Making; International Urban Health Conference, 2015

- GIS Data Visualization to Optimize Family Planning Supply Chain Performance in Bangladesh: Initial Experience and Opportunities; Annual MEASURE Evaluation GIS Working Group Meeting, 2015


- Mobile Alerts to Increase Reporting Rates and Reduce Potential Stock-Outs of Family Planning Commodities; mHealth Compendium, Volume 5, African Strategies for Health, 2015

We would be happy to hear from you

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This report is made possible by the generous support of the American people through the US Agency for International Development (USAID), under the terms of cooperative agreement number AID-OAA-A-11-00021. The contents are the responsibility of Management Sciences for Health and do not necessarily reflect the views of USAID or the United States Government.