

GHANA: Improving Rational Medicine Use in the Mission Sector

Problem: The assessment carried out by the SEAM Program in 2001 identified poor quality prescribing and dispensing practices as weaknesses within the mission sector as evidenced by an overprescription of antibiotics. The Catholic Department of Health has a network of 97 institutions that primarily serve rural areas—supplying about 30 percent of the population with health care services.

Strategy for Change: SEAM worked with the Catholic Pharmaceutical Service, which supplies the Catholic facilities, to promote the rational use of medicines. This was based on training a core team of health professionals from a hospital to run a Drug and Therapeutics Committee (DTC) as the means for changing prescribing and dispensing practices in the hospitals, leading to patients using medicines better. Five hospitals in the Catholic mission sector were selected to have the DTC training, and five government hospitals and five other Catholic hospitals were selected as controls. Activities included—

- Experts in promoting the rational use of medicines from both the government and mission sector worked together to design and secure consensus on the right approach.
- A training manual was developed that was disease-specific and focused on standard treatment guidelines to enable practice changes to be tracked.
- A modular training program was conducted that included two days of classroom work and eight weeks of field practice in participating hospitals, as well as post-training monitoring.

Results: The initiative's goal was to improve the quality of prescribing and dispensing practices in the Catholic mission sector, and SEAM carried out baseline and endline assessments to determine changes in those practices. However, since the project was only in place for eight months (including three months of training) before the SEAM Program had to wrap up its work, the assessment produced limited findings. Drawing more definitive conclusions would require a longer follow-up period. Some preliminary findings included—

- Overprescribing had not been eradicated, but it had been reduced. For malaria encounters, there was a reduction in the number of drugs prescribed in DTC hospitals (baseline average 3.7 to endline average 3.3), but the endline average was still similar to the government control hospitals (average 3.5) and Catholic control hospitals (average 3.3).
- In hypertension encounters, DTC hospitals had a baseline of 3.5 medicines prescribed and endline of 3.0; government control hospitals had a baseline average of 3.0, endline average of 2.9; and Catholic control hospitals had a baseline average of 3.4, endline average of 3.5.
- Baseline data showed that in many instances, antibiotics were inappropriately used for malaria. In DTC hospitals, that practice decreased from 9 to 4 percent; in government hospitals it increased from 9 to 15 percent; and in Catholic control hospitals it decreased from 5 to 3 percent.
- Adherence to the national standard treatment guidelines for malaria by DTC hospitals (39 percent) was not significantly different from the government hospitals (41 percent) but was significantly lower than Catholic control hospitals (55 percent). The opposite, however, was true for hypertension—adherence to the national standard treatment guidelines in DTC hospitals was higher (79 percent) compared to government hospitals (55 percent) and Catholic control hospitals (45 percent).

Key Lessons Learned: Observing the impact of drug-use behavior changes requires time and continuous motivation. This impact assessment was conducted early in the DTC process; more time is needed for implementation to see the desired effects of using DTCs to improve drug use in hospitals.

- Training should generate sufficient interest in participants to ensure that all team members complete the modular course and prevent attrition.
- Physicians' involvement in training and leadership at each facility is critical for success of the program.
- For sustainability and acceptability by hospitals, DTC training should emphasize quality therapeutic care rather than just focusing on pharmaceuticals.
- Hospital management support and encouragement along with appropriate incentives (non-monetary) are needed for behavioral changes to occur.
- To sustain interest in the training program, organizers should follow up during fieldwork in the facility.

- Compliance with the selection of medicines was good, but much more needs to be done on adhering to dosages and frequency of treatment.

Activity update (February 2007): The drug and therapeutics committees established under SEAM continue to function at their individual institutions. To date, the DTC initiative has not expanded to other hospitals because of financial constraints. A next step would be to collect new endline data at the target hospitals to evaluate results after two full years of implementation and expand the effort to additional hospitals if warranted.