The Malawi Pharmacy Assistant Training Program seeks to train at least 150 Pharmacy Assistants for health facility deployment to improve pharmaceutical management in rural Malawi. This report is a brief update on the progress made over the first year of the program. In the first year, VillageReach, in partnership with the Malawi Ministry of Health (MOH), Malawi College of Health Sciences (MCHS), and University of Washington Global Medicines Program, successfully launched the Pharmacy Assistant Training program. The program partners made significant progress and achievements including: completed enhancements to the Pharmacy Assistant curriculum emphasizing supply chain management and practical learning; developed practicum training support materials for both students and preceptors; recruited, enrolled, and oriented the first cohort of 50 students; identified and oriented 12 district hospitals and relevant staff to serve as practical training sites; developed and implemented a monitoring and evaluation plan; deployed 25 students to 12 district hospitals and continued classroom training of 25 students; implemented a monthly supervision of students in practical sites; and began preparations for the 2014 intake of 100 students.

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**Progress to Date**

At the end of the first year, the program implementation has been successful and is on schedule. Additionally, we have set strong collaborations with key stakeholders and forums on the ground to ensure that the intervention is integrated into, and strengthens the existing systems. A program steering committee comprised of the Ministry of Health, Malawi College of Health Sciences and VillageReach was established and meets quarterly to oversee and support the program. The program is also a member of the Logistics and Human Resources for Health Technical Working Groups within the MOH.

The groundwork to prepare for the first cohort of students was completed within the first year. In October, 2012, the MCHS Pharmacy Assistant Certificate curriculum was reviewed and enhanced to include more emphasis on supply chain management and practical learning, in collaboration with the MCHS, MOH, University of Washington Global Medicines program, and local stakeholders in supply chain. The steering committee members approved 12 district hospitals as practicum sites.
where students spend five months of their first year undergoing practical training. In their second year of studies, students will be placed at health centers within the districts. A district assessment was conducted in the 12 districts in February and March 2013 to ascertain their suitability as practicum sites, identify challenges and their mitigation measures, and collect baseline information on key indicators in our monitoring and evaluation plan. With the increased emphasis on practical learning, the program partners developed new training materials including a preceptor guide and a student workbook to support and assist students and preceptors during the practical placement. These materials were distributed to students and preceptors in May, 2012. A total of 25 Pharmacy Technicians and 12 District Health Office representatives were oriented to the program, practicum training materials, and their respective roles in supporting the students in May and June 2013.

The first cohort of 50 students – 23 women and 27 men – was successfully recruited and enrolled. Among the 50 students, two are HSAs and one is an auxiliary nurse. We hope to increase the number of HSAs slightly in the next intake. One challenge to this is that many of the HSAs were either over or under qualified for the position. We are attempting to change our recruitment strategy in the next year so that we will be able to recruit and enroll a larger proportion of HSAs. We are currently starting to plan for recruitment of 100 students next year.

The students reported for classes on March 11, 2013. Following 10 weeks of orientation, the students were separated into two groups of 25. One group of students remained on campus to continue classroom learning while the other 25 students were deployed to district hospitals for practical learning. The 25 students reported to their practical sites on May 19, 2013. Currently, 11 district hospitals have additional pharmacy support as training sites for these 25 students.

At the end of the first year, student retention is 100%, as is student attendance both on campus and at practicum sites. VillageReach and MCHS faculty implemented a monthly supervision plan to provide support and guidance to the students and preceptors during the practical training. We have conducted two supervision visits. These visits have revealed that the students are being incorporated into the routine activities of the hospital and the pharmacy. They are actively supporting dispensing, storeroom management and inventory and they are completing their workbook activities. The Pharmacy Technicians report that the students are already a valuable resource in the pharmacy, and they are contributing to improved performance in the areas of dispensing, inventory and information management. Furthermore, the students are sent to health centers for two weeks during their initial district placement. Of the students that have already completed the two-week stay, all report a positive experience, where they felt they provided significant support and made improvements in the performance of the health center pharmacies including introducing storeroom management procedures, improving storage conditions and storeroom organization, updating and correcting stock cards, and filling in monthly LMIS forms. Moreover, the students report an eager willingness to return to the health centers where they believe their services are needed. Students will begin their health center deployments next year.
Monitoring and Evaluation

During the first year, VillageReach designed and implemented a robust Monitoring and Evaluation (M&E) plan. First, a district assessment was conducted in February/March 2013 that collected baseline information on key indicators defined in the plan. Key findings from the district assessment include; practical placements sites have sufficient and experienced human resources, systems and infrastructure to serve as learning sites. However, gaps were noted including; poor dispensing practices, limitations with storage space and arrangement, high demand of the existing Pharmacy Technicians time, low reporting rates, and poor information management.

We established routine data collection for continuous monitoring. Sources for data include MCHS reports, LMIS reports from the central level, monthly supervision visits, and student reports from the practical placement. Finally, the University of Washington Global Medicines Program incorporated the impact evaluation protocol for the additional component of the program evaluation. Next year, we will begin to report on health center level information. We plan to conduct a full baseline evaluation in February and March 2014 prior to health center deployments.

Challenges Encountered

In the first year, we encountered challenges with turnover in the MOH both at the central level and in the selected districts. The Deputy Director, Senior Logistician, and Chief Pharmacist in the Health Technical Support Services Pharmaceutics Department (HTSS/P) that began the program have all transitioned out of the MOH. We continue to build relationships with the new HTSS/P leadership.

At the district level, Pharmacy Technicians are currently being redistributed. We anticipate that some of the Pharmacy Technicians that were oriented to the program will be sent to work in new districts, which means we may need to orient new preceptors to the program over the next year. We have asked HTSS/P to consider the PA program as they are redistributing the Pharmacy Technicians.

In the next year we anticipate that we will see challenges related to overall supply chain and commodity availability as the Essential Medicines Kit program will end in September 2013 and responsibility for procurement, storage, and distribution of these commodities will be transitioned to Central Medical Stores Trust (CMST).

In addition, next year will see an increase in the number of PA students enrolled at MCHS from 50 to 150. We are working closely with campus leadership and the pharmacy department to ensure there is adequate capacity in terms of classroom space, lecturers, and materials to support the students. The supervision of the students once they are deployed to practicum sites will also be a challenge as we will have 50 students at district hospitals and 25 students in health centers. We will likely need to increase the number of districts supporting students and revise our supervision plans to ensure that students receive appropriate support.