Summary

The Ethiopian government has implemented successive health sector transformation plans during the last two decades to improve access to essential health services and health outcomes. The country has expanded primary health care units and higher education institutions, implemented a massive health workforce development scheme, and improved essential supplies and equipment with the aim of achieving the Millennium Development Goals and universal health coverage.

The health workforce is one of six building blocks of health systems. Frontline health workers are the largest number of health workforce. They are the initial contacts that connect families and communities with the health system. “Without frontline health workers, there would be no health care for millions of families in low income countries”

Ethiopia, like other low-income countries, faces multiple health workforce challenges, including shortages, inadequate training, low capacity, weak management systems and poor working conditions; together these lead to high attrition, poor motivation and poor performance of frontline health workers.

The overall objective of this thesis is to assess the performance of frontline health workers (including nurses, midwives and rural health extension workers) who work at public health facilities in Ethiopia and identify factors that influence it, with the aim of improving primary health care services in low-resource settings. The study is composed of eight interrelated chapters.

Chapter 1 is a general introduction that focuses on country contexts, the study conceptual framework and research questions. Ethiopia has a decentralized health care system with poorly developed human resource management structures and functions. The conceptual framework of this thesis is adapted from the World Health Organization’s health action framework (including human resource management systems, leadership, partnership, finances, education and policy) and four dimensions of health workers performance (availability, competence, productivity and responsiveness).

Chapters 2 and 3 explore midwives’ and nurses’ competency levels at the point of graduation from pre-service education. A cross-sectional design was used to observe midwives’ midwifery skills using a 10-station objective structured clinical examination (OSCE). Midwives’ and nurses’ nutrition skills were also assessed using a five-station OSCE. Only 32% of midwives attended 20 or more births during training (the national standard), and just 6% attended 40 or more births (the international standard). Midwives’ overall average OSCE midwifery competence score was 51.8%. The nutrition competence scores of midwifery and nursing students were 57.0% and 53.9%, respectively. The findings suggest that pre-service midwifery education needs to be
improved and that in-service training and on-site mentoring must be provided to newly employed midwives and nurses.

Chapter 4 focuses on the effectiveness of a quality improvement intervention to increase providers’ competencies for routine antenatal care (ANC), uncomplicated labor and delivery and immediate postnatal care (PNC) services. The study employed a post-only evaluation of intervention and comparison public health facilities. Overall mean competence scores of providers at intervention facilities were 22 and 11.9 percentage points higher than comparison sites for PNC and uncomplicated labor and delivery, respectively. There was no difference in ANC competency levels. The quality improvement intervention contributed to standardizing provider skills in delivering ANC, labor and delivery care and immediate PNC services within and among facilities. Scaling up the intervention to other facilities and regions may increase the availability of better quality maternal and newborn health services across Ethiopia.

Chapter 5 describes daily work practices among rural health extension workers (HEWs), using a task analysis methodology. A total of 62 tasks were examined using four measurement variables: frequency, task criticality, education and competence. Some HEWs learned how to perform hygiene and environmental sanitation tasks (43.6%), disease prevention and control tasks (44.9%), family health tasks (45.3%) and health education and communication tasks (39.8%) during their pre-service education. However, most learned primarily through in-service and on-the-job training. Substantial numbers of HEWs said they were never trained on integrated management of newborn and child illness (22%) and institutional clean and safe delivery services (15.9%). Over 85% of HEWs rated health extension program tasks as highly critical to public health outcome. HEWs performed certain critical tasks infrequently, including management of supplies, stocks and maintenance at their health posts and management of the cold chain system. Almost one-fourth (22%) of HEWs lacked skills to perform safe and clean delivery. This study demonstrates that HEWs are insufficiently prepared for the job during pre-service education. Policymakers need to review HEWs’ scope of practice, update pre-service education curricula and prioritize in-service training modules.

Chapters 6 and 7 discuss nurses’ job satisfaction, motivation and intention to leave the job using a cross-sectional study design. Overall, 60.8% of nurses working in public health facilities were satisfied with their jobs. About half (50.2%) intended to leave their jobs in the next year. Their intrinsic and extrinsic motivational levels were quite low. Nurses who were working to fulfil the government compulsory health service obligation, who were working at health centers and who had a university degree expressed significantly lower satisfaction, poorer motivation and higher turnover intentions than other nurses. Inadequate salary and benefits, lack of recognition from the organization, limited professional development opportunities, poor working environment and poor living conditions were the main predictors for nurses dissatisfaction, demotivation and high turnover intentions. A combination of financial and nonfinancial interventions is essential to
increase nurses’ job satisfaction and motivation and, ultimately, to decrease actual turnover. In addition, providing localized salary and benefits may also decreased job dissatisfaction. Policymakers should primarily focus on increasing retention in three groups: young nurses, nurses with a university degree and nurses who are completing their compulsory service obligation.

Chapter 8 presents general discussion, conclusions and recommendations. In conclusion, this thesis has contributed evidence on the most effective way to strengthen the performance of frontline health workers in Ethiopia and other low-resource settings. The thesis suggests that the FMoH and regional health bureaus should improve health workers’ training and introduce effective and sustainable human resource management interventions designed to improve FHWs’ competence, retention and productivity in order to attain the goals set out in the nation’s health sector transformation plan and HRH strategic plan to attain SDG 3 ‘Ensure healthy lives and promote well-being for all at all ages’.