Summary

Afghanistan has made significant progress in improving maternal and newborn health (MNH) and health system performance in the last 15 years; however, it still faces poor maternal and newborn health outcome indicators.

This thesis aimed to examine the public health system’s readiness to provide emergency obstetric and newborn care (EmONC), assess quality of maternal and newborn health care, and explore changes in health facility readiness to provide EmONC between 2010 and 2016. Such information will help to frame policy decisions and consider the design of evidence-based interventions to address gaps in the quality of care and reduce preventable maternal and newborn mortality in Afghanistan.

This thesis composed of eight chapters:

Chapter 1 provided a general introduction to global MNH and deterrents of preventable maternal and newborn mortality in low and middle-income countries. In addition to the Afghanistan country context, this chapter reflects on the structure of the health care services and quality of MNH in the country. It presented the aims and research questions, the conceptual framework, the research methods and a brief description of the thesis.

Chapter 2 presented the findings of a cross-sectional study on post-abortion care (PAC) in health facilities in Afghanistan. The study provided information on the availability of human resources, equipment, and supplies as well as knowledge of skilled birth attendants (SBAs) on PAC services in 78 health facilities designated to provide EmONC. The result of the study showed that all facilities had at least one health care provider who provided PAC services. About 70% of providers were trained in PAC and 66% of them were able to identify the most common complications of unsafe or incomplete abortion. Providers correctly demonstrated an average of 31% of the tasks required for PAC practices. The study concluded that most health facilities have supplies and equipment for PAC; however, the capacity of healthcare providers to deliver PAC was limited. It was recommended that the capacity of all SBAs in PAC services should be built.

Chapter 3 examined the capacity of EmONC facilities to prevent and manage severe preeclampsia/eclampsia (PE/E) cases in 2009–2010. In this cross-sectional assessment, the availability of equipment and supplies in 78 health facilities were observed and 244 providers were interviewed. The study found that most health facilities had drugs and supplies for management of PE/E. Providers who were trained on the use of MgSO4 scored higher than untrained providers. Diazepam as anticonvulsant for management of PE/E was commonly used by the SBAs. Although, drugs and supplies needed to treat severe PE/E were widely available at EmONC facilities in Afghanistan, providers had lack of knowledge in some areas, especially the use of MgSO4 and diazepam. The study suggested provision of refresher training, and reinforce best practices alongside supervision.

Chapter 4 presented the findings of a cross-sectional study that assessed the capacity of health facilities for performing newborn resuscitation and providers’ knowledge and skills in 2009–2010. The study assessors interviewed doctors and midwives in 78 health facilities on their knowledge and observed their performance on newborn resuscitation procedures on an anatomical model. Additionally, supplies, equipment, and infrastructure were also assessed at each health facility. The findings showed that the
majority of health facilities had essential equipment for newborn resuscitation. More than 80% of providers received training on newborn resuscitation. Doctors and midwives scored 71% and 66%, respectively, on knowledge questions and 66% and 71% on the skills assessment. Gaps were found in performance of providers in newborn resuscitation. To improve the performance of health providers, the study recommended to strengthen competency-based pre-service and in-service training complemented by supportive supervision.

Chapter 5 presented the findings of the quality of early detection and management of PE/E, based on the 2016 Afghanistan National Maternal and Newborn Health Quality of Care Assessment. It responded to questions about availability of supplies and knowledge and skills of SBAs to detect and manage PE/E in health facilities. All accessible public health facilities (n=77) with an average of at least five births per day, a sample of 149 public health facilities with less than five births per day and 20 private health facilities were assessed. Facility inventory, record review, interview with SBAs and direct clinical observation of complications were conducted. As results, most public health facilities had supplies and medicine for early detection and management of PE/E. During observation of ANC, 86.2% clients had their blood checked, 38.4% were asked if they had symptoms of PE/E. About half of the women with severe PE/E received correct dose loading and maintenance doses of MgSO4. In conclusion, SBAs had deficiency in knowledge and clinical practices in detection and management of PE/E in HFs. Investment in capacity development and continuing medical education for SBAs were recommended.

Chapter 6 examined quality of care in prevention and management of postpartum hemorrhage in health facilities in Afghanistan in 2016. The study used a subset of data from the 2016 Afghanistan National Maternal and Newborn Health Quality of Care Assessment. It provided evidence on the availability of supplies, including uterotonics and equipment, and SBAs’ practices in the prevention and management of PPH. The study found that oxytocin was widely available in health facilities, but half of the health facilities had misoprostol. Nevertheless, substantial gaps were found on practices of SBAs in detection and management of PPH. The study recommended skills development of SBAs through continuous capacity building approaches.

Chapter 7 assessed the changes in readiness of EmONC public health facilities in Afghanistan between 2010 and 2016. The study analyzed a subset of data from two cross-sectional health facility assessments conducted in 2010 and 2016. The study found that changes in EmONC signal functions in most health facilities did not occur between 2010 and 2016. However, availability of numerous drugs and supply along with availability of midwives declined in health facilities in 2016 as compared to 2010. The study concluded that despite a few positive changes, readiness of EmONC services had declined from 2010 levels. Investment in readiness of health facilities for provision of EmONC services is recommended.

Chapter 8 presented a general discussion of the study findings, a conclusion and recommendations. The discussion was structured according to the adopted conceptual framework, addressing the four domains of quality of care and changes in those between 2010 and 2016. Four domains of MNH quality of care included evidence-based practices, actionable health information systems, competencies of motivated human resources and physical resources. The thesis demonstrated that MNH quality of care in health facilities in Afghanistan declined between 2010 and 2016. Deficiencies in evidence-based practices, weak health information systems, insufficiency of SBA competencies, and inadequacy of physical resources have been identified as main shortfall of the health system performance. Deteriorating security situation and increased armed conflict had played a critical role in the decline. Political instability and armed conflict have created a strong barrier to access quality MNH care. However,
concerted efforts and commitment of the government and international partners in collaboration with private sectors are needed to address the gaps in MNH quality of care to gradually improve quality of care and accelerate the reduction of preventable maternal and newborn mortality in Afghanistan.