ISPAD Allan Drash Fellowship Report

Recipient: Dr. Archana Nepal

Year Awarded: 2025

Host Centre: Addenbrooke's Hospital, Cambridge University Hospitals NHS Foundation Trust, Department of Diabetes and Endocrinology

Mentor: Dr. Loredana Marcovecchio

Duration: 24 March – 30 April 2026

Fellowship Overview

I am sincerely grateful to the International Society for Pediatric and Adolescent Diabetes (ISPAD) for awarding me the Allan Drash Fellowship and providing me with the opportunity to undertake clinical training at Addenbrooke's Hospital under the mentorship of Dr. Loredana Marcovecchio. The fellowship was one of the most rewarding experiences of my professional career, broadening my clinical knowledge, strengthening my confidence in paediatric diabetes care, and exposing me to an outstanding multidisciplinary model of care that I hope to adapt within my own institution in Nepal.

Clinical Exposure

During my attachment I attended paediatric diabetes clinics, paediatric endocrinology clinics, inpatient ward rounds, the Severe Insulin Resistance and Lipodystrophy Clinic, diabetes educator-led clinics, Pump Pathway sessions and regional educational meetings. Overall, I observed approximately 100 patient encounters, including around 55 children and adolescents with diabetes. Every consultation offered unique learning opportunities, from newly diagnosed diabetes to advanced diabetes technologies and rare endocrine disorders.

Structured Multidisciplinary Care

Each clinic began with a pre-clinic multidisciplinary meeting where consultants, registrars and diabetes educators reviewed laboratory results, insulin pump report downloads, CGM reports and previous management plans before patients arrived. Post-clinic meetings ensured coordinated follow-up and education. I was impressed by the contributions of every professional during MDT meeting. The dietitians demonstrated a particularly child-

centred approach by speaking directly with children, exploring food preferences and selective eating habits, and tailoring practical dietary plans.

Diabetes Technology

CGM interpretation and insulin pump review formed an integral part of routine clinics. Reviewing time-in-range, glucose variability and insulin delivery before consultations demonstrated how technology can guide individualised treatment decisions. My understanding of insulin pumps and hybrid closed-loop systems was strengthened through the Pump Pathway clinic and diabetes educator sessions as well. I also observed one newly diagnosed child through the pathway from structured diabetes education to the first consultant consultation, highlighting the seamless integration of education and medical care.

Diabetes Education

The educator-led programme was exceptionally comprehensive, covering insulin administration, carbohydrate counting, sick-day rules, hypoglycaemia management, pump use and CGM. I also observed a dedicated session teaching parents how to administer glucagon for severe hypoglycaemia, reinforcing the importance of preparing families for diabetes emergencies through practical training.

Transition and Exercise

The transition clinics were particularly relevant to my own practice. These joint clinics, led by both paediatric and adult diabetes clinicians, provided a seamless transition of care for young people moving to adult services at 18–19 years of age. Consultations addressed a wide range of issues relevant to adolescence and emerging adulthood, including examination stress, alcohol use, gym training, sports participation, and developing independence in diabetes self-management. Through these clinics, I gained a much deeper understanding of exercise management in type 1 diabetes, particularly the adjustment of carbohydrate intake according to pre-exercise glucose levels, as well as nutritional strategies before and during prolonged physical activity to optimise glycaemic control and reduce the risk of hypoglycaemia.

Rare cases

A case of 13-year-old with recently diagnosed type 1 diabetes who presented repeatedly with foot pain, highlighting that neuropathic symptoms may occasionally occur early in the disease course as well. I also observed patients with both generalized and partial lipodystrophy, allowing me to appreciate their distinct clinical features and increasing my awareness that these conditions may be under-recognised in Nepal.

Reflection on differences between UK and Nepal

The fellowship also allowed me to reflect on important differences between diabetes care in the United Kingdom and Nepal. While my current diabetes team consists of a paediatric endocrinologist, a diabetes educator and a pharmacist, the multidisciplinary team at

Addenbrooke's includes consultants, registrars, diabetes specialist nurses, educators, dietitians, psychologists and other allied health professionals who work closely together to deliver comprehensive care.

Similarly, diabetes education in my institution is generally provided in small group sessions because of limited resources, whereas at Addenbrooke's education is highly individualised and tailored to each child and family. Observing this personalised approach highlighted the value of addressing the unique educational needs of every family and has inspired me to explore ways of introducing more individualised education within the constraints of our healthcare system.

Impact on Future Practices

This fellowship has had a profound influence on my clinical practice and future goals. It has strengthened my understanding of multidisciplinary diabetes care, diabetes technology, structured patient education, transition services, exercise management and the recognition of rare disorders such as lipodystrophy. On returning to Nepal, I hope to introduce several practical changes within my institution, including structured pre- and post-clinic multidisciplinary discussions, greater use of CGM and pump data during consultations, enhanced education on exercise and emergency glucagon administration, more personalised diabetes education where feasible, and the development of a structured transition programme for adolescents moving to adult care. Although differences in resources present challenges, many of these principles can be adapted to improve the quality of care for children and adolescents living with diabetes in Nepal.

Acknowledgements

Beyond the outstanding clinical experience, I enjoyed exploring the beautiful city of Cambridge, making the fellowship personally as well as professionally rewarding. I sincerely thank ISPAD for making this opportunity possible. I am especially grateful to Dr. Loredana Marcovecchio for her mentorship, and to Dr. Emile, Dr. Ken, Dr. Ajay, Dr. Sandra, Dr. Ben, the diabetes educators, registrars, nurses and the entire Diabetes and Endocrinology team for their generosity, support and warm hospitality. I am confident that the knowledge and skills gained through this fellowship will contribute meaningfully to improving the care of children and adolescents with diabetes in Nepal.