CURRICULUM VITAE

Muhammad Ali Karamat

Consultant Physician Diabetes and Endocrinology

Heartlands Hospital, University Hospitals Birmingham NHS Foundation Trust

Visiting Professor, City University, Birmingham Honorary Lecturer IMSR University of Birmingham

Training Programme Director Diabetes and Endocrinology Health Education West Midlands

National Recruitment Lead Diabetes and Endocrinology, UK NIHR Clinical Research Scholar

Clinical Champion Diabetes UK

RCP Regional Advisor West Midlands Sessional Teaching Warwick University

# SUMMARY

*Dr Karamat is a consultant in diabetes and endocrinology at University Hospitals Birmingham NHS Foundation Trust and an honorary lecturer at Birmingham University. His clinical areas of interest include role of technology in management of Type 1 DM as well as antenatal and community diabetes. He leads the Type 1 Diabetes service and is also joint lead for the regional islet and pancreas transplantation services with colleagues from Oxford. He is a leading authority on management of Type 1 Diabetes and technology and chaired the inpatient guidelines of hospitalized patients on insulin pumps as part of the Diabetes Technology Network.*

*His area of interest is Type 1 Diabetes in the multi-ethnic population which is not very well studied. He has been principal investigator for several phase2 and 3 clinical trials in Type 1 Diabetes. He has also supervised a PhD student looking at obstructive sleep apnoea in Type 1 Diabetes Mellitus. Throughout his career he has exhibited good leadership skills and has brought innovation to the work place.*

*He is actively involved in medical education and is the Training Programme Director for Diabetes and Endocrinology Health Education West Midlands as well as the clinical lead for the School of Medicine on Differential Attainment. He has been nominated as one of the national Diabetes UK Clinical Champions for 2020-22. He is currently the national recruitment lead for diabetes and endocrinology UK and RCP regional Advisor for West Midlands. He has been an invited speaker on the YDEF/EASD collaborative Young investigator scholarship as senior faculty member and also teaches regularly on the YDEF courses for Specialist Registrars. In the past he has also worked as clinical tutor for international training fellows as well as the Royal College of Physicians at University Hospitals Birmingham NHS Foundation Trust.*

*He is part of the working group for South Asian Health Foundation (SAHF) and been involved in writing reports about health inequalities in populations across Europe with Diabetes. In addition he has published extensively in the field of ethnicity and diabetes, management of diabetes during Ramadan, diabetes and cardiovascular disease and intensive insulin therapy as well as non-alcoholic fatty liver disease. His current research areas of interest include associations of sleep apnoea with Type 1 Diabetes and management of newly diagnosed people living with Type 1 Diabetes. He has delivered multiple talks at national and international stage on management of Type 1 Diabetes with particular emphasis on the role of technology and transplantation.*

# PERSONAL PROFILE

Address:

Diabetes Centre, Heartlands Hospital, Bordesley Green East, Birmingham B9 5SS Contact Numbers:

01214241310

07949554583

Email address: [Muhammad.karamat@uhb.nhs.uk](mailto:Muhammad.karamat@uhb.nhs.uk)

[m.a.karamat@bham.ac.uk](mailto:m.a.karamat@bham.ac.uk)

# SUMMARY OF QUALIFICATIONS:

FRCP, Royal College of Physicians London, Sep 2014 M.D, Medicine, University of Birmingham, July 2014 CCT, Diabetes and Endocrinology, JRCPTB Dec 2011. MRCP, Royal College of Physicians London, June 2006. MBBS, Punjab University, Pakistan, May 2002.

# AWARDS, INVITED LECTURES, PRESENTATIONS AND DISTINCTIONS:

* 2022 QIC and HSJ Awards Finalist. Digital Evaluation of Ketosis and Other Diabetes-related Emergencies (DEKODE)
* Oct 2022 South Asian Health Foundation Role of technology in management of Type 1 Diabetes Birmingham
* Aug 2022 Excellence in teaching award by ABEPOH (Association of British Endocrinologists of Pakistani Origin and Heritage)London
* May 2022 Senior faculty member UK Delegation to North European Young Diabetes Association Bergen Netherlands
* 2022. Winner of National Rowan Hillson Inpatient Safety Award. Theme: ‘The best interventions: Redesigning, rebuilding, and maintaining safe inpatient diabetes care during COVID’.
* March 2022 Diabetes and Ramadan Conference Birmingham. Management of Diabetes in Pregnancy during Ramadan
* Feb 2022 Management of Type 1 and inpatient diabetes. Advanced Diabetes care MSc module Birmingham City University
* Jan 2022 to date RCP Regional Advisor West Midlands
* Dec 21 West Midlands Physicians Association Autumn update What is new in management of Type 1 and Type 2 Diabetes
* Oct 21 South Asian Health Foundation Symposium Maximising remote consultations by using flash glucose monitoring
* Aug 21 to date NIHR Research Scholar West Midlands Clinical Research Network
* May 21 Mid-summer update Pakistan society of endocrinology Management of Type 1 Diabetes
* 2021 Runner up BJD Quality Improvement Award. Title: Sustaining improvement in diabetic ketoacidosis management through Quality Improvement Project
* November 2020-2022 Clinical Champion Diabetes UK
* Oct 2020 Developing World-Class D&E Training: The Health Education West Midlands Model. Highly commended QIC Awards
* Oct 2019 Training Programme Director and National Recruitment Lead Diabetes and Endocrinology
* July 2019 International cardiometabolic forum on management of heart failure and NAFLD Beijing
* March 2019 Diabetes UK Primary care award Solihull Integrated Care Model
* Nov 2018 Pakistan Endocrine Society Management of Hypoglycaemic unawareness in Type 1 Diabetes Mellitus Peshawar
* May 2018 Guidelines for managing insulin pump therapy in hospitalized patients ABCD-DTN meeting Glasgow
* July 2017 Management of diabetes complications in the transition age group at Aston University Birmingham
* March 2017 Management of high risk patients during Ramadan at the International Diabetes in Ramadan meeting at Postgraduate centre Queen Elizabeth Hospital
* 2016 Management of Diabetes Mellitus in the Afro Caribbean community, Campanile Hotel, Birmingham
* Jan 2016 Improving diabetes care in Birmingham: update from the Pan Birmingham Diabetes Network at St John’s hotel, Solihull
* May 2015.Management of diabetes mellitus among the elderly. SpR training day.
* Oct 2014 Oral presentation “Consensus statement on management of Type 2 Diabetes Mellitus in South Asians” at SAHF Birmingham
* May 2014 Webinar for G.Ps: Improving outcomes in diabetes.
* April 2014 Oral presentation on Diabetes and Heart Failure at Midlands Diabetes Club.
* Oct 2013 Oral presentation on gestational diabetes mellitus at Annual SAHF meeting Birmingham
* July 2010 Assessment of glucose homeostasis in coronary care Excellence in diabetes Hyatt Hotel, Birmingham

First prize and educational grant of £10,000.

* June 2009 Assessment of glucose homeostasis in coronary care Sparrow Training programme for SpRs, New Orleans.
* Dec 2008 An unexpected adrenal gonad connection; Isolated gucocorticoid deficiency and hypospadias in an adult patient due to mutant StAR protein MA Karamat, L Lin, JC Achermann, N Krone, JW Tomlinson, W Arlt Oral Communication Prize Clinical Cases Meeting.
* Nov 2008 The Endocrinology of Long-Life Batteries! Runner up, Nussey Prize, Selly Oak Hospital
* Academically declared Best Graduate of the college for the session 2002. Awarded 7 gold medals.

# PUBLICATIONS:

* Association of British Clinical Diabetologists Diabetes Technology Network UK (ABCD DTN-UK) audit of the NHS England Hybrid Closed-Loop Pilot in Adults with Type 1 Diabetes. In draft

## Crabtree TSJ, Griffin T, Yap YW, Narendran P, Gallen G, Furlong N, Cranston I, Chakera AJ , Philbey C, Karamat MA, Saraf S , Kamaruddin S, Evans M , Chapman A, Hussain S, Elliott J, Ryder REJ, Hammond P, Lumb A, Choudhary P\*, Wilmot EG\* on behalf of all ABCD Closed-Loop audit contributors

* Glycaemic outcomes in patients with diabetes under 65 and over 65 years using intermittently scanned continuous glucose monitoring (Flash) system. In draft

## Carol Wong, Anne De Bray, Naeem Ul Hassan, Ahmed Almohandes, Kyi Zin Thant, Sofia Gill, Dayna Gill, Srikanth Bellary\*, M.Ali Karamat\*

* Inequalities in the Monitoring and Management of Diabetic Kidney Disease in UK Primary Care: A Cross Sectional Study of The Health Improvement Network Database. In draft

## Katherine Phillips, Jonathan M Hazlehurst, Christelle Sheppard, Srikanth Bellary, Wasim Hanif, Muhammad Ali Karamat, Francesca Crowe, Anna Stone, Christopher Sainsbury, G Neil Thomas, Krishnarajah Nirantharakumar, Indranil Dasgupta

* DEKODE-Ramadan: A study 512 diabetes-related ketoacidosis episodes around Ramadan shows no added risk or impact on outcomes. In draft

## Haaziq Sheikh, Lakshmi Rengarajan, Vina Soran, Parth Narendran, Wasim Hanif, Muhammed Ali Karamat, Ateeq Syed, Punith Kempegowda, DEKODE team

* [Risk of incident obstructive sleep apnoea in patients with type 1 diabetes: a](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9283161/) [population-based retrospective cohort study](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9283161/)

## Ziyad Alshehri, Anuradhaa Subramanian, Nicola J. Adderley, Krishna M. Gokhale, Muhammad Ali Karamat, Clare J. Ray, Prem Kumar, Krishnarajah Nirantharakumar, Abd A. Tahrani

**Diabetologia. 2022**; 65(8): 1353–1363. Published online 2022 May 24. doi: 10.1007/s00125-

022-05714-5

* [Improving diabetes and endocrinology specialty training with modest resources: the](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8651306/) [Health Education West Midlands model](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8651306/)

## Punith Kempegowda, Timothy D Robbins, Kristien Boelaert, Wiebke Arlt, John Ayuk, Sailesh Sankar, Muhammad A Karamat

**Future Healthc J. 2021** Nov; 8(3): e644–e647. doi: 10.7861/fhj.2020-0091

* [Effect of COVID-19 on the clinical course of diabetic ketoacidosis (DKA) in people](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8133369/) [with type 1 and type 2 diabetes](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8133369/)

**Punith Kempegowda, Eka Melson, Agnes Johnson, Lucy Wallett, Lucretia Thomas, Dengyi Zhou, Catherine Holmes, Agata Juszczak, Mohammed Ali Karamat, Sandip Ghosh, Wasim Hanif, Parth Narendran, Srikanth Bellary. Endocr Connect. 2021** Apr 1; 10(4): 371–377. Published online 2021 Mar 5. doi: 10.1530/EC-20-0567

* Pharmacological management of South Asians with Type 2 Diabetes: Consensus Recommendations from the South Asian Health Foundation

## Wasim Hanif , Sarah Ali , Srikanth Bellary , Vinod Patel , Azhar Farooqi , Muhammad Ali Karamat , Mujahid Saeed , Sobha Sivaprasad , Kiran Patel , Kamlesh Khunti Diabet Med 2020 Dec 10;e14497. doi: 10.1111/dme.14497.

* Ramadan and Diabetes: A Narrative Review and Practice Update

## Syed H. Ahmed, Tahseen A. Chowdhury, Sufyan Hussain, Ateeq Syed, Ali Karamat, Ahmed Helmy, Salman Waqar, Samina Ali, Ammarah Dabhad, Susan T. Seal, Anna Hodgkinson, Shazli Azmi, Nazim Ghouri

**Diabetes Ther. 2020** Nov; 11(11): 2477–2520. Published online 2020 Sep 9. doi: 10.1007/s13300-020-00886-y

* COVID-19, Diabetes and Ramadan

## Tahseen A. Chowdhury, Salman Waqar, Sufyan Hussain, Syed H. Ahmed, Ateeq Syed, Ali Karamat, Ahmed Helmy, Nazim Ghouri

**Diabetes Ther. 2020** Nov; 11(11): 2447–2451. Published online 2020 Sep 3. doi: 10.1007/s13300-020-00887-x

* Simulation via instant messaging-Birmingham advance (SIMBA) model helped improve clinicians’ confidence to manage cases in diabetes and endocrinology.

## Eka Melson, Meri Davitadze, Manal Aftab, Cai Ying Ng, Emma Ooi, Parisha Blaggan, Wentin Chen, Thia Hanania, Lucretia Thomas, Dengyi Zhou, Joht Singh Chandan, Latha Senthil, Wiebke Arlt, Sailesh Sankar, John Ayuk, Muhammad Ali Karamat, Punith Kempegowda

**BMC Med Educ. 2020**; 20: 274. Published online 2020 Aug 18. doi: 10.1186/s12909-020-

02190-6

* The South Asian Health Foundation (UK) guidelines for managing diabetes during Ramadan

## W. Hanif,V. Patel,S.N. Ali,A. Karamat,M. Saeed,M. Hassanein,A. Syed,T.A. Chowdhury,A. Farooqi,K. Khunti.

**Diabetes Research and Clinical Practice** VOLUME 164, 108145, JUNE 01, 2020 <https://doi.org/10.1016/j.diabres.2020.108145>

* Simulation training using WhatsApp (Sim-thru-WhatsApp) improves doctors’ confidence in endocrine and diabetes case management.

## Wentin Chen, Punith Kempegowda, Eka Melson, Meri Davitadze, Manal Aftab, Emma Ooi, Cai Ying Ng, Parisha Blaggan, Thia Hanania, Lucretia Thomas, Dengyi Zhou, Sailesh Sankar, John Ayuk, Muhammad Ali Karamat

**Clin Med (Lond) 2020** Mar; 20(Suppl 2): s62–s63. doi: 10.7861/clinmed.20-2-s62

* The effect of Ramadan fasting on cardiovascular events and risk factors in patients with type 2 diabetes: A systematic review. **Almulhem M, Susarla R, Alabdulaali L, Khunti K, Karamat MA, Rasiah T, Tahrani AA, Hanif W, Nirantharakumar K.** [**Diabetes Res**](https://www.ncbi.nlm.nih.gov/pubmed/31711857)[**Clin Pract.**](https://www.ncbi.nlm.nih.gov/pubmed/31711857) **2019** Nov 9;159:107918. doi: 10.1016/j.diabres.2019.107918.
* Diabetic myonecrosis: an uncommon diabetic complication

## Punith Kempegowda, Eka Melson, Gerald Langman, Fady Khattar, Muhammad Karamat, Quratul-Ain Altaf

**Endocrinol Diabetes Metab** Case Rep. 2019; 2019: 19-0067. Published online 2019 Oct 3. doi: 10.1530/EDM-19-0067

* SQUID DKA – baseline audit of diabetic ketoacidosis management at a large NHS foundation trust in the West Midlands.

**Punith Kempegowda, Amna Noorin, Ayesha Ishaq, Ateeq Syed, and Muhammad Karamat.** [**Future Healthc J.**](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6616822/) **2019** Mar; 6(Suppl 1): 12. doi: [10.7861/futurehosp.6-1-s12](https://dx.doi.org/10.7861%2Ffuturehosp.6-1-s12)

* Clinical and cost implications of Insulin Degludec in Patients with Type 1 Diabetes and Problematic Hypoglycemia: A Quality Improvement Project.

**Karamat, M.A., Dar, S., Bellary, S. et al. Diabetes Ther (2018)** 9:839. https://doi.org/10.1007/s13300-018-0400-x

* Representation of people of South Asian origin in cardiovascular outcome trials of glucose-lowering therapies in Type 2 diabetes.

**Khunti K, Bellary S, Karamat MA, Patel K, Patel V, Jones A, Gray J, Shepherd P, Hanif W; South Asian Health Foundation. Diabet Med. 2017** Jan;34(1):64-68. doi: 10.1111/dme.13103. Apr 28

* Preconception care for women with type 1 or type 2 diabetes mellitus: a mixed- methods study exploring uptake of preconception care.

**Earle S, Tariq A, Komaromy C, Lloyd CE, Karamat MA, Webb J, Gill PS.Health Technol Assess. 2017 Mar**; 21(14):1-130. doi: 10.3310/hta21140

* Prevalence of Type 2 diabetes in patients admitted with acute coronary syndrome: The role of easily reproducible non-invasive screening methods.

**Karamat MA, Raja UY, Manley SE, Jones A, Hanif W, Tahrani AA. BMC Endocr Disord. 2017** Jan 23; 17(1):3. doi: 10.1186/s12902-017-0153-y

* Severe, asymptomatic non-alcoholic fatty liver disease in routine type 2 diabetes care; a multi-disciplinary approach to diagnosis and management.

## Armstrong MJ, Hazlehurst JM, Parker R, Koushiappi E, Mann J, Khan S, Philips A, Chandler L, Johnson J, Round M, Haydon G, Karamat MA, Newsome

**PN, Tomlinson JW QJM. 2014** Jan; 107(1):33-41. doi: 10.1093/qjmed/hct198. Epub 2013 Oct 15.

* Thyroid stimulating hormone receptor (TSHR) intron 1 variants are major risk factors for Graves' disease in three European Caucasian cohorts.

## Płoski R, Brand OJ, Jurecka-Lubieniecka B, Franaszczyk M, Kula D, Krajewski P, Karamat MA, Simmonds MJ, Franklyn JA, Gough SC, Jarząb B, Bednarczuk

**T. PLoS One. 2010** Nov 25;5(11):e15512

## M A Karamat and S C Gough

Postprandial hyperglycaemia red herring or red flag Primary Care Cardiovascular Journal, vol 3 issue 3 Jul/Aug/Sep 2010

* + Book chapter on diabetes with Professor Gough for Royal College of Psychiatrists publication “Essentials of Medicine in Psychiatry”.

## Karamat MA, Syed A and Hanif W.

Review of diabetes management and guidelines during Ramadan.

**J R Soc Med. 2010** Apr; 103(4):139-47

## Afsar Raza, MMH Nuri, Muhammad Ali Karamat, Sohail Aziz, Khalid Raja, Azhar M Kiyani.

Primary PTCA in acute myocardial infarction. Our experience at the Armed Forces Institute of Cardiology and National Institute of Heart Diseases Rawalpindi Pakistan. **Pakistan Heart Journal Vol 35 No 1-4 Jan-Dec 2002**

# LOCAL, REGIONAL AND INTERNATIONAL COMMITTEES AND COLLABORATIONS:

* + 2022 to date Chair of Differential Attainment Working Group School of Medicine.
  + 2022 to date Member of local RCP College tutors and Associate College Tutors Network as RCP Regional Advisor.
  + 2022 to date Member and Chair of Workforce planning for Centre of Endocrinology Diabetes and Metabolism University of Birmingham
  + 2020 to date Member of national training committee SAC Diabetes and Endocrinology as TPD West Midlands.
  + 2021 to date National recruitment lead Diabetes and Endocrinology
  + 2019 to date Chair of Specialist Training Committee Diabetes and Endocrinology West Midlands as Training Programme Director
  + 2019 to date Member of School Board Postgraduate School of Medicine West Midlands
  + 2021 to date Teaching for the Advanced Diabetes Care MSc Module, Birmingham City University
  + 2020 to date Member of Pan Midlands Type 1 Diabetes Clinical and Research Network
  + 2018 to date Partnership with Pakistan Endocrine Society
  + 2017 to date Member of Pan Birmingham and Solihull Diabetes Medicines Management Advisory Group
  + 2016 to date Member of Pan-Birmingham Clinical Diabetes Network
  + 2010 to date Member of Diabetes working group of South Asian Health Foundation
  + 2010 to date Birmingham University IMSR (Institute of metabolisms and system research) and CEDAM (Centre for Endocrinology, Diabetes and Metabolism).
  + 2014 to date Teaching at Postgraduate Diabetes Modules, Warwick University. Diabetes in Pregnancy and Role of technology in management of Type 1 Diabetes

# RESEARCH GRANTS:

* + To assess clinical and cost effectiveness of an integrated diabetes care model in Solihull (SoLID) general practice. First prize at Diabetes UK primary care award and

£500. I was the lead author and presenter at the conference.

* + Funding for use of new technology CGMS from Friends of Solihull Charities 2016

£1250. (Lead applicant for patient benefit grant)

* + Preconception care. What are the barriers and facilitators to uptake?

NIHR HTA project grant £250,000 Co-applicant with S Earle, C Lloyd, P Gill and J Webb 2014-2016. I was involved in all aspects of the study including design of the project as well as writing of the grant and analysing results as well as directly supervising the research fellow. This led to the following publication

Preconception care for women with type 1 or type 2 diabetes mellitus: a mixed- methods study exploring uptake of preconception care.

**Earle S, Tariq A, Komaromy C, Lloyd CE, Karamat MA, Webb J, Gill PS.Health Technol Assess. 2017 Mar**; 21(14):1-130. doi: 10.3310/hta21140

* + Assessment of glucose homeostasis in coronary care; QEHB Charities; £17,000; 2010-2011; I was the lead applicant for the grant leading to following publication as part of my MD

Prevalence of Type 2 diabetes in patients admitted with acute coronary syndrome: The role of easily reproducible non-invasive screening methods.

**Karamat MA, Raja UY, Manley SE, Jones A, Hanif W, Tahrani AA. BMC Endocr Disord. 2017** Jan 23; 17(1):3. doi: 10.1186/s12902-017-0153-y

* + Assessment of glucose homeostasis in coronary care (Lead applicant) Excellence in diabetes Hyatt Hotel, Birmingham July 2010

First prize and educational grant of £10,000 (Leading to following publication as part of my MD)

In addition, I have been involved in the following portfolio studies as local Principal Investigator including actively recruiting for all these studies:

* + Local Principal Investigator for Heartlands site for CLRN Trial A European Multicenter Study to Evaluate the Accu-Chek® Insight Insulin Pump in Routine Practice.(Funded by Roche Diagnostics)
  + Local Principal Investigator for The LIBERATES Trial - improving gLucose control in patIents with diaBEtes following myocardial infArction: the role of a novEl glycaemic monitoring Strategy. (Funded by University of Leeds)

Currently I am working on a research grant looking at developing a clinical and psychological educational tool for adults newly diagnosed with Type 1 Diabetes. This is in collaboration with colleagues from King’s College Hospital London and the Sheffield Department of Diabetes as well as local collaborators at University of Birmingham

In addition I remain interested in looking at the association of glycaemic variability in Type 1 DM with obstructive sleep apnoea as well as mechanism of microvascular complications such as nephropathy in diabetes.

# QUALITY IMPROVEMENT PROJECTS:

* + Quality improvement project looking at improving performance of inpatient diabetes as part of the DEKODE group
  + Quality improvement project looking at glycaemic control in elderly patients with Type 1 Diabetes
  + Quality improvement project as part of Simulation via instant messaging Birmingham Advance (SIMBA) in diabetes and endocrinology
  + Use of insulin degludec in management of Type 1 Diabetes Mellitus

# PROFESSIONAL ORGANIZATIONS:

* + Fellow and Regional Advisor Royal College of Physicians
  + South Asian Health Foundation
  + Society for Endocrinology UK.
  + Diabetes UK.
  + Midlands Diabetes and Endocrine Club
  + ABCD and Diabetes Technology Network UK

# REFERENCES:

* + 1. Professor Kamlesh Khunti

Professor of Primary Care Diabetes and Vascular Medicine College of Life Sciences University of Leicester

Director UK National Institute for Health Research (NIHR) in Applied Research Collaborations (ARC) East Midlands,

Director of Centre for Ethnic Health Research Director of Real World Evidence Unit

Honorary Visiting Professorial Fellow Department of General Practice, University of Melbourne.

Co-Chair Diabetes Working Group & Trustee South Asian Health Foundation Tel +44 1162734161

Mobile 07715479228

Email: [kk22@leicester.ac.uk](mailto:kk22@leicester.ac.uk)

* + 1. Professor Wasim Hanif MD FRCP

Professor of Medicine and Consultant Physician Diabetes and Endocrinology University Hospital Birmingham NHS Foundation Trust

Hon. Professor of Medicine

University of Warwick

Visiting Professor Birmingham City University Medical Director MSC in Advance Diabetes BCU Tel: +44 121 3714404

Mobile: 07880021539

Email: [Wasim.Hanif@uhb.nhs.uk](mailto:Wasim.Hanif@uhb.nhs.uk)