

SUPPLEMENTARY DATA

Gaps in Guidelines for the Management of Diabetes Mellitus in Low and Middle Income

Countries vs. HIC – a Systematic Review

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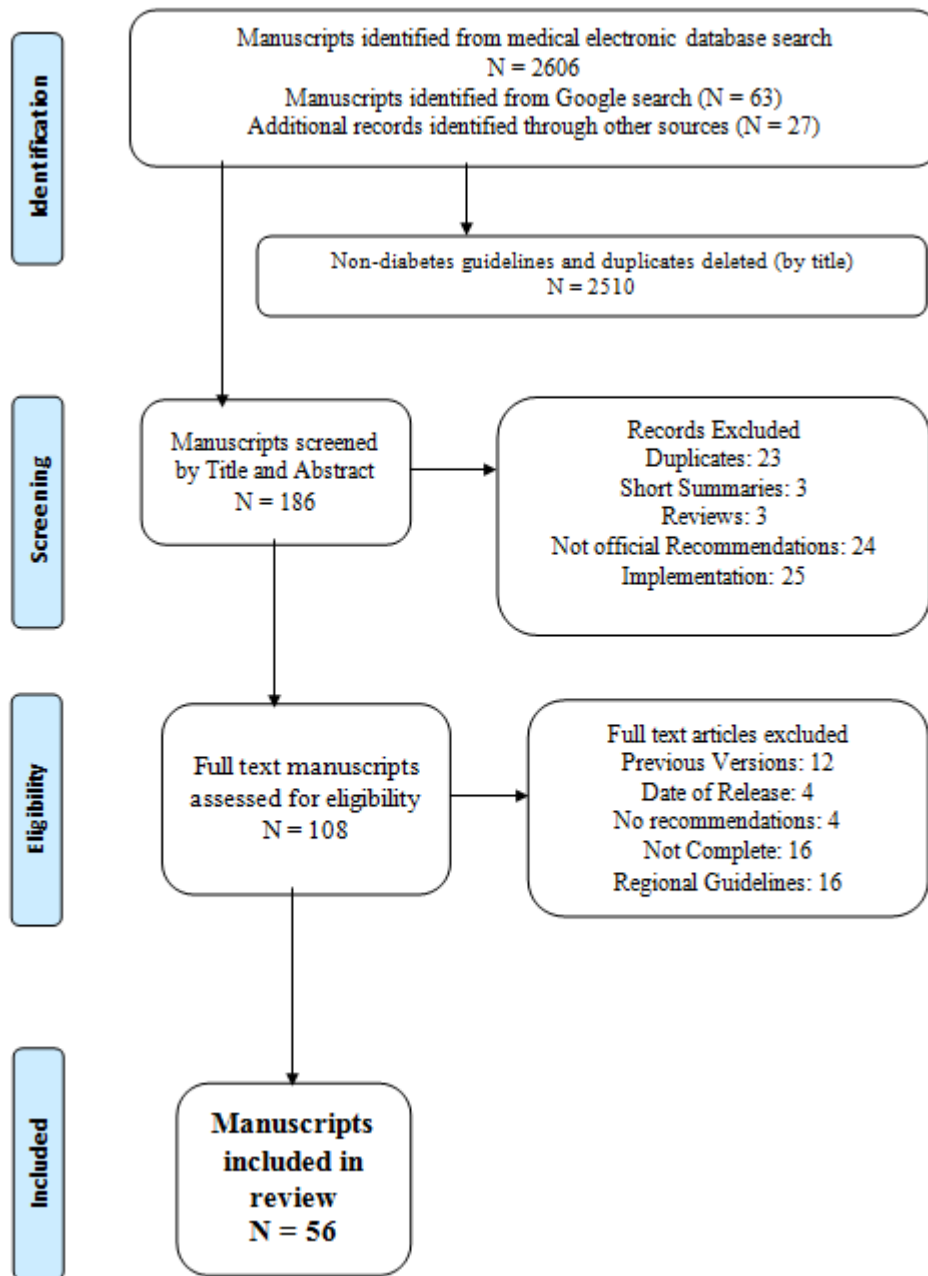
SUPPLEMENTARY MATERIALS.

*These authors contributed equally to this work

†Control Unique to Cardiovascular Diseases in Low and Middle Income Countries.

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Supplementary Figure S1. PRISMA Flow Chart of the Search for this Article.



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APPENDIX I

The PICO Search Strategy.¹

Context

Efficiency of a search strategy for answering healthcare related question entails acquisition of as much relevant and as little irrelevant information as possible. This is more likely when search in evidence based practice is approached methodically. For this reason, the PICO strategy was developed.

Objective

The PICO strategy was designed to allow for a well-structured research question which by extension will allow correct definition of information that should be sourced. There is also a better focus on the research objectives with avoidance of unnecessary searches.

Methods

The PICO process starts with framing of the research question from which the PICO elements can be extracted. The components of the various PICO elements are combined and re-adjusted to generate necessary search queries. See Table below;

	Application in this Review
Problem or Population of Interest	Country-specific guidelines
Intervention	Not applicable
Comparison	Low-Middle vs. income countries
Outcome	Target audience, spectrum of care, trustworthiness, ease of application, ELSE consideration

APPENDIX II

Institute of Medicine (IOM) Standards for developing Trustworthy Clinical Practice Guidelines.²

Context:

With marked increase in randomized controlled trials and more than 3 700 guidelines from 39 countries as at 2011, quality and trustworthiness of these guidelines becomes an issue. Several questions arise viz: on what evidence are these practice guidelines based? Is there any bias in the development process? How rigorous were the methods used in the guideline development? How relevant are the guidelines to subpopulations?

Objective:

In a bid to standardize evidence-based clinical practice guidelines, the United State Congress asked the Institute of Medicine (the health division of the United State National Academy of Sciences designed to answer health- and healthcare-related questions) to determine the best approach to designing a clinical practice guideline. The IOM standard was developed to ensure quality and reliability by transparency, reproducibility and scientifically valid results.

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Methods

The IOM recommends that all clinical practice guidelines comply with eight standards: establishing transparency; management of conflict of interest; guideline development group composition; systematic review; recommendations should be rated according to strength of evidence; articulation of recommendation; external review; updating.

Application in this Review

- Transparency: A guideline was deemed to be transparent if the processes by which the guideline was developed and it's funded is explicitly stated.
- Conflict of interest: A guideline was said to have managed conflict of interest if there was disclosure OR guideline development process stated exclusion of conflicted members from leadership role.
- Guideline development group composition: A guideline was deemed to have fulfilled this standards if there was a minimum of the following: clinicians, diabetic patients. involved in the guideline development
- Systematic review: A guideline was deemed to have fulfilled this standard if it was based on systematic literature review.
- Grading strength of recommendations: A guideline was deemed to have fulfilled this standard if for at least three quarters of its recommendation, all of the following are included: evidence, harms, benefits, and level of confidence in the recommendation.
- Articulation of recommendation: A guideline was deemed to have fulfilled this standard if at least three quarters of its recommendations are actionable i.e. under what circumstances, the responsible provider, and how the recommendation should be carried out is clearly stated.
- External review: A guidelines was considered externally reviewed if it was made available to the general public OR its representative for comment prior to release AND relevant stakeholders i.e. organizations and agencies were involved.
- Updating: A guideline was deemed to have fulfilled this standard if a proposed date for future review was stated.

SUPPLEMENTARY DATA

Supplementary Table S1. Available Diabetes Guidelines from Low Income Countries.

	Country	Year	Title	Author	Committee Members
1	Afghanistan ³	2013	National Standard Treatment Guidelines for the Primary Level	*Various	Various
2	Ethiopia ⁴	2014	Standard Treatment Guidelines for General Hospital	Food, Medicine and Health Care Administration and Control Authority	Various
3	Malawi ⁵	2015	Malawi Standard Treatment Guidelines (MTSG)	Ministry of Health	NS
4	Liberia ⁶	2011	National Therapeutic Guidelines for Liberia	Ministry of Health & Social Welfare	NS
5	Tanzania ⁷	2013	Standard Treatment Guidelines and Essential Medicine Drug List	Ministry of Health	Various
6	Uganda ⁸	2012	Uganda Clinical Guidelines	Ministry of Health	Various
7	Zimbabwe ⁹	2011	6 th Essential Drugs List and Standard Treatment Guidelines for Zimbabwe	National Drug and Therapeutic Policy Advisory Committee Ministry of Health and Child Welfare	NS

Countries arranged in alphabetical order.

*Islamic Republic of Afghanistan, Ministry of Public Health and General Directorate of Pharmaceutical Affairs.

NS: Not Stated.

SUPPLEMENTARY DATA

Supplementary Table S2. Available Diabetes Guidelines from Lower-Middle Income Countries.

	Country	Year	Title	Author	Members
1	Ghana ¹⁰	2010	Standard Treatment Guidelines	MOH	NS
2	India ¹¹	2015	Recommendations for Management of Type 2 DM	RSSDI	Various.
3	Kenya ¹²	2010	National Clinical Guidelines for Management of Diabetes	Ministry of Public Health and Sanitation	NS
4	Kiribati ¹³	2007	Therapeutic Drug Guidelines	MOH	NS
5	Nigeria ¹⁴	2008	Standard Treatment Guidelines	MOH	NS
6	Philippines ¹⁵	2013	Practice Guidelines on Diagnosis and Management of DM	UNITE For Diabetes Philippines MOH	Various. Non-medical people.
7	Solomon Islands ¹⁶		Guidelines for the Management of NCD in PHC		NS
8	Sri Lanka ¹⁷	2013	Diabetes Mellitus: Glucose Control	Endocrine Society of Sri Lanka	NS
9	Swaziland ¹⁸	2012	Standard Treatment Guidelines and Essential Medicines List of Common Medical Conditions in the Kingdom of Swaziland	MOH. USAID	Various
10	Zambia ¹⁹	2008	Standard Treatment Guidelines, Essential Medicines List & Essential Laboratory Supplies List For Zambia.	MOH	Various

Countries arranged in alphabetical order

NS: Not Stated. NA: Not Available. USAID: US Agency for International Development. MOH: Ministry of Health NCD: Non Communicable Disease. PHC: Primary Health Care. RSSDI: Research Society for the Study of Diabetes in India

SUPPLEMENTARY DATA

Supplementary Table S3. Available Diabetes Guidelines from Upper-Middle Income Countries.

	Country	Year	Title	Author	Members
1	Belize ²⁰	2010	Managing Diabetes in Primary Care in Belize	MOH	Various
2	Botswana ²¹	2010	The Essential Health Package	MOH	Various
3	Brazil ²²	2010	Algorithm for the Treatment of Type 2 DM	Lerario et al	NS
4	China ²³	2016	Standards of Care for Type 2 DM	CDS	Various
5	Colombia ²⁴	2016	CPG: Diagnosis, Treatment and Follow Up of Diabetes Type in the Population Older than 18 years old	GSSHS	Various
6	Ecuador ²⁵	2011	Clinical and Therapeutic Protocols for the Care of Chronic NCD	MOH	Various
7	Fiji ²⁶	2012	Diabetes Management Guidelines	MOH	Various
8	Jamaica	2007	Guidelines for the Management of DM	MOH	Various
9	Libya ²⁷	2006	Basic Management of DM: Practical Guidelines	Targ Elgzyri	NS
10	Malaysia ²⁸	2015	Management of Type II Diabetes Mellitus	MOH	Various
11	Mauritius ²⁹		Clinical Guidelines for the Management of Type II DM	*MOH	NS
12	Mexico ³⁰	2014	Clinical Practice Guidelines DM	MOH	Various
13	Panama ³¹	2009	Guide for the Comprehensive Care of People with DM	PAHO	Various
14	Peru	2015	CPG for the Diagnosis, Treatment and Control of DM in First Level Care	MOH	NS
15	Romania ³²	2006	Type II DM: Guideline for GPs		
16	South Africa ³³	2012	Guideline for the Management of Type 2 Diabetes	SEMDSA	NS
17	St. Lucia ³⁴	2006	Managing Diabetes in St. Lucia	MOH	
18	Turkey ³⁵	2010	CPG for Diagnosis, Treatment and Follow Up DM	SEMT	NS
19	Tuvalu ³⁶	2010	Standard Treatment Guidelines	MOH	Various

Countries arranged in alphabetical order.

SEMDSA: Society for Endocrinology, Metabolism and Diabetes of South Africa. DM: Diabetes Mellitus. MOH: Ministry of Health. *Ministry of Health and Quality of Life/Mauritius Institute of Health/World Health Organisation. SEMT: Diabetes Study Group of the Society of Endocrinology and Metabolism. PAHO: Pan American Health Organisation. ¹Algorithm for the Treatment of Type 2 Diabetes: A Position Statement of Brazilian Diabetes Society. GSSHS: General Social Security Health System. NCD: Non-communicable Disease. CDS: Chinese Diabetes Society. NS: Not Stated.

SUPPLEMENTARY DATA

Supplementary Table S4. Available Diabetes Guidelines or Recommendation from High Income Countries.

	Country	Year	Title	Author	Members
1	Argentina ³⁷	2008	CPG on Prevention, Diagnosis, and Treatment of Type 2 DM for First Level Care	MOH	Various
2	Australia ³⁸	2014	General Practice Management of Type 2 Diabetes	RACGP	NS
3	Bahrain ³⁹	2014	Guideline for Management of Type 2 DM in Primary Care Settings and Outpatient Clinic	MOH	Various
4	Bermuda ⁴⁰	2009	Guidelines for Diabetes Care in Bermuda	MOH	Various
5	Canada ⁴¹	2013	CPG for the Prevention and Management of DM in Canada	CDA	Various
6	Chile	2010	Clinical Guide DM Type 2	MOH	Various
7	Greece ⁴²	2013	Guidelines for Treatment of DM	HDA	Various
8	Hong Kong ⁴³	2013	Reference Framework for Diabetes Care for Adults in Primary Care Setting	Various	Various
9	Ireland ⁴⁴	2016	A Practical Guide to Integrated Type II Diabetes Care	ICGP	Various
10	Italy ⁴⁵	2007	Italian Standards for Diabetes Mellitus	Diabete Italia	Various
11	Korea ⁴⁶	2011	Clinical Practice Guidelines for Type II Diabetes in Korea	Ko et al	Various
12	New Zealand ⁴⁷	2012	Primary Care Handbook: Management of T2DM	MOH	Various
13	Scotland ⁴⁸	2010	Management of Diabetes (A national clinical guideline)	SIGN	Various
14	Singapore ⁴⁹	2014	MOH CPG: Diabetes Mellitus	MOH	Various
15	Spain	2008	CPG on type 2 Diabetes	MOH	Various
16	Sweden ⁵⁰	2015	National Guidelines for Diabetes Care	NBHW	Various
17	*England ⁵¹	2015	Type 2 Diabetes in Adults: Management	NICE	Various
18	US ⁵²	2016	Standards of Medical Care in DM	ADA	Various
19	US ⁵³	2014	Guiding Principle for the care of People with or at Risk for Diabetes	NDEP	Various
20	Wales ⁵⁴	2008	Designed for the Management of Adults with DM across Wales	NHS	Various

Countries arranged in alphabetical order.

*NICE Obesity Management Guideline and Updates published in 2015 included. NS: Not Stated. DM: Diabetes Mellitus. CPG: Clinical Practice Guidelines. VP: Various Practitioners. MOH: Ministry of Health. NHS: National Health Service. RACGP: Royal Australian College of General Practitioners. ICGP: Irish College of General Practitioners. SIGN: Scottish Intercollegiate Guidelines Network. NBHW: National Board of Health and Welfare. CDA: Canadian Diabetes Association. NICE: The National Institute for Health and Care Excellence. ADA: American Diabetes Association. NDEP: National Diabetes Education Program. HDA: Hellenic Diabetes Association

SUPPLEMENTARY DATA

Supplementary Table S5. Stakeholder Population (6Ps) Targeted by the Diabetes Guidelines.

	Populace	Patient	Providers	Policy Makers	Payers	Partners
LIC						
Afghanistan	No	No	Yes	No	No	No
Ethiopia	No	No	Yes	Yes	Yes	No
Liberia	No	No	Yes	No	No	No
Malawi	No	No	Yes	No	No	No
Tanzania	No	No	Yes	No	No	No
Uganda	No	No	Yes	No	No	No
Zimbabwe	No	No	Yes	No	No	No
Lower-MIC						
Ghana	No	No	Yes	No	No	No
Kenya	No	No	Yes	No	No	No
Kiribati	No	No	Yes	No	No	No
Nigeria	No	No	Yes	No	No	No
Philippines	No	No	Yes	No	No	No
Solomon Island	No	No	Yes	No	No	No
Swaziland	No	No	Yes	No	No	No
Zambia	No	No	Yes	No	No	No
Upper-MIC						
Belize	No	No	Yes	No	No	No
Botswana	No	Yes	Yes	Yes	No	No
Colombia	No	Yes	Yes	Yes	No	No
Fiji	No	No	Yes	No	No	No
Libya	No	No	Yes	No	No	No
Malaysia	No	No	Yes	No	No	No
Mexico	No	No	Yes	No	Yes	Yes
Peru	No	No	Yes	Yes	No	No
Romania	No	No	Yes	No	No	No
South Africa	No	No	Yes	Yes	Yes	No
St. Lucia	No	No	Yes	No	No	No
Turkey	No	No	Yes	No	No	No
Tuvalu	No	No	Yes	No	No	No
HIC						
Argentina	No	No	Yes	Yes	No	No
Australia	No	No	Yes	No	No	No
Canada	No	No	Yes	No	No	No
Chile	No	No	Yes	Yes	No	No
Greece	No	Yes	Yes	Yes	No	No
Hong Kong	Yes	Yes	Yes	No	No	No
Italy	No	Yes	Yes	Yes	Yes	No
New Zealand	No	No	Yes	No	No	No
Scotland	No	Yes	Yes	Yes	Yes	No
Singapore	No	No	Yes	No	No	No
Spain	No	Yes	Yes	No	No	No
Sweden	No	No	Yes	Yes	Yes	No
England	No	Yes	Yes	Yes	Yes	No
Wales	No	Yes	Yes	No	Yes	No

Countries arranged in alphabetical order.

*Guidelines from India, China, Ecuador, Sri-Lanka, Panama, Jamaica, Ecuador, Brazil, Mauritius, Bahrain, and Ireland did not state its target audience.

SUPPLEMENTARY DATA

Supplementary Table S6. Spectrum of Diabetes Care Addressed By Diabetes Guidelines (LIC, Lower MIC).

	Surveillance	Prevention	†DM Emergencies	*Special Care	¶CVD Comorbid	ψNon-CVD Comorbid	Patient Education	Nutrition	Physical Activity
LIC									
Afghanistan	No	Yes	Yes	No	No	No	No	No	No
Ethiopia	No	No	Yes	No	No	No	No	Yes	Yes
Liberia	No	No	Yes	No	No	No	No	No	No
Malawi	No	No	Yes	No	No	No	No	No	No
Tanzania	No	No	Yes	No	No	No	Yes	Yes	Yes
Uganda	No	No	Yes	No	No	No	No	No	No
Zimbabwe	No	No	Yes	Yes	No	No	No	Yes	No
Lower-MIC									
Ghana	No	No	Yes	Yes	No	No	No	Yes	Yes
India	Yes	No	No	No	Yes	Yes	Yes	Yes	Yes
Kenya	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Kiribati	Yes	No	Yes	Yes	Yes	Yes	No	Yes	Yes
Nigeria	No	No	Yes	Yes	Yes	No	No	Yes	Yes
Philippines	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Solomon Island	No	Yes	No	No	No	No	No	No	Yes
Sri Lanka	No	No	No	Yes	Yes	No	No	No	Yes
Swaziland	No	No	No	No	No	No	No	Yes	Yes
Zambia	No	No	Yes	Yes	No	No	Yes	Yes	Yes

Countries arranged in alphabetical order.

†DM Emergencies: Diabetic Ketoacidosis, Hyperosmolar Hyper-glycemic State, and Hypo-glycemia. *Special Care: Glucose control during acute hospital admission for non-glucose issues e.g. Intensive Care, Surgeries Pregnancy, and Ramadan. ¶Cardiovascular Co-morbidities: Does the Guideline cover hypertension, dyslipidaemia and obesity. ψ Non-Cardiovascular Co-morbidities: Diabetic foot, retinopathy etc.

SUPPLEMENTARY DATA

Supplementary Table S7. Spectrum of Diabetes Care Addressed By Guidelines (Upper- MIC)

	Surveillance	Prevention	†DM Emergencies	*Special Care	¶CVD Comorbid	ψNon-CVD Comorbid	Patient Education	Nutrition	Physical Activity
Upper-MIC									
Belize	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Botswana	No	No	No	Yes	No	No	Yes	No	No
Brazil	No	No	No	No	No	No	No	No	No
China	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes
Colombia	Yes	No	No	No	Yes	No	No	Yes	Yes
Ecuador	Yes	No	No	No	No	No	Yes	Yes	Yes
Fiji	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Jamaica	Yes	No	Yes	Yes	Yes	Yes	Yes	No	Yes
Libya	No	No	No	No	No	No	No	No	Yes
Malaysia	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Mauritius	No	No	No	No	No	Yes	No	Yes	Yes
Mexico	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Panama	Yes	Yes	No	No	No	Yes	Yes	Yes	Yes
Peru	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes
Romania	No	No	Yes	No	No	Yes	Yes	Yes	Yes
South Africa	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
St. Lucia	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Turkey	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Tuvalu	Yes	No	Yes	Yes	No	Yes	No	No	Yes

Countries arranged in alphabetical order.

†DM Emergencies: Diabetic Ketoacidosis, Hyperosmolar Hyper-glycemic State, and Hypo-glycemia. *Special Care: Glucose control during acute hospital admission for non-glucose issues e.g.Intensive Care, Surgeries Pregnancy, and Ramadan. ¶Cardiovascular Co-morbidities: Does the Guideline cover hypertension, dyslipidaemia and obesity. ψ Non-Cardiovascular Co-morbidities: Diabetic foot, retinopathy etc.

SUPPLEMENTARY DATA

Supplementary Table S8. Spectrum of Diabetes Care Addressed By Guidelines (HIC).

	Surveillance	Prevention	†DM Emergencies	*Special Care	¶CVD Comorbid	ψNon-CVD Comorbid	Patient Education	Nutrition	Physical Activity
Argentina	Yes	Yes	No	No	No	Yes	Yes	Yes	Yes
Australia	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Bahrain	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Bermuda	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
Chile	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes
Canada	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Greece	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Hong Kong	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
Ireland	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Italy	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
Korea	Yes	No	No	No	No	No	No	No	No
New Zealand	Yes	No	Yes	Yes	Yes	Yes	No	Yes	Yes
Scotland	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
Singapore	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Spain	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes
Sweden	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes
England	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
US	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
US	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes
Wales	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Countries arranged in alphabetical order.

†DM Emergencies: Diabetic Ketoacidosis, Hyperosmolar Hyper-glycemic State, and Hypo-glycemia. *Special Care: Glucose control during acute hospital admission for non-glucose issues e.g. Intensive Care, Surgeries Pregnancy, and Ramadan. ¶Cardiovascular Co-morbidities: Does the Guideline cover hypertension, dyslipidaemia and obesity. ψ Non-Cardiovascular Co-morbidities: Diabetic foot, retinopathy etc

SUPPLEMENTARY DATA

Supplementary Table S9. Translatability, Ethical, Legal, and Socio-economic (ELSE) Considerations (LIC, Lower-MIC)

	Translatability Index	Ethical Consideration	Legal Consideration	Social Consideration	Psychological Consideration	Economic Consideration	Dissemination Channels
LIC							
Afghanistan	No	No	No	No	No	No	No
Ethiopia	No	No	No	No	No	No	No
Liberia	No	No	No	No	No	No	No
Malawi	No	No	No	No	No	No	No
Tanzania	No	No	No	No	No	No	No
Uganda	No	No	No	No	No	No	No
Zimbabwe	No	No	No	No	No	No	No
Lower-MIC							
Ghana	No	No	No	No	No	No	No
India	Yes	Yes	No	No	No	Yes	No
Kenya	No	No	No	Yes	Yes	Yes	No
Kiribati	No	No	No	No	No	No	No
Nigeria	No	No	No	No	No	No	No
Philippines	No	No	No	No	No	No	No
Solomon Island	No	No	No	No	No	No	No
Sri Lanka	Yes	No	No	No	No	No	No
Swaziland	No	No	No	No	No	No	No
Zambia	No	No	No	No	No	Yes	No

Countries arranged in alphabetical order.

SUPPLEMENTARY DATA

Supplementary Table S10. Translatability, Ethical, Legal, and Socio-economic (ELSE) Considerations (Upper MIC)

	Translatability Index	Ethical Consideration	Legal Consideration	Social Consideration	Psychological Consideration	Economic Consideration	Dissemination Channels
Upper-MIC							
Belize	No	No	No	No	No	No	No
Botswana	No	No	No	No	No	Yes	No
Brazil	No	No	No	No	No	Yes	No
China	No	No	No	No	No	No	No
Colombia	Yes	Yes	Yes	No	No	Yes	Yes
Ecuador	No	No	Yes	No	No	No	No
Fiji	No	No	No	No	No	No	No
Jamaica	No	No	No	No	Yes	No	No
Libya	No	No	No	No	No	No	No
Malaysia	No	No	No	Yes	Yes	No	Yes
Mauritius	No	No	No	No	No	No	No
Mexico	No	No	No	No	No	No	No
Panama	Yes	No	Yes	No	Yes	No	Yes
Peru	Yes	No	Yes	No	No	No	No
Romania	No	No	No	No	No	No	No
South Africa	No	No	No	Yes	No	No	Yes
St. Lucia	No	No	No	No	No	No	No
Turkey	No	No	No	Yes	No	No	No
Tuvalu	No	No	No	No	No	No	No

Countries arranged in alphabetical order.

SUPPLEMENTARY DATA

Supplementary Table S11. Translatability, Ethical, Legal, and Socio-economic (ELSE) Considerations (HIC)

	Translatability Index	Ethical Consideration	Legal Consideration	Social Consideration	Psychological Consideration	Economic Consideration	Dissemination Channels
HIC							
Argentina	Yes	No	No	No	No	No	Yes
Australia	No	No	No	Yes	Yes	No	Yes
Bahrain	Yes	No	No	Yes	Yes	Yes	No
Bermuda	No	No	No	No	Yes	No	No
Canada	No	No	No	No	Yes	Yes	No
Chile	Yes	No	No	No	No	No	Yes
Greece	No	No	No	No	No	No	No
Hong Kong	No	No	No	No	No	No	No
Ireland	No	No	No	No	No	No	No
Italy	No	No	Yes	Yes	Yes	Yes	No
Korea	No	No	No	No	No	No	No
New Zealand	No	No	Yes	No	No	No	Yes
Scotland	No	No	No	Yes	Yes	Yes	Yes
Singapore	No	No	No	No	Yes	No	No
Spain	Yes	No	No	No	No	No	Yes
Sweden	Yes	No	No	No	No	Yes	Yes
England	No	No	Yes	Yes	Yes	No	No
US	No	No	No	Yes	Yes	No	No
US	No	No	No	No	No	No	No
Wales	No	No	Yes	Yes	Yes	Yes	No

Countries arranged in alphabetical order.

SUPPLEMENTARY DATA

Supplementary Table S12. Trustworthiness of Guidelines Using the IOM Standards (LIC, Lower-MIC)

	Transparency	Conflict of Interest	Multi-disciplinary Approach	Systematic Review	Strength of Recommendation	Articulation	External Validation	Updates
LIC								
Afghanistan	No	Yes	Yes	No	No	No	No	No
Ethiopia	No	No	Yes	No	No	No	No	No
Liberia	Yes	No	Yes	No	No	No	No	No
Malawi	Yes	No	No	No	No	No	No	No
Tanzania	Yes	Yes	Yes	No	No	No	No	No
Uganda	No	No	No	No	No	No	No	No
Zimbabwe	No	No	Yes	No	No	No	No	No
Lower-MIC								
Ghana	No	No	Yes	Yes	No	No	Yes	No
India	Yes	No	No	No	No	Yes	No	No
Kenya	Yes	No	Yes	No	No	Yes	No	No
Kiribati	No	No	No	No	No	Yes	No	No
Nigeria	No	No	No	No	No	No	Yes	No
Philippines	Yes	No	Yes	Yes	Yes	Yes	Yes	No
Solomon Island	Yes	No	No	No	No	Yes	No	No
Sri Lanka	No	No	No	No	No	Yes	No	No
Swaziland	No	No	Yes	No	No	No	Yes	No
Zambia	Yes	No	Yes	Yes	No	No	No	No

Countries arranged in alphabetical order.

SUPPLEMENTARY DATA

Supplementary Table S13. Trustworthiness of Guidelines Using the IOM Standards (Upper MIC)

	Transparency	Conflict of Interest	Multi-disciplinary Approach	Systematic Review	Strength of Recommendation	Articulation	External Validation	Updates
Upper-MIC								
Belize	No	No	No	No	No	Yes	No	No
Botswana	No	No	Yes	No	No	No	Yes	No
Brazil	Yes	No	No	No	No	No	No	No
China	No	No	No	*NS	No	No	No	No
Colombia	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Ecuador	Yes	No	No	No	No	Yes	No	No
Fiji	No	No	Yes	No	No	No	No	No
Jamaica	No	No	Yes	No	No	No	Yes	No
Libya	No	No	No	No	No	No	No	No
Malaysia	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Mauritius	No	No	Yes	No	No	No	No	No
Mexico	No	No	Yes	No	No	Yes	No	No
Panama	Yes	No	No	No	No	Yes	Yes	Yes
Peru	Yes	No	No	No	Yes	Yes	No	No
Romania	No	No	No	No	No	No	No	No
South Africa	Yes	No	Yes	Yes	No	Yes	Yes	No
St. Lucia	No	Yes	No	No	No	Yes	No	No
Turkey	No	Yes	Yes	No	Yes	Yes	No	No
Tuvalu	No	No	No	No	No	No	No	No

Countries arranged in alphabetical order. *NS: Not Stated.

SUPPLEMENTARY DATA

Supplementary Table S14. Trustworthiness of Guidelines Using the IOM Standards (HIC).

	Transparency	Conflict of Interest	Multi-disciplinary Approach	Systematic Review	Strength of Recommendation	Articulation	External Validation	Updates
HIC								
Argentina	Yes	No	No	No	Yes	Yes	Yes	No
Australia	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Bahrain	Yes	No	Yes	No	No	Yes	No	No
Bermuda	Yes	No	Yes	No	No	Yes	No	No
Canada	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Chile	Yes	Yes	No	No	Yes	Yes	No	No
Greece	No	No	No	No	Yes	Yes	No	No
Hong Kong	Yes	No	Yes	Yes	Yes	Yes	No	No
Ireland	Yes	No	Yes	Yes	Yes	Yes	Yes	No
Italy	Yes	No	Yes	Yes	Yes	Yes	Yes	No
Korea	No	Yes	Yes	Yes	No	No	No	No
New Zealand	Yes	No	Yes	Yes	No	Yes	No	Yes
Scotland	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
Singapore	No	No	Yes	Yes	Yes	Yes	No	Yes
Spain	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Sweden	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
England	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
US	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
US	No	No	Yes	Yes	No	No	No	No
Wales	No	No	Yes	Yes	No	Yes	Yes	No

Countries arranged in alphabetical order.

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