

# **ADIPS Report on 2024 Gestational Diabetes Screening and Diagnosis Conference**

Friday 10 May 2024 at the Parkroyal Darling Harbour Sydney

## ADIPS Report on 2024 Gestational Diabetes Screening and Diagnosis Conference

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#### **Key Abbreviations and Definitions**

ADIPS: Australasian Diabetes in Pregnancy Society

GDM: Gestational diabetes mellitus, being hyperglycaemia first detected at any time during pregnancy, less than overt diabetes

GEMS: Gestational Diabetes Mellitus Trial of Diagnostic Detection Thresholds trial

HAPO: Hyperglycemia and Adverse Pregnancy Outcomes study

OGTT: Oral glucose tolerance test (75g 2-h OGTT in pregnancy)

SIGN: Scottish Intercollegiate Guidelines Network

TOBOGM: Treatment of Booking Gestational Diabetes Mellitus randomised control trial

#### Introduction

Gestational diabetes mellitus (GDM), defined as hyperglycaemia first detected at any time during pregnancy less than overt diabetes (1), is a common disorder of pregnancy, associated with increased risk of pregnancy complications (2) and long-term cardiometabolic risks to both mother and baby, including type 2 diabetes, hypertension and overweight/obesity (3,4).

The Australasian Diabetes in Pregnancy Society (ADIPS) is recognised as the lead organisation in diabetes in pregnancy within the Diabetes Alliance and has historically developed and published clinical guidance in relation to diabetes in pregnancy in Australia. In 1991, ADIPS first developed guidelines for the testing and diagnosis of GDM, based primarily on expert opinion (5). In 2008, the large international prospective cohort Hyperglycemia and Adverse Pregnancy Outcome (HAPO) Study was published (2), showing a continuous positive association between increasing maternal glucose concentrations following the one-step 2-h 75 g oral glucose tolerance test at 24-32 weeks' gestation and perinatal complications at lower blood glucose thresholds than those reflected in previous GDM diagnostic criteria. Based largely on the HAPO Study, and randomised controlled trial (RCT) evidence of treatment

benefit for GDM diagnosed from 24 weeks' gestation (6,7), ADIPS updated their guidelines in 2014, by consensus (8). The 2014 ADIPS consensus guidelines for the testing and diagnosis of GDM largely endorsed the 2010 International Association of Diabetes and Pregnancy Study Groups (IADPSG) (9) and 2013 World Health Organisation (WHO) (1) revised recommendations for the diagnosis and classification of GDM.

The 2014 ADIPS consensus guidelines recommended that hyperglycaemia first detected at any time during pregnancy should be classified as either: diabetes mellitus in pregnancy, diagnosed by fasting plasma glucose  $\geq$ 7.0 mmol/l and/or 2-h plasma glucose  $\geq$ 11.1 mmol/l following the 75 g 2-h OGTT, and/or a random plasma glucose  $\geq$ 11.1 mmol/l in the presence of diabetes symptoms; or GDM, diagnosed at any time during pregnancy by fasting plasma glucose 5.1-6.9 mmol/l, and/or 1-h plasma glucose  $\geq$ 10.0 mmol/l, and/or 2-h plasma glucose 8.5-11.0 mmol/l following the 75 g 2-h OGTT (8). The guidelines recommended testing in early pregnancy in those at risk for hyperglycaemia. All individuals not previously known to have type 2 diabetes or hyperglycaemia in pregnancy were advised to perform a one-step OGTT at 24-28 weeks' gestation. The guidelines also acknowledged that in areas with a likely high prevalence of undiagnosed type 2 diabetes, or in remote areas where a OGTT may be logistically difficult, HbA1c can be considered, with a level  $\geq$ 6.5% likely representing previous undiagnosed type 2 diabetes (8).

## Procedures for updating ADIPS guidance on the screening, diagnosis and classification of hyperglycaemia in pregnancy

The ADIPS Board commenced a process to update ADIPS guidance on the screening, diagnosis, and classification of hyperglycaemia in pregnancy. The First International Association of Diabetes and Pregnancy Study (IADPSG) summit on the diagnosis of GDM in early pregnancy: TOBOGM Summit in November 2022 (10), sought to address the knowledge-gap in whether to diagnose and treat early GDM. A range of outcomes were discussed, and the thematic analysis of data collected at the Summit highlighted the importance of considering resources, cost, consumer perspectives and equity in translating preliminary findings of the Treatment of Booking Gestational Diabetes Mellitus (TOBOGM) randomised control trial into a clinical approach for early GDM, as well as the potential impact on the diagnostic approach at 24-28 weeks' gestation. A subsequent TOBOGM Workshop in 2023 among ADIPS members discussed possible options for diagnostic approaches for early GDM (11).

The ADIPS Board agreed to hold a GDM Screening and Diagnosis Guidance Development Conference to update the screening and diagnostic approach for GDM early in pregnancy and at 24-28 weeks' gestation. A Conference Planning Group was established with representatives from the colleges of Obstetrics and Gynaecology (RANZCOG), General Practitioners (RACGP) and Midwives (ACM); the Diabetes Alliance (Australian Diabetes Society (ADS), ADIPS, Australian Diabetes Educators Association (ADEA), and Diabetes Australia); the Australian Commission on Safety and Quality in Health Care; and NSW Health.

The intention for this process was for ADIPS to publish best available evidence-based and consensus recommendations for the diagnosis of GDM that have been developed in consultation with key stakeholders in Australia and New Zealand, including a wide range of professional societies and colleges as well as consumer representatives. ADIPS hoped that this collaborative process would help ensure that the final evidence-based recommendations are acceptable to other key stakeholders and considered for adoption into other organisations' guidance in due course. ADIPS notes that the New Zealand Maternity Guidelines Review Steering Group are concurrently updating their national clinical guideline on GDM.

#### 2024 ADIPS GDM Screening and Diagnosis Conference 10 May 2024

The 2024 ADIPS GDM Screening and Diagnosis Conference was hosted by ADIPS and NSW Health, supported by the Sydney Partnership for Health, Education, Research and Enterprise (SPHERE), on 10<sup>th</sup> May 2024, in Sydney, Australia. Eighty-one delegates from Australia and New Zealand attended, as either ADIPS members or nominees from key stakeholder organisations, representing a range of health professionals, academics, policy makers and consumers with lived experience. Stakeholder organisations invited are listed in **Appendix 1**. The Delegates were provided pre-reading materials via email and a web-based platform, including the recent Scottish Intercollegiate Guidelines Network (SIGN) evidence review (available at that time in draft form) (12). However, the Board acknowledges that not all delegates may have received or had the opportunity to read all the materials prior to the meeting.

#### **Methods for report**

#### Format and key questions at the Conference

As detailed in the conference program (**Appendix 2**), the conference began with presentations, including a background summary of the history of GDM and the rationale for the current ADIPS guidance for GDM, an overview of the draft Scottish Intercollegiate Guidelines Network (SIGN) GDM evidence summary (12), an update on New Zealand GDM guideline development (13), and learnings from lead investigators of the New Zealand Gestational Diabetes Mellitus Trial of Diagnostic Detection Thresholds trial (GEMS) (14) and Australian-led TOBOGM (15) trials. This was followed by a series of workshops, where delegates discussed the following questions:

- 1. Should we screen for and diagnose GDM in early pregnancy?
- 2. Should the OGTT be universally recommended for screening in early pregnancy?
- 3. Should we screen for and diagnose GDM at 24-28 weeks' gestation?
- 4. Should the OGTT be universally recommended for screening at 24-28 weeks' gestation?
- 5. If OGTT screening is not universal, what alternative strategy should be recommended to detect GDM at early pregnancy and at 24-28 weeks' gestation, respectively?
- 6. What diagnostic thresholds on the OGTT should be used for GDM in early pregnancy and at 24-28 weeks' gestation?

Delegates were advised that discussion of GDM testing methods apart from OGTT were not considered within the remit of the meeting.

Questions relating to GDM diagnosis in early pregnancy and at 24-28 weeks' gestation were addressed in separate workshops. Facilitated group discussions occurred at 10 separate tables, with an hour provided for each workshop. Following each workshop, each table was provided with up to 3 minutes to summarise their discussion outcomes to all conference attendees.

Twenty minutes were then allocated for whole group discussion, followed by an electronic survey to capture individual perspectives relating to the questions posed in each workshop.

#### Data collection and analysis

Delegates discussed questions on GDM screening and diagnosis in early pregnancy during facilitated table discussions. A scribe was nominated at each table and captured feedback in writing on butcher's paper. In the subsequent discussion outcomes session, a spokesperson from each table presented a summary to the wider group and there was time for whole group discussion among conference attendees. This discussion outcomes session was audio recorded. An electronic survey using SLIDO (Cisco Systems, Inc.) was then administered to capture individual perspectives. It is noted that there were technical limitations of the electronic survey limiting free text responses when delegates selected "other" in multiple choice questions, and discussion and clarification of the meaning of some the questions, which was not well captured in the transcripts but recalled by the report authors. In lieu of electronic free text responses, delegates were able to provide written responses on paper that were collated and transcribed.

Questions used to facilitate both table discussions and results from electronic survey questions are detailed in **Appendices 2** and **3**, respectively. This process of data collection was repeated for the second round of questions on GDM screening and diagnosis at 24-28 weeks' gestation. Data collected from audio recordings are individually identifiable, while data from the electronic surveys was not identifiable. Consent was obtained from delegates prior to recordings and all delegates were aware that a summary of the wider group discussions and survey data would be disseminated through a Conference Report. Audio recordings from each table were manually transcribed. Transcripts were analysed using thematic analysis where key themes were identified in response to discussion questions. Descriptive analysis of survey data was collected to summarise the main issues raised as part of the wider group discussions.

#### **Results of meeting**

#### GDM screening and diagnosis in early pregnancy

**Table 1** summarises the themes raised from discussion on GDM screening and diagnosis in early pregnancy. Delegates who presented in the wider group discussion showed broad support for screening and diagnosing GDM in early pregnancy. Descriptive results obtained from the electronic survey suggested that four-fifths of attendees felt that all individuals identified as "at risk for GDM" should be screened for, and if present, diagnosed with GDM before 20 weeks' gestation.

Delegates considered several approaches that could be adopted to screen for GDM. Some delegates expressed the view that universal screening for early GDM using OGTT should be offered. The majority group (57% on individual survey) felt that risk-factor based screening should be used to decide who should proceed to an OGTT, although which specific risk factors to include were not comprehensively discussed.

Regarding diagnostic criteria for GDM, most delegates (96%) were in favour of using higher OGTT thresholds than those currently recommended, derived from an odds ratio of 2.0 in the HAPO Study (2). Survey responses demonstrated an even split between those who felt that, if early OGTT was recommended, testing should be performed between 10-13 + 6 weeks' gestation or 14-20 weeks' gestation, based on advantages of earlier testing compared to tolerability of the test.

Delegates discussed details of the TOBOGM trial, including the role of the need for neonatal respiratory support in Special Care Nursey/Neonatal Intensive Care Unit in driving the primary outcome. Some delegates noted that the rate of respiratory distress in neonates in the control group was significantly higher than in previously published data from similar cohorts, suggesting perhaps the benefit observed was a chance finding rather than relating to the intervention. It was noted that adoption of early GDM screening has not currently been adapted by many similar countries.

Financial barriers, stigma associated with a GDM diagnosis and with identification of being "high risk", and a lack of culturally appropriate information about the rationale for testing were cited as barriers related to testing and treating GDM in early pregnancy. Several delegates

suggested the use of a life course perspective in women's health, and that identifying GDM allows entry into postpartum strategies to reduce risk of progression to type 2 diabetes.

Despite not being raised in the provided discussion questions, the importance of screening for overt diabetes in early pregnancy was noted by eight out of ten table groups, with HbA1c on the first set of antenatal bloods generally being the preferred approach with or without a fasting glucose level. On the individual survey, 42% of delegates suggested the use of HbA1c on its own and 46% of delegates suggested the use of HbA1c with fasting glucose.

Additional topics discussed included: the need for further research into how best to detect hyperglycaemia across pregnancy, the use of biomarkers and other novel approaches, such as continuous glucose monitoring (CGM), a focus being on identifying a more acceptable test for consumers, and the implications of preanalytical issues in defining glucose cut offs.

#### GDM screening and diagnosis at 24 – 28 weeks' gestation

**Table 2** lists the themes raised in discussion on GDM screening and diagnosis at 24-28 weeks' gestation. All delegates agreed that universal OGTT testing for GDM at 24-28 weeks' gestation should occur.

However, if testing for GDM was to be implemented at early pregnancy using the one-step 75g OGTT, some proposed that alternate approaches for subsequent screening could be sought, but that these would require a robust evidence base (i.e. randomised controlled trials). A fasting glucose was suggested if the OGTT was not universally offered, based upon pragmatic prepost trials, including during the COVID-19 pandemic. There were concerns about whether this would reduce diagnosis of GDM in some ethnic groups, and those that may be less likely to attend for a second step. Delegates also discussed the use of a fasting and 1-hour test only, as has been suggested in the draft NZ guideline.

Most (81%) delegates supported the use of OGTT diagnostic thresholds based on the HAPO Study odds ratio of 2.0 (fasting plasma glucose  $\geq$ 5.3, 1-h plasma glucose  $\geq$ 10.6, 2-hour plasma glucose  $\geq$ 9.0 mmol/L), with a key theme being consistency in diagnostic thresholds across pregnancy to minimise confusion. Four groups noted that the OGTT thresholds at 24-28 weeks' should only be changed if GDM screening in early pregnancy is implemented with the higher

OGTT thresholds. However, 16% of delegates were in favour of keeping current ADIPS recommended OGTT diagnostic criteria (fasting glucose  $\geq$ 5.1, 1-h plasma glucose  $\geq$ 10.0, and or 2-h plasma glucose  $\geq$ 8.5 mmol/L) (4).

Delegates raised the importance of considering those for whom an OGTT is not tolerated (e.g. bariatric surgery) and those who elect not to do an OGTT. Delegates suggested strategies including the use of fasting glucose, CGM or self-monitoring of blood glucose. The limited evidence base and logistic barriers for these approaches were discussed.

#### **Conclusion**

The 2024 ADIPS Gestational Diabetes Screening and Diagnosis Conference brought together key stakeholders from across Australia and New Zealand to reflect on how best to translate contemporary evidence on the screening and diagnosis of GDM into practice. Findings from the conference will support drafting of updated ADIPS consensus recommendations.

## Table 1. Key themes raised from table discussions on GDM screening and diagnosis in early pregnancy.

#### Should we screen for GDM in early pregnancy

All women should be assessed for the presence of risk factors for GDM and OGTT recommended to women with risk factors

A lot of early screening is currently being done using OGTT in Australia

Screening should be "offered, rather than pushed"

If early HbA1c was done to exclude overt diabetes, OGTT not needed at 10 - 14 weeks (should not be done before 10 weeks)

There should be caution regarding making recommendations based largely on the findings of one randomised trial

#### Screening approaches in early pregnancy

Important to screen for overt diabetes in early pregnancy, routine HbA1c with first antenatal bloods should be considered

The draft SIGN Guidelines wording regarding use of HbA1c and OGTT testing is acceptable

Nausea and vomiting are common in early pregnancy, OGTT may be better tolerated after 13 weeks

When considering universal screening, need to consider high prevalence of risk factors and concerns around using ethnicity as a risk factor

#### Diagnosis of GDM in early pregnancy

Should adopt higher OGTT diagnostic thresholds based on HAPO odds ratio of 2.0

Analytical issues and reproducibility must be considered when putting emphasis on 0.1 mmol/L difference in glycaemia. Consider repeated fasting glucose (also relevant for HbA1c), especially if close to diagnostic threshold

#### Barriers related to testing/treating GDM in early pregnancy

Performing multiple OGTTs is burdensome and difficult for women

Costs, capacity, and lack of culturally appropriate information to advise on GDM screening in early pregnancy

Need to consider priority populations, including Aboriginal and Torres Strait Islander people and rural/remote communities

Possible workforce issues with longer duration of dietary management as well as risk for overly restricted diets

Stigma associated with GDM affects testing and diagnosis of current and subsequent pregnancies

#### Future work related to testing/treating GDM in early pregnancy

Evidence from additional randomised controlled trials is needed

Ongoing research should consider alternatives to the OGTT

Consider whether both the 1-hour and 2-hour glucose levels on OGTT are needed (HAPO data discussed, could be examined in TOBOGM cohort); NZ guideline suggesting fasting and 1 hour.

Broader women's health perspective on pre-conception, pre-pregnancy testing and lifestyle interventions.

## Table 2. Key themes raised from discussion on GDM screening at 24-28 weeks' gestation.

#### Should GDM screening at 24-28 weeks' occur

Universal screening for GDM at 26-28 weeks' should be done using a 75g OGTT in women without a previous diagnosis of GDM or pre-pregnancy diabetes.

#### How to screen for GDM at 24-28 weeks'

If OGTT was performed in early pregnancy, OGTT may not be required at 24-28 weeks'.

If women declined the OGTT, they could perform the fasting glucose as an alternative at 24-28 weeks'.

Discussions about CGMs or finger prick testing as alternatives when OGTT not done, but these have limited evidence base.

#### Diagnosis of GDM at 24-28 weeks'

Diagnostic thresholds based on an odds ratio of 2.0 in HAPO should be adopted for consistency with early pregnancy recommendation

Use of HAPO odds ratio of 1.75 thresholds if only the one OGTT is used to test GDM at 24–28 weeks', given potential benefit demonstrated in GEMS subgroup analysis

Use of a one-hour OGTT could be considered given very few additional cases of GDM detected on 2-hour alone

#### **Additional considerations**

Undertaking OGTTs is burdensome and difficult for women, so alternatives should be considered.

If diagnostic thresholds are raised, women that have borderline OGTTs (previously defined as GDM) should still be considered for post-partum lifestyle interventions and T2D screening

Need to consider that if those with milder hyperglycaemia are not labelled as having GDM, this would limit access to NDSS, national GDM register etc.

De-escalation to models of care with less intensive monitoring and management can be an option for women with GDM and lesser degrees of hyperglycaemia

#### Future work related to testing/treating GDM at 24-28 weeks'

Additional research should be done on alternative screening methods.

If early screening adopted, consider who might not need repeat screening at 24-28 weeks'.

#### References

- 1. Report of a World Health Organization Consultation Diagnostic criteria and classification of hyperglycaemia first detected in pregnancy: A World Health Organization Guideline. Diabetes Research and Clinical Practice 2014;103: 341-63.
- 2. HAPO Collaborative Research Group. Hyperglycemia and adverse pregnancy outcomes. New Eng J Med. 2008; 358:1991-2002.
- 3. Lowe WL Jr, Scholtens DM, Kuang A, et al; HAPO Follow-up Study Cooperative Research Group. Hyperglycemia and Adverse Pregnancy Outcome Follow-up Study (HAPO FUS): Maternal Gestational Diabetes Mellitus and Childhood Glucose Metabolism. Diabetes Care. 2019 Mar;42(3):372-380.
- 4. Bardugo et al. Glucose intolerance in pregnancy and risk of early-onset type 2 diabetes: a population-based cohort study. Lancet Diabetes Endocrinol. 2023 May;11(5):333-344.
- 5. Martin FIR for the Ad Hoc Working Party. The diagnosis of gestational diabetes. MJA 1991; 155: 112.
- 6. Crowther CA, Moss JR, McPhee AJ, et al; Australian Carbohydrate Intolerance Study in Pregnant Women (ACHOIS) Trial Group. Effect of treatment of gestational diabetes mellitus on pregnancy outcomes. New Eng J Med. 2005;352:2477-86.
- 7. Landon MB, Spong CY, Thom E, et al. A multicenter, randomized trial of treatment for mild gestational diabetes. New Eng J Med. 2009;361(14):1339-48.
- 8. Nankervis A, McIntyre HD, Moses R, for the Australasian Diabetes in Pregnancy Society available at: <a href="https://www.adips.org/downloads/2014ADIPSGDMGuidelinesV18.11.2014\_000.pdf">www.adips.org/downloads/2014ADIPSGDMGuidelinesV18.11.2014\_000.pdf</a>
- 9. IADPSG Consensus Panel International association of diabetes and pregnancy study groups recommendations on the diagnosis and classification of hyperglycemia in pregnancy. Diabetes Care 2010; 33:676-682.
- 10. Sweeting A, McMillan F, Simmons D, on behalf of the TOBOGM Summit attendees. The First International Association of Diabetes and Pregnancy Study Groups (IADPSG) summit on the diagnosis of gestational diabetes in early pregnancy: TOBOGM Summit Report.

  www.adips.org/TOBOGM%20Summit%20Report%20Final%20with%20cover.pdf
- 11. Rhou J. TOBOGM Workshop 2023: Options for Diagnostic Approaches for Early Gestational Diabetes Mellitus. Available at:
  - $\frac{https://www.adips.org/TOBOGM\%20Workshop\%20Summary\%20Aug\%202023\%20Fin}{al\%2020231129.pdf}$
- 12. Scottish Intercollegiate Guidelines Network (SIGN). Management of diabetes in pregnancy (SIGN 171). Edinburgh: SIGN; 2024. [cited 21 May 2024]. Available from URL: <a href="http://www.sign.ac.uk">http://www.sign.ac.uk</a>.
- 13. Te Whatu Ora Health New Zealand, Testing for, diagnosing and managing gestational diabetes (diabetes of pregnancy) Te whakamātau, te tautohu me te whakahaere i te mate huka hapūtanga (Draft Guideline), April 2024

- 14. Crowther CA, Samuel D, Leslet ME, et al, for the GEMS Trial Group. Lower versus Higher Glycemic Criteria for Diagnosis of Gestational Diabetes. N Engl J Med. 2022;387:587-98.
- 15. Simmons D, Immanuel J, Hague WM, et al, for the TOBOGM Research Group. Treatment of Gestational Diabetes Mellitus Diagnosed Early in Pregnancy. N Engl J Med. 2023;388:2132-44.

#### Appendix 1. Key stakeholders invited to send delegates to conference

ACT Government Department of Health

Australian Association of Clinical Biochemists (AACB)

Australian Diabetes Society (ADS)

Australian Diabetes Educators Society (ADEA)

Australian College of Midwives (ACM)

Australian College of Rural and Remote Medicine

Australian Primary Health Care Nurses Association

Diabetes Australia

Endocrine Society of Australia

Living Evidence for Australian Pregnancy and Postpartum Care (LEAPP)

Maternity Choices Australia

Maternity Consumer Network

National Aboriginal Community Controlled Health Organisation (NACCHO)

**NSW** Health

NZ GDM Guidelines Steering Group

The New Zealand Society for the Study of Diabetes (NZSSD)

Perinatal Society of Australia and New Zealand (PSANZ)

Royal Australasian College of General Practitioners (RACGP)

Royal Australia and New Zealand College of Obstetrics and Gynaecology (RANZCOG)

Victoria Government Department of Health

#### The following organisations were invited but could not attend -

Rural Doctor Service

Internal Medicine Society of ANZ (IMSANZ)

Dietitians Australia

Royal College of Pathologists of Australasia

Australian Commission on Safety and Quality in Health Care

Queensland, Northern Territory, Tasmania, South Australia and Western Australia Government Departments of Health

## Appendix 2: ADIPS GDM Screening and Diagnosis Conference Program, 10 May 2024.

9.30 – 9.40AM	Welcome and Acknowledgement of Country: Professor David Simmons
9.40 – 9.50AM	Purpose and outline of the day: A/Professor Glynis Ross and A/Professor Stefan Kane
9.50 – 10.05AM	A short history of GDM screening and diagnosis: A/Professor Alison Nankervis
10.05 – 10.20AM	Systematic evidence update: Scottish Intercollegiate Guidelines Network: Professor Robert Lindsay
10.20– 10.35AM	Learnings from the GEMS Trial: Professor Caroline Crowther
10.35 – 10.55AM	Learnings from the TOBOGM Trial: Professor David Simmons
10.55 – 11.10AM	Consumer perspectives: Diabetes Australia
11.10 – 11.30AM	Morning tea
11.30AM – 12.30PM	Workshop 1 – Table discussion on GDM Screening in Early Pregnancy
12.30 – 1.30PM	Lunch
1.30 – 2.30PM	Presentation of Table discussion and electronic survey participation on GDM Screening in Early Pregnancy
2.30 – 3.30PM	Workshop 2 – Table discussion on GDM screening at 24 – 28 weeks
3.30 - 3.50PM	Afternoon Tea
3.50 – 4.50PM	Presentation of Table discussion and electronic survey participation on GDM screening at 24 – 28 weeks
4.50 - 5.00PM	Closing Summary: Prof Stefan Kane

#### **Appendix 3 SLIDO responses**

#### Workshop 1 – SLIDO Questions on GDM Screening in Early Pregnancy

- 1. All women should be screened for and if present, diagnosed with GDM before 20 weeks gestation.
- Strongly Agree 12%
- Agree 29%
- Neutral 9%
- Disagree 28%
- Strongly Disagree 21%
- 2. All women identified as "at risk for GDM" should be screened for and if present, diagnosed with GDM before 20 weeks gestation.
- Strongly Agree 47%
- Agree 34%
- Neutral 8%
- Disagree 9%
- Strongly Disagree 1%
- 3. If early GDM screening occurs, what should be recommended regarding timing of screening?
- 4-9 weeks 0%
- 10 13 + 6 weeks 41%
- 14 20 weeks 42%
- As early as possible 9%
- Other (Specify) 8%
- 4. What should be the process and recommended test for screening and diagnosis for early GDM (i.e., GDM before 20 weeks gestation)?
- All women have a 75g OGTT (Universal screening) 8%

- Only women with risk factors have a 75g OGTT 57%
- Women with an elevated fasting glucose have a 75g OGTT 9%
- Women with an elevated HbA1c have a 75g OGTT 8%
- Other specify. 18%
- 5. Which glucose thresholds should be used to diagnose GDM on the 75g OGTT? Select one option only.
  - a) Current ADIPS (HAPO 1.75): (Fasting  $\geq 5.1$ , 1hour  $\geq 10.0$ , 2 hours  $\geq 8.5$ ) 3%
  - b) HAPO 2.0 (Fasting  $\geq$  5.3, 1 hour  $\geq$ 10.6, 2 hours  $\geq$  9.0) 96%
  - c) Other specify. 1%
- 6. Should women at high risk of pre-existing type 2 diabetes receive screening as early as possible in pregnancy?
  - a) No 3%
  - b) Yes, with HbA1c 42%
  - c) Yes, with fasting glucose 0%
  - d) Yes, with fasting glucose and HbA1c 46%
  - e) Yes, either fasting glucose or HbA1c 8%
  - f) Other specify. 1%

#### Workshop 2 – SLIDO Questions on GDM Screening at 24 – 28 weeks.

Given the proposal for early GDM:

- 7. All women without a diabetes or GDM diagnosis should be screened for and diagnosed with GDM at 24 28 weeks gestation using an OGTT.
  - a) Strongly Agree 59%
  - b) Agree 41%
  - c) Neutral 0%
  - d) Disagree 0%
  - e) Strongly Disagree 0%

- 8. Which glucose thresholds should be used to diagnose GDM on the 75g OGTT? Select one option only.
  - a) Current ADIPS (HAPO 1.75): (Fasting  $\geq$  5.1, 1hour  $\geq$  10.0, 2 hours  $\geq$  8.5) 16%
  - b) HAPO 2.0 (Fasting  $\geq$  5.3, 1 hour  $\geq$ 10.6, 2 hours  $\geq$  9.0) 81%
  - c) Other specify. 3%
- 9. If the OGTT screening is not universal, what alternative screening strategy should be recommended\*? Select all that apply.
  - a) Risk factor-based screening 12%
  - b) Fasting blood glucose test 47%
  - c) HbA1c test 5%
  - d) Other specify. 36%

<sup>\*</sup> Assumes some women will not proceed to OGTT, some will be diagnosed on the basis of this first step, others will need to return for an OGTT.