NATIONAL DIABETES PREVENTION PROGRAMME:
Preventing Type 2 Diabetes in England
Evidence

Supplier Engagement Day
Tuesday 19th May
Background of evidence reviews

- Landmark RCTs of diabetes prevention programmes have ‘proven’ effectiveness
- Many studies have been conducted since, with varying results
- Systematic reviews – no ‘best practice model’ has emerged
- There is a need to understand the current state of the evidence base and to identify factors associated with success
Aims and methods

• Two reviews were commissioned to examine:
  – Effectiveness of diabetes prevention interventions
  – Effectiveness of weight management programmes
• Systematic review and meta-analysis
  – Overall effects (Diabetes & weight-related outcomes)
  – Age, gender, BMI, ethnicity
  – Intervention components
• Search methods adopted from previous systematic reviews
DPP Review: key findings (1)

• Diabetes prevention interventions are effective in reducing incidence of diabetes, fasting and 2-hour glucose, HbA1c % levels and reducing weight
  – True across different age groups
  – Men may achieve a slightly lower effect than women
  – Effect size may be greater for those who are already overweight / obese
  – Impact of ethnicity on intervention effect is unclear

• Increased adherence to guidelines = greater intervention effect
DPP review: key findings (2)

- Associations observed between some intervention components & magnitude of effect
  - Ongoing contact (rather than ‘one-off’)
  - Combined physical activity and diet interventions
  - Minimum of 13 sessions and 16 or more hours of contact over 18 months
  - Optimum session length 1-2 hours
  - Engage social support
Weight management review: findings suggest

• Weight management programmes are effective in reducing weight among participants
  – Effect size consistent regardless of age or ethnicity
  – Interventions more effective for women than men

• Associations observed between some intervention components & magnitude of effect, for example
  – Calorie-control or counting
  – Supervised exercise
  – Weekly goal setting
Interpretation of the evidence reviews

- Some insight into possible key components of effective interventions, inform service specification
  - Adherence to the evidence vs adaptation / innovation
  - Some components ‘fixed’, others will be flexible
- Other key forms of evidence currently being utilised:
  - Expert Reference Group
  - Work with demonstrator sites
  - Further data collection and analysis
- Gaps in the evidence base also identified – opportunities to generate new evidence