#### NICE National Institute for Health and Care Excellence

## NICE guideline for coeliac disease - research gaps

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# NICE guideline for coeliac disease

- How the guideline was developed
- Diagnostic pathway
- Annual review
- Refractory coeliac disease

#### **GUIDELINE DEVELOPMENT**



### The guidelines manual

- 2012 version followed.
- Newer version (2014) now available for guidelines currently in development.

NICE National Institute for Health and Care Excellence Process and methods guides **Developing NICE guidelines: the** manual http://www.nice.org.uk/article/pmg20 Published: 31 October 2014 last updated: 19 February 2015



#### **Development phase**





### Defining review questions

- **Population**: best description? subgroups?
- Intervention(s): which? any that should be excluded e.g. those no longer used in clinical practice?
- Comparator(s): alternatives e.g. usual/standard care, placebo?
- Outcomes: important for clinical decision making and to patients



#### **Evidence Review**

- Use the best quality evidence available in the literature.
- Meta-analyse where possible.
- GRADE the quality of the literature at the outcome level.







 "... the <u>comparative</u> analysis of alternative courses of action in terms of both their <u>costs</u> and <u>consequences</u>."

Drummond, Stoddart & Torrance, 1987

- Systematic review of relevant economic literature
- Original (*de novo*) economic modelling



## Writing recommendations

- Reflect the strength of the recommendation
- There are 3 levels of certainty:
  - recommendations for activities or interventions that should (or should not) be used
  - recommendations for activities or interventions that could be used
  - recommendations for activities or interventions that must (or must not) be used.



#### **DIAGNOSING COELIAC DISEASE**





Figure 1: Schematic representation of the original cost-utility model

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#### Economic modelling results Adults





### Serological testing Adults

- When healthcare professionals request serological tests to investigate suspected coeliac disease in young people and adults, laboratories should:
  - test for total immunoglobulin A (IgA) and IgA tissue transglutaminase (tTG) as the first choice
  - use IgA endomysial antibodies (EMA) if IgA tTG is weakly positive
  - consider using IgG EMA, IgG deamidated gliadin peptide (DGP) or IgG tTG if IgA is deficient<sup>[1]</sup>.

#### Economic modelling results Children



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#### Serological testing Children

- When healthcare professionals request serological tests to investigate suspected coeliac disease in children, laboratories should:
  - test for total IgA and IgA tTG as the first choice
  - consider using IgG EMA, IgG DGP or IgG tTG if IgA is deficient<sup>[1]</sup>.

#### Serological testing

- What is the sensitivity and specificity of IgG tissue transglutaminase (tTG), IgG endomysial antibodies (EMA) and IgG deamidated gliadin peptide (DGP) tests in detecting coeliac disease in people with IgA deficiency?
- What is the sensitivity and specificity of IgA EMA and IgA DGP tests in detecting coeliac disease in people who test negative for IgA tTG?

#### Serological testing

• What is the sensitivity and specificity of IgA DGP & IgG DGP in the detection of CD in children under 2 years?

#### MONITORING OF PEOPLE WITH COELIAC DISEASE



#### Annual review

- Offer an annual review to people with coeliac disease. During the review:
  - measure weight and height
  - review symptoms
  - consider the need for assessment of diet and adherence to the gluten-free diet
  - consider the need for specialist dietetic and nutritional advice.

#### **Dietary support**

- Should people with coeliac disease be offered calcium and vitamin D supplements for a specific time period soon after their initial diagnosis?
- How can the role of the dietitian contribute most effectively within a coeliac disease team.



#### Frequency of monitoring

 What is the effectiveness of more frequent monitoring compared with monitoring at 12 months after diagnosis in people with newly diagnosed coeliac disease?

#### **REFRACTORY COELIAC DISEASE**



#### Refractory Coeliac Disease

- Pharmacological interventions
- Nutritional interventions
- Autologous stem-cell transplants

• What is the clinical and cost-effectiveness of autologous stem cell transplant for the treatment of people with refractory coeliac disease?



#### Conclusions

- Rigorous methodological development process.
- Some strong recommendations based on good quality evidence.
- Identified evidence gaps for further research to improve the diagnosis and the care of people with coeliac disease.

