Implementation Programme

NICE support for commissioners and others using the quality standard on nutrition support in adults

November 2012

1 Introduction

Implementing the recommendations from NICE guidance and other NICE accredited guidelines is the best way to support improvements in the quality of care offered to patients in line with the statements and measures that comprise the NICE quality standards. To support implementation, this document:

- considers the cost of implementing the changes needed to achieve the quality standard at a local level
- identifies where potential cost savings can be made
- highlights the areas of care in the quality standard with potential implications for commissioners
- directs commissioners and service providers to a package of support tools that can assist with the implementation of NICE guidance and service redesign.

NICE quality standards define high-quality care for patients across a care pathway or clinical area. They are based on NICE guidance, and other NICE accredited guidelines, and are presented as a set of specific, concise statements that represent high-quality care, with associated measures. The NICE quality standard for nutrition support in adults was developed by a Topic
Expert Group (TEG) using the best available evidence, and was produced collaboratively with the NHS and social care organisations, along with their partners and service users.

The Care Quality Commission (CQC) registers providers of health and adult social care in England, ensuring they meet essential standards of quality and safety set out in the CQC (registration) regulations. NICE quality standards define what high-quality care should look like. The statements and measures in a NICE quality standard together indicate a high-quality service. The delivery of high-quality care is signalled by good performance across all statements and measures.

Each quality statement has accompanying quality measures. At present, the number of health outcome measures are limited, so the quality measures focus on improving the processes of care that are considered to be linked to health outcomes.

From 2013/14 the NHS Commissioning Board will draw on NICE quality standards to translate the national health outcomes into measures and indicators that can be applied at a local level. These will be used to hold clinical commissioning groups to account for their contribution to improving outcomes, and will be set out in the NHS commissioning outcomes framework. Trusts and other service providers may refer to the quality standards in their quality accounts in order to assess the quality of their healthcare services and demonstrate quality improvement within their organisation.

NHS commissioners can use the quality standards to improve the services commissioned from providers by including quality statements and measures in the service specification element of the standard contract, establishing key performance indicators as part of a tendering process, and providing incentives for improving provider performance using quality standard measures, where they are provided, in association with incentive payments such as Commissioning for Quality and Innovation (CQUIN). The NHS Institute
for Innovation and Improvement (2010) has published examples of locally agreed CQUINs for nutrition support in adults.

NICE quality standards can also provide a baseline against which improvements can be measured and rewarded, enabling commissioners to address gaps in service provision, support best practice and encourage evidence-based treatments and care.

The NICE support for commissioners and others on the nutrition support in adults quality standard should be read alongside the following:

- NICE quality standard for nutrition support in adults.

2 Overview of nutrition support in adults

Malnutrition is a state in which the deficiency of nutrients such as energy, protein, vitamins or minerals results in measurable adverse effects on body composition, function or clinical outcome. Recommendation 1.3.1 of NICE clinical guideline 32 Nutrition support in adults defines a person as malnourished if they have:

- a body mass index (BMI) of less than 18.5 kg/m²
- unintentional weight loss greater than 10% within the past 3–6 months
- a BMI of less than 20 kg/m² and unintentional weight loss greater than 5% within the past 3–6 months.

Malnutrition is both a cause and consequence of ill health. Malnutrition increases a person’s vulnerability to disease. The consequences of this include increased susceptibility to infection, delayed wound healing, impaired function of heart and lungs, muscle weakness and depression.

To compound any disease-related reduction in food intake, many people also have no help with obtaining or preparing meals when they are ill at home. People in hospital may have problems relating to poor standards of catering,
inappropriate or interrupted meal times, incorrect food consistencies and a lack of staff support or appropriate aids to help them eat and drink for themselves.

Nutritional support is an ongoing process involving the following steps:

- raising awareness
- screening
- recognising malnutrition or the risk of malnutrition
- documenting nutritional support goals in a management care plan
- treatment
- reviewing nutritional care to identify and respond to changes in nutritional status.

Methods to improve and maintain nutritional intake include:

- dietary advice
- help with eating
- food solutions, such as food delivered to the home
- oral nutrition support, for example food and water, fortified foods and sip feeds
- enteral tube feeding – the delivery of nutritionally complete food directly into the gut using a tube
- parenteral nutrition – the delivery of nutrition intravenously.

Enteral and parenteral nutrition are also known as artificial nutrition support and are typically prescribed for people who are malnourished or at high risk of becoming malnourished, for example because of a long-term illness or disability. Some types of oral nutrition support may also be prescribed.

2.1 Epidemiology

It has been estimated that malnutrition (or undernutrition) affects over 3 million people in the UK. Of these about 1.3 million are over the age of 65. The following groups are particularly at risk (British Association for Parenteral and Enteral Nutrition 2012):

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• Older people over the age of 65. Malnutrition affects more than 10% of people aged 65 and over. The risk and prevalence of malnutrition increase with age and therefore the prevalence of malnutrition is set to rise as the population ages (National Prescribing Centre¹ 2012).

• People with long-term conditions such as diabetes, kidney disease or chronic lung disease.

• People with chronic progressive conditions – for example dementia or cancer.

• People who misuse drugs or alcohol.

Figure 1 illustrates the prevalence and impact of malnutrition in the UK in different settings. The majority of people affected by malnutrition are living in the community – around 93% or 2.8 million people.

Figure 1 Prevalence of malnutrition in the UK (based on British Association for Parenteral and Enteral Nutrition 2012, Russell and Elia 2012)

¹ From May 2011 the team delivering the work of the National Prescribing Centre became part of NICE, forming the NICE Medicines and Prescribing Centre
2.2 Improving nutritional support through integration

The NICE quality standard for nutrition support covers adults (18 years and older) in hospital and the community who are at risk of malnutrition or who have become malnourished, and adults who are receiving oral nutrition support, enteral or parenteral nutrition. The quality standard for nutrition support for adults emphasises that ‘an integrated approach to the provision of services is fundamental to the delivery of high-quality care to adults who need nutrition support’.

Commissioners and providers of the following services need to work together to achieve the quality standard:

- primary care
- community care
- intermediate care services
- general acute hospitals
- mental health hospitals
- residential and care homes
- sheltered housing
- domiciliary care
- public health
- catering providers for health and social care services
- voluntary organisations.

A whole-system approach to commissioning and service design is needed because the quality and cost of nutritional care in one setting can directly affect health and social care services elsewhere in the system. For example, failure to identify the risk of malnutrition in the community can increase the likelihood of a person becoming ill and being admitted to hospital. Higher rates of malnutrition increase average length of stay in hospital and the costs associated with treatment. Failure to adequately manage a person’s nutrition and hydration needs in hospital correspondingly increases the risk that they
will not recover fully before being discharged to community and social care services.

To improve the integration of nutrition support services, commissioners and providers may wish to consider the following approaches:

- Include an assessment of local malnutrition prevalence, and risk of malnutrition, in the joint strategic needs assessment.
- Develop a local multi-agency nutrition support partnership to map local service provision and develop pathways to improve the delivery of nutrition support across relevant settings.
- Ensure there is a nutrition multidisciplinary team that works across primary, community and secondary care settings. This team may include doctors (for example gastroenterologists, gastrointestinal surgeons, intensivists or others with a specific interest in nutrition support), dietitians, a specialist nutrition nurse, other nurses, pharmacists, biochemistry and microbiology laboratory support staff, and other allied healthcare professionals (for example, speech and language therapists).
- Nominate lead clinicians, social care professionals and commissioners to promote awareness of nutritional support when redesigning, commissioning and delivering local services.
- Ensure hospital trusts have a nutrition steering committee working within the clinical governance framework, in accordance with recommendations 1.1.6 and 1.1.7 in Nutrition support in adults (NICE clinical guideline 32).

Commissioners and others may wish to refer to the following examples of collaborative working to prevent malnutrition from the NICE shared learning database:

- Fighting malnutrition: a strategic, multidisciplinary approach
- A partnership approach to improving the nutritional care of our patients
3 Resource implications

The cost of meeting the quality standard for nutrition support in adults depends on current local practice and the progress organisations have made in implementing Nutrition support in adults (NICE clinical guideline 32).

Malnutrition has a significant impact on health and social care, with spending on disease-related malnutrition estimated to be in excess of £13 billion per year. Better nutritional care could result in substantial cost savings to the NHS: reducing the annual healthcare cost of malnutrition by 1% would save £130 million annually (NHS Institute for Innovation and Improvement 2010). These savings can be achieved mainly through decreased spending on treatment of malnutrition and associated medical complications, as well as through identifying clinically unnecessary use of nutrition support.

Table 1 summarises the resource implications by area of care for commissioners and service providers working towards achieving this quality standard. The detail of how the resource and commissioning implications have been estimated is provided in section 4 of this report.
Table 1 Potential resource and commissioning implications of achieving the quality standard for nutrition support in adults

<table>
<thead>
<tr>
<th>Area of care</th>
<th>Estimated resource impact</th>
<th>Commissioning implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recognition – screening</td>
<td>Increased screening is unlikely to require additional staff, but there are likely to be substantial training costs, and increased demand for nutrition assessments and interventions. However, it is anticipated that this increase in preventive activity will free up capacity elsewhere, particularly through decreased length of hospital stays.</td>
<td>Ensure all relevant health and social care providers have an integrated policy for nutrition screening that is in line with NICE guidance. Ask providers to report on their practice against the locally agreed policy. Reach agreement on which validated screening tool to use.</td>
</tr>
<tr>
<td>Nutrition care plans, treatment and review</td>
<td>Appropriate use of nutrition support should decrease overall treatment costs in secondary care by decreasing complications and lengths of stay even if direct costs related to nutrition support increase. Prescribing savings may also be possible by ensuring appropriate prescribing, both directly through discontinuation of nutritional support if appropriate and indirectly through improved nutrition monitoring.</td>
<td>Agree protocols for the frequency of planned malnutrition screening and for revisiting nutritional support goals, and ‘trigger points’ that indicate a possible change in clinical outcomes or social circumstances. Medicines management teams may wish to audit local prescribing of oral, enteral and parenteral nutrition support to ensure that it provides people’s complete nutritional requirements.</td>
</tr>
<tr>
<td>Self-management of artificial nutrition support</td>
<td>Enabling better self-management of artificial nutrition support should help to avoid some of the demand associated with malnutrition, freeing up resources within services providing interventions.</td>
<td>Commissioners should seek assurance that providers offer training for people self-managing their artificial nutrition support. There should also be expert support and advice available 24 hours a day, 7 days a week.</td>
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4 Commissioning implications and cost impact

This section considers the commissioning implications and potential resource impact of implementing the recommendations to achieve the NICE quality standard for nutrition support in adults. This quality standard comprises 5 quality statements.
4.1 Recognition

Quality statement 1: Recognition – screening

People in care settings are screened for the risk of malnutrition using a validated screening tool.

Surveys show that the majority of hospitals, mental health units and care homes have protocols in place for screening people with malnutrition and the risk of malnutrition using a validated screening tool (Russell and Elia 2012).

Commissioners should check that their providers’ malnutrition screening protocols are in line with recommendations 1.2.2–1.2.5 in Nutrition support in adults (NICE clinical guideline 32), which cover hospital inpatients and outpatients, care homes and GP surgeries. If hospital departments identify groups of patients with a low risk of malnutrition, the hospital may opt out of screening these groups. Opt-out decisions should follow an explicit process via the local clinical governance structure and involve experts in nutrition support. The basis of these decisions should be clearly detailed in the protocol.

Commissioners should ask all of their providers to routinely or periodically monitor local practice to demonstrate that local protocols on nutrition screening are being adhered to.

Commissioners may wish to reach an agreement with providers on the screening tool(s) to be used. A common example is the Malnutrition Universal Screening Tool (‘MUST’). When selecting a screening tool, commissioners should consider the care setting, ease of use, training requirements, local demography and the availability of alternative validated tools if ‘MUST’ is not appropriate, such as for people who are unable to communicate.

Administering ‘MUST’ is expected to take around 3–5 minutes (Stratton et al. 2004) and would typically be carried out by nursing staff. The direct cost per screening is £1.28–£1.84, depending on the setting. Expert opinion suggests

2 This is based on expert opinion about which staff groups are likely to undertake the screening. Costs shown include staff overheads (such as National Insurance and training costs).

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that although providers usually have protocols in place to screen eligible people (Russell and Elia 2012), these protocols are not fully implemented. Screening of all clinically eligible people would have a significant resource impact in a number of areas, as shown in table 2.

**Table 2 Estimated resource impact per 100,000 people**

<table>
<thead>
<tr>
<th>Area of resource impact</th>
<th>Cost impact (£000s)³</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase in screenings – direct costs⁴</td>
<td>38.9</td>
</tr>
<tr>
<td>5-minute ‘MUST’ screening by a nurse, in various settings</td>
<td></td>
</tr>
<tr>
<td>Increase in nutritional assessments – direct costs⁵</td>
<td>10.8</td>
</tr>
<tr>
<td>45-minute assessment by a dietitian, in the community or secondary care</td>
<td></td>
</tr>
<tr>
<td>Increase in nutritional interventions</td>
<td>22.0</td>
</tr>
<tr>
<td>Includes net ingredient costs and costs associated with administration of oral supplements, enteral and parenteral nutrition</td>
<td></td>
</tr>
<tr>
<td>Decrease in secondary care activity</td>
<td>(143.6)</td>
</tr>
<tr>
<td>Primarily from decreased length of hospital stays</td>
<td></td>
</tr>
<tr>
<td>Net cost</td>
<td>(71.8)</td>
</tr>
</tbody>
</table>

Based on the costing template for Nutrition support in adults (NICE clinical guideline 32), updated with the most recent available tariffs and staff costs.

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³ See appendix A for further details on the variables used.
⁴ Cost of increasing proportions screened to 90% from current figures of 65% of inpatients, 15% of outpatients and 10% of GP new registrations. Assumptions of current screening rates based on expert opinion.
⁵ Assumptions included that assessments were to be undertaken by a dietitian (middle of band 6) either in the community or within secondary care (requiring 45 minutes per patient), with salary levels taken from 2012/13 Agenda for Change, adjusted to include staff overheads. The proportions of screened patients who were referred for an assessment were 30% of inpatients, 10% of outpatients, 25% of patients in GP surgeries and 20% within care homes.
The overall resource impact of increased screening is estimated to be a saving of £71,800 per 100,000 people, with earlier identification freeing up capacity in secondary care and other settings that implement interventions.

Commissioners may also wish to:

- agree local targets with providers for the proportion of eligible people in specified settings to be screened for malnutrition or the risk of malnutrition
- consider using incentives such as CQUIN or Local Enhanced Services to drive up the proportion of the eligible population who are screened and who have a documented care plan that aims to meet their nutritional requirements, if this is appropriate (see also section 4.2)
- ask providers using the NHS Safety Thermometer to add nutrition screening as a measure within the tool.

Commissioners and others may wish to refer to the following examples of screening from the NICE shared learning database:

- Prevalence of malnutrition in nursing, care and residential homes in Walsall
- 'MUST do better' – our journey, to improving nutrition for everyone – a continuous cyclic, trust wide audit, of NICE clinical guideline 32
- Implementing nutritional screening in care homes
4.2 Nutrition care plans, treatment and review

Quality statement 2: Treatment

People who are malnourished or at risk of malnutrition have a management care plan that aims to meet their complete nutritional requirements.

Quality statement 3: Documentation of results and nutrition support goals

All people who are screened for the risk of malnutrition have their screening results and nutritional support goals (if applicable) documented and communicated in writing within and between settings.

Quality statement 5: Review

People receiving nutrition support are offered a review of the indications, route, risks, benefits and goals of nutrition support at planned intervals.

Following the identification of malnutrition or the risk of malnutrition, it is important that nutritional support goals are documented in a management care plan, treatment initiated and regularly reviewed. Commissioners should ask providers in all relevant health and social care settings to demonstrate that:

- Nutrition support goals are clearly documented in people’s management care plans.
- There are systems in place to share these management care plans across care settings. Commissioners may wish to reach an agreement with providers on the use of a standard template for documenting screening results and nutrition support goals in management care plans. This will help to encourage continuity in recording, using and sharing nutrition care plans within and between provider settings (National Prescribing Centre 2012).
- People receiving nutrition support are offered a review of the indications, route, risks, benefits and goals of nutrition support at planned intervals by a healthcare professional. Commissioners and providers should agree
protocols on the frequency of screening and review of nutrition support goals. They may wish to agree on ‘trigger points’ that indicate a possible change in clinical outcomes or social circumstances, which should prompt the need for a review of malnutrition risk and nutrition support goals.

Medicines management teams and other commissioners may wish to routinely audit the local prescribing of nutrition support supplements, to ensure that this treatment is clinically appropriate, and is reviewed at key stages of care. The full guideline for nutrition support for adults reported that many people are receiving less than the full nutrition required from prescribed oral and enteral feeds (National Collaborating Centre for Acute Care 2006, page 78). Medicines management teams should pay particular attention to:

- Whether or not the prescription, in addition to other food and fluid intake, seeks to meet people’s nutritional requirements. This includes consideration not only of the person’s energy (calorie intake) but also protein, fluid, electrolyte, mineral, micronutrient and fibre needs.
- Whether or not the prescription has considered people’s physical needs, such as problems with swallowing (dysphagia), gastrointestinal performance, physical activity and duration of the support.

A number of studies have demonstrated wastage caused by poor prescribing and failure to review prescribed nutritional supplements (NHS Institute for Innovation and Improvement 2010; Oral Nutritional Support Toolkit NHS London 2011; National Prescribing Centre 2012). The QIPP case study on prevention and treatment of adult malnutrition: appropriate prescribing of oral nutritional supplements demonstrated that over half of patients prescribed oral nutrition supplements in the community were prescribed them inappropriately. Savings were delivered by reducing inappropriate prescribing of oral supplements, although care should be taken to ensure that this does not decrease appropriate prescribing. Along with these potential savings, the cost of undertaking reviews will vary depending on the care setting, but it is not expected to be substantial. Expert opinion suggests that reviews are not being

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conducted routinely, so to achieve the likely potential savings, providers may wish to ensure reviews are included within the core responsibilities of their multidisciplinary teams.

It is not anticipated that there will be a cost impact to meeting quality statements 2, 3 and 5, because the tasks involved should be part of core responsibilities for members of the multidisciplinary team. As noted in section 4.1, appropriate use of nutrition support can reduce hospital admissions, length of hospital stays, rate of complications and contacts with community services. This lowers the resource requirements associated with treatment, so there should be the potential for cost savings – particularly from decreased use of oral nutrition supplements.
4.3  **Self-management**

**Quality statement 4: Self-management of artificial nutrition support**

People managing their own artificial nutrition support and/or their carers are trained to manage their nutrition delivery system and monitor their wellbeing.

The Guideline Development Group for [Nutrition support in adults](https://www.nice.org.uk/guidance/ng32) (NICE clinical guideline 32) found evidence that people who are self-managing their enteral and parenteral nutrition support are not always adequately trained to recognise and respond to adverse changes in their wellbeing and in the management of their nutritional delivery system. For example, 20% were not provided with an instruction manual on how to undertake basic procedures when first discharged and 14% were not issued with emergency telephone numbers. There were deficiencies in the assessment and monitoring of 54%, and around 20% had avoidable metabolic complications (NCEPOD 2010). Resolving the issues identified in this report would not be expected to have significant recurring cost or resource impacts, but would require more consistent adherence to current procedures.

Commissioners should satisfy themselves that their providers of artificial nutrition support:

- have a training programme in place for people who are self-managing artificial nutrition support and/or their carers.
- That training is delivered by specified members of the nutrition support multidisciplinary team.

Commissioning this training may involve additional costs locally where this is not currently undertaken during discharge meetings. Encouraging higher levels of self-management may result in efficiency savings as a result of avoiding preventable interventions.

Commissioners should ensure that all of their providers give people managing their own artificial nutrition support and/or their carers information on who should be the first point of contact if they are having difficulty with, or have NICE support for commissioners and others: Nutrition support in adults.
questions about, enteral or parenteral nutrition support. The contact should be an expert member of the multidisciplinary team who is readily available to provide advice and support. Commissioners should also satisfy themselves that there is emergency support available 24 hours a day, 7 days a week.

Commissioners and others may wish to refer to the following examples of review from the NICE shared learning database:

- **Pilot to improve the appropriate prescription of oral nutritional supplements within the Walsall area**
- **Prescription of oral nutritional supplements**

Commissioners and others may wish to refer to the following examples of review from NHS Evidence QIPP resources:

- **Oral nutritional supplement prescribing review: to reduce the number of patients with malnutrition**
- **Prevention and treatment of adult malnutrition: appropriate prescribing of oral nutritional supplements**
5 Links to national drivers and other useful resources

Useful resources

- Nutrition and Hydration Resource – Royal College of Nursing

NICE implementation support

- Costing report on nutrition support in adults
- Costing template on nutrition support in adults
Appendix A

Costs in table 2 were calculated using the costing template for Nutrition support in adults (NICE clinical guideline 32). Assumptions used in table 2 that differ from those in the costing template are detailed below.

Population

- The number of hospital admissions was 4,701,467 based on Hospital Episode Statistics 2011 data (HES), amended to exclude some specialties, following the methodology used in Nutrition support in adults (NICE clinical guideline 32). The total number of outpatient first attendances (10,961,687) was also taken from HES 2011.
- The number of new registrations at GP practices was 5,157,313, based on the Office of National Statistics mid-year estimate for 2009.
- Total residents in care homes was increased to 376,250, based on a survey by the British Geriatric Society (Martin and Thorpe 2011).
- The prevalence of malnutrition was estimated to be 30% among hospital patients and 35% among patients in care homes, based on an average of those categorised as being at 'medium to high risk' of malnutrition in the 4 most recent Nutrition Support Week surveys conducted by BAPEN, as at November 2012.
- For outpatients, malnutrition prevalence was changed to 16% (Rust et al 2010).

Increase in appropriate screenings – direct cost impact estimated to be £38,900 per 100,000 people

- Screening costs per patient were increased to £1.28 in outpatients; £1.67 in inpatients, and £1.84 in GP surgeries to reflect increased staff costs, taken from Agenda for Change 2012/13. This includes a 20% uplift for staff training and overheads.
- Based on BAPEN Nutrition Screening Week surveys, expert opinion suggests that the proportions of people eligible for screening who are
screened under the current pathway are 65% of eligible inpatients; 15% of outpatients and 10% of patients in GP practices.

**Increase in appropriate nutritional assessments – direct cost impact estimated to be £10,800 per 100,000 people**

- The unit cost of a nutritional assessment was altered based on Agenda for Change 2012/13. Expert opinion suggests there have been changes in common practice, and that a consultation is now likely to last for approximately 30 minutes. As the vast majority of dietetic assessments are undertaken within secondary care, a total of 45 minutes was considered to be a ‘best estimate’ of the average time required per patient, including training and scheduling issues.

**Increase in appropriate nutritional interventions – direct cost impact estimated to be £22,000 per 100,000 people**

- The cost of oral nutrition support was increased to £0.74 per patient, per day for inpatients and outpatients, and £6.28 in a GP setting based on an inflation increase of 13.7%.
- The daily cost of enteral tube feeding was increased to £7.19 per patient for inpatients and £15.19 per patient for patients in the community, to include inflation.
- The cost of parenteral nutrition was increased to £50.00 per patient per day for inpatients and £83.09 in the community. This is based on expert opinion and reflects the cost of a standard parenteral nutrition bag, including supplements, taking into account that some providers add electrolytes.

**Decrease in secondary care treatment – estimated savings of £143,600 per 100,000 people**

- The average saving per patient, per day was increased to £367, to include inflation.
- The cost of a GP visit was increased to £36 based on Personal Social Services Research Unit data (Curtis 2011).
- Average cost per outpatient attendance was increased to £105 based on Reference Costs, 2011.
- Average cost per admission was increased to £1260 based on Reference Costs, 2011. This is the total cost of elective admissions divided by the number of first finished consultant episodes.
References

British Association for Parenteral and Enteral Nutrition (2012) Introduction to malnutrition [online; accessed 28 September 2012]


NHS Institute for Innovation and Improvement (2010) Keeping nourished, getting better – one of the high impact actions. London: NHS Institute for Innovation and Improvement


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