

# DECREASED MALNUTRITION RATES IN PAEDIATRIC INPATIENTS FOLLOWING INTRODUCTION OF NATIONAL OBLIGATORY SCREENING

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## OBJECTIVES AND STUDY

From 2008, Dutch hospitals have been required to screen for and treat acute malnutrition in paediatric patients on admission as part of a national quality indicator.

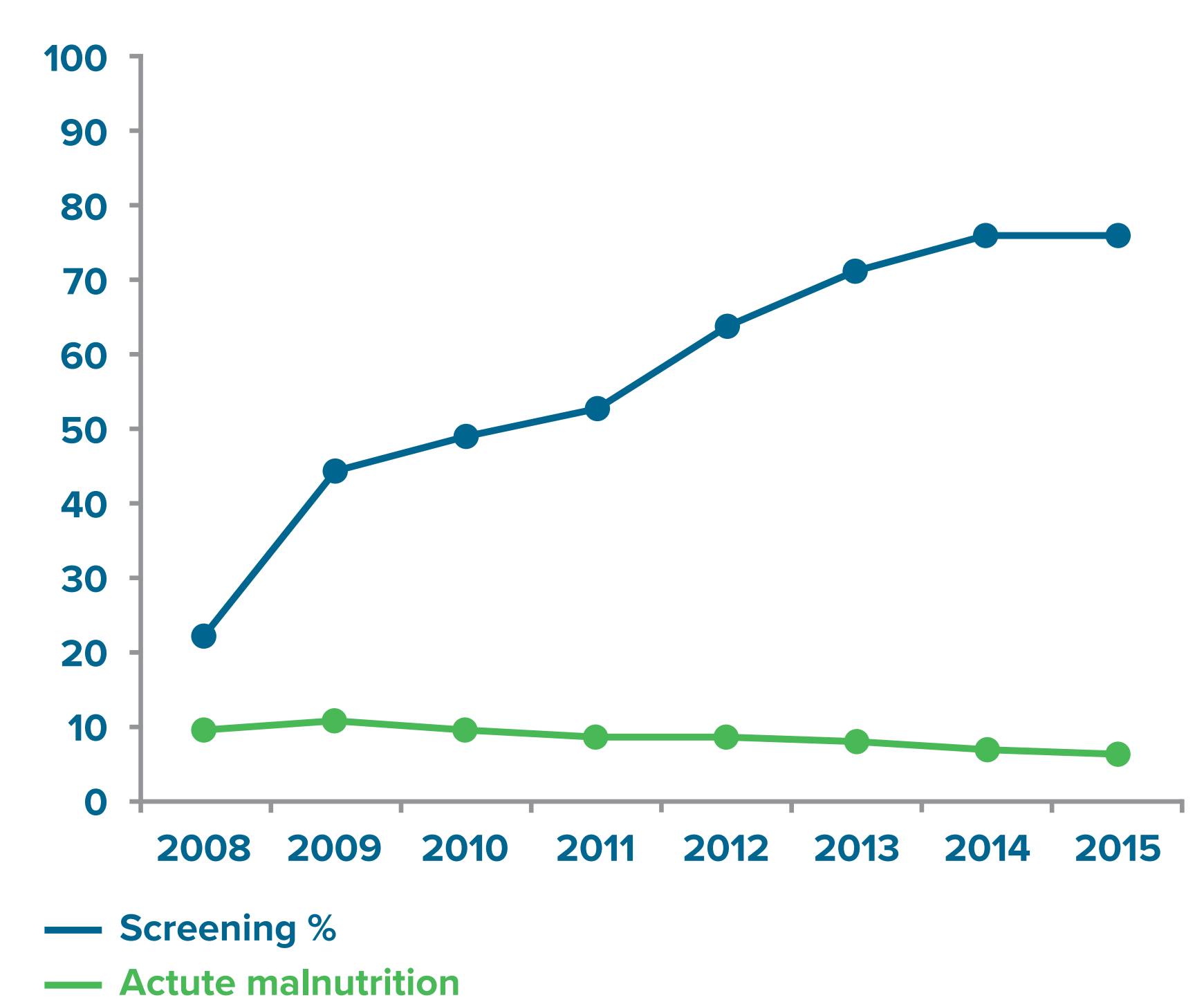
The aim of this study was to assess if the introduction of this malnutrition quality initiative altered

- 1) the number of children screened for malnutrition on admission
- 2) the treatment of malnutrition

## METHODS

- Analysis of centrally reported data of all Dutch hospitals with a paediatric in-patient ward regarding screening for malnutrition and its from 2008-2015
- Acute malnutrition defined as:
  - weight for age <-2 SDS in patients <1 y
  - weight for height <-2 SDS in patients aged 1-18 y
- For children >1 year of age: nutritional intake data on day 4 compared to set minimum energy requirement calculated using the Schofield formula +30% and protein requirement of 1.2-1.5 g/kg/day

## RESULTS



## RESULTS: ACUTE DISEASE RELATED MALNUTRITION IN CHILDREN ADMITTED TO DUTCH HOSPITALS 2008-2015

		2008	2009	2010	2011	2012	2013	2014	2015
<b>Sreening</b>	Institutions (n)	34	63	79	87	88	90	91	90
	Admissions (n)	47.595	69.282	94.289	103.114	92.897	86.410	87.048	86.656
	Screening (n)	10.539	30.567	46.054	53.985	58.946	61.391	65.973	65.720
	Acute malnutrition (n)	993	3280	4422	4723	5010	4981	4551	4277
	<b>Screening (weighted %)<sup>1</sup></b>	<b>22,1</b>	<b>44,1</b>	<b>48,8</b>	<b>52,4</b>	<b>63,5</b>	<b>71,0</b>	<b>75,8</b>	<b>75,8</b>
	<b>Acute malnutrition (weighted %)<sup>2</sup></b>	<b>9,4</b>	<b>10,7</b>	<b>9,6</b>	<b>8,7</b>	<b>8,5</b>	<b>8,1</b>	<b>6,9</b>	<b>6,5</b>
<b>Treatment</b>	<b>Adequate protein intake (weighted %)<sup>3</sup></b>	<b>56,7</b>	<b>75,6</b>	<b>69,7</b>	<b>72,8</b>	<b>55,6</b>	<b>75,5</b>	<b>63,1</b>	<b>66,7</b>
	<b>Adequate energy intake (weighted %)<sup>3</sup></b>	<b>56,7</b>	<b>76,0</b>	<b>65,8</b>	<b>67,1</b>	<b>57,9</b>	<b>72,8</b>	<b>60,3</b>	<b>62,9</b>

1 (children screened (n)/admissions (n))\*100. 2 (children screened (n)/malnourished children (n))\*100.

3 (adequate protein or energy intake (n)/ malnourished children at admission day 4 (n))\*100

## CONCLUSION

- Since hospitals have been required to report on screening for malnutrition on admission and its treatment, screening numbers have increased significantly and prevalence rates of malnutrition in paediatric patients have dropped.
- The number of children with an adequate minimum energy and protein intake on day 4 of admission has remained the same.
- The increased awareness of malnutrition among admitted paediatric patients may have led to this decrease in rate of acute malnutrition.