

CHAPTER 19 APPENDICES

Appendix A Sample Dietitian role statement

Appendix B Growth chart comparisons



Appendix A

Cystic Fibrosis Role Statement



Role Statement for Accredited Practising Dietitians practising in the area of Cystic Fibrosis

Developed by: Cystic Fibrosis Interest Group
Date Created: June 2014

Introduction

Accredited Practising Dietitians (APDs) are recognised professionals with the qualifications and skills to provide expert nutrition and dietary advice. APDs are qualified to advise individuals and groups on nutrition related matters.

APDs have sound university training accredited by DAA, undertake ongoing professional development and comply with the DAA guidelines for best practice. They are committed to the DAA Code of Professional Conduct and Statement of Ethical Practice, and to providing quality service.

APD is the only national credential recognised by the Australian Government, Medicare, the Department of Veterans Affairs and most private health funds as the quality standard for nutrition and dietetics services in Australia. It is a recognised trademark protected by law.

Purpose of this Role Statement

- To define the role an APD may fulfil when working in the area of Cystic Fibrosis (CF)
- To promote the knowledge and expertise of an APD, broadly and in the area of CF
- To advocate for dietetic services

Knowledge and skills in this area of practice

Entry level dietetic competencies ensure all APDs can conduct comprehensive assessments (assessment, diagnosis, intervention, monitoring and evaluation). Within a particular practice area, APD skills and knowledge will range from entry level to highly skilled. Within this continuum APDs can either fully manage the patient, seek support (clinical supervision, secondary consultation, mentor) to continue seeing the patient or choose to refer the patient on. The following list of skills and knowledge required to work in CF are:

Skills:

- *Interpretation of markers of nutritional status including: regular anthropometric and body compositional measurements, dietary intake measures, biochemical indices and medical screening procedures (e.g. DEXA scans, oral glucose tolerance tests.)*²
- *Ability to provide advice tailored to the individual with CF, considering changing physiological needs, psychological barriers to optimal intake and life stage (e.g. adolescence, pregnancy, transplantation.)*²
- *Capacity to utilise chronic condition management approaches (e.g. partnering with individuals with CF and their caregivers, goal setting, reflective listening and questioning, motivational interviewing.)*^{3,4}
- *Critical and clinical reasoning.*

Knowledge:

- *Thorough understanding of the role nutrition has in improving outcomes including longevity and quality-of-life for individuals with CF.*^{5,6}
- *Familiarity with the pathophysiology of CF (e.g. effects on gut function, absorption, digestion, airways etc.), interdisciplinary management, and nutritional co-morbidities (i.e. CF related – diabetes, liver disease and bone disease.)*^{1,2}

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- *Specific knowledge about pancreatic enzyme replacement therapy (i.e. preparations available, mechanisms of action, the link between food intake and dosing principles.)*

Activities entry level APDs would conduct:

- *Nutrition assessment skills. Determine a CF patient's individual energy, salt and fluid needs, based on factors such as lung function, pancreatic function, nutritional co-morbidities, anthropometric and body compositional measurements, growth history, biochemical indices (e.g. fat soluble vitamin levels) and physical activity.*²
- *Counselling and intervention*
 - Determine realistic goals for nutritional therapy in collaboration with the patient and care-givers and other members of the CF team.²
 - Provide comprehensive advice to assist in maintaining a healthy weight and in the management of other factors of CF, including: supplemental oral and enteral feeding (i.e. initiation, goal setting and monitoring), pancreatic insufficiency, fat soluble vitamin status, altered gastric motility, constipation and distal intestinal obstructive syndrome, CF related liver disease, impaired glucose tolerance/diabetes, reduced bone mineral density.²
- *Monitoring and evaluation*
 - Conduct regular nutritional surveillance, with all aspects of nutrition and gastrointestinal status being reviewed.^{1,2}
- *Effective communication skills*
 - Communicate nutritional aspects of care with the individual with CF, their care-givers and the CF team to ensure continuity of care.^{1,2}

Activities APDs working at a higher level would conduct:

- *Overseeing CF nutritional care of inpatients and outpatients, especially complex cases (i.e. transplantation, end-stage lung disease, intensive care setting, and enteral feeding.)*^{1,2}
- *Management of home enteral nutrition service for CF patients, including gastrostomy tube monitoring and trouble shooting.*
- *Act as a nutrition resource person for the training, education and development and support of others involved in CF care. This includes the mentoring/supervision of students or less experienced dietitians as well as various other health professionals.*^{1,2}
- *Lead or participate in nutrition and multi-professional quality improvement activities, research projects and/or audits.*^{1,2}
- *Remain current with CF literature and practices by being a member of the CF Interest Group and other relevant international professional groups; undertaking professional development activities in the area of CF albeit internal or external (i.e. journal clubs, regular attendance at national or international meetings, presenting at professional and consumer forums on nutrition).*
- *Involvement in strategic and collaborative CF Interest Group activities.*

Any individual practitioner should refer to the [Scope of Practice Decision Tool](#) to determine if a task is within their scope of practice.

Activities APDs working in this area do not usually undertake:

- Sole nutritional management of patients, without the support of an interdisciplinary team from a recognised specialist CF centre (contact [Cystic Fibrosis Australia](#) for CF centre details.)
- Practising in the CF area without engaging in ongoing professional development to build on knowledge and skills and without clinical supervision/mentoring.
- Providing psychological counselling outside of their skill-base.
- Prescribing pancreatic enzyme replacement therapy and ordering nutrition related biochemical tests (potential extended scope of dietetic practice in the future).

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Review date: June 2017

Appendix 1 – Background

The role of nutrition in CF care

Poor nutritional status is an independent risk factor for poor survival and has been associated with worse pulmonary function and other complications of CF, including bone disease.^{2,5-6}

Outcomes of APD involvement

- In a series of practice surveys from 1998 to 2010, the CF Interest Group has shown increasing alignment with dietetic practice standards (e.g. screening for CF related diabetes, completion of annual dietetic reviews, fat soluble vitamin screening and supplementation.) These surveys were not designed to review patient outcomes.⁷⁻⁹
- To begin evaluating the effectiveness of collaborative quality improvement and research activities undertaken by the CF Interest Group, a retrospective cohort study was performed on all individuals registered with the Australian Cystic Fibrosis Data Registry between 1999 and 2012 (n=85,363 yearly records). Body mass index (BMI) was used as a proxy for nutritional outcomes. The number of abstracts submitted to Australasian Cystic Fibrosis Conferences by dietitians was monitored also. Significant improvements in BMI were seen for children (aged 2-17 years, 1999 mean 47th BMI percentile vs 2012 mean 59th BMI percentile, p=0.0001) and adults (aged >18 years, 1999 mean BMI 21.3kg/m² vs 2012 mean BMI 23.0kg/m², p=0.0001.) Conference abstracts submitted increased exponentially (2 abstracts 1999 vs 26 abstracts 2013.) While it is not possible to delineate the impact of multidisciplinary team management, treatment changes and identification of milder CF genotypes; our data provides support that as health metrics go up – so too does APD ‘presence’.¹⁰

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[Link to entry level competencies](#)



Appendix B

Comparison of World Health Organisation and Centers for Disease Control and Prevention growth chart weight-for-age measurements in children birth to 24 months

This content has been adapted from <https://www.cdc.gov/mmwr/preview/mmwrhtml/rr5909a1.htm>

The World Health Organization (WHO) released new international growth charts for children aged 0–59 months in 2006. These charts describe weight for age, length (or stature) for age, weight for length (or stature), and body mass index for age.

The US Centers for Disease Control and Prevention (CDC) charts describing how certain children grew in a particular place and time and are considered a growth reference. In contrast, the WHO charts describing the growth of healthy, predominately breastfed children in optimal conditions and are therefore considered a growth standard.

The CDC and NHMRC recommend that the 2006 WHO international growth charts are used for children from birth–24 months instead of the CDC growth charts. The CDC growth charts should continue to be used for individuals 2–18 years of age in Australia and NZ WHO charts in New Zealand.

Clinicians should be aware that the WHO charts show a faster rate of weight gain in the first few months (figures 1 and 2) and therefore fewer children will be identified as underweight using the WHO charts. Beginning at approximately 3 months, the WHO charts show a slower rate of weight gain (figures 1 and 2), which is normal among breastfed infants from 3–18 months. Gaining weight more rapidly than indicated on the WHO charts may be early signs of overweight.

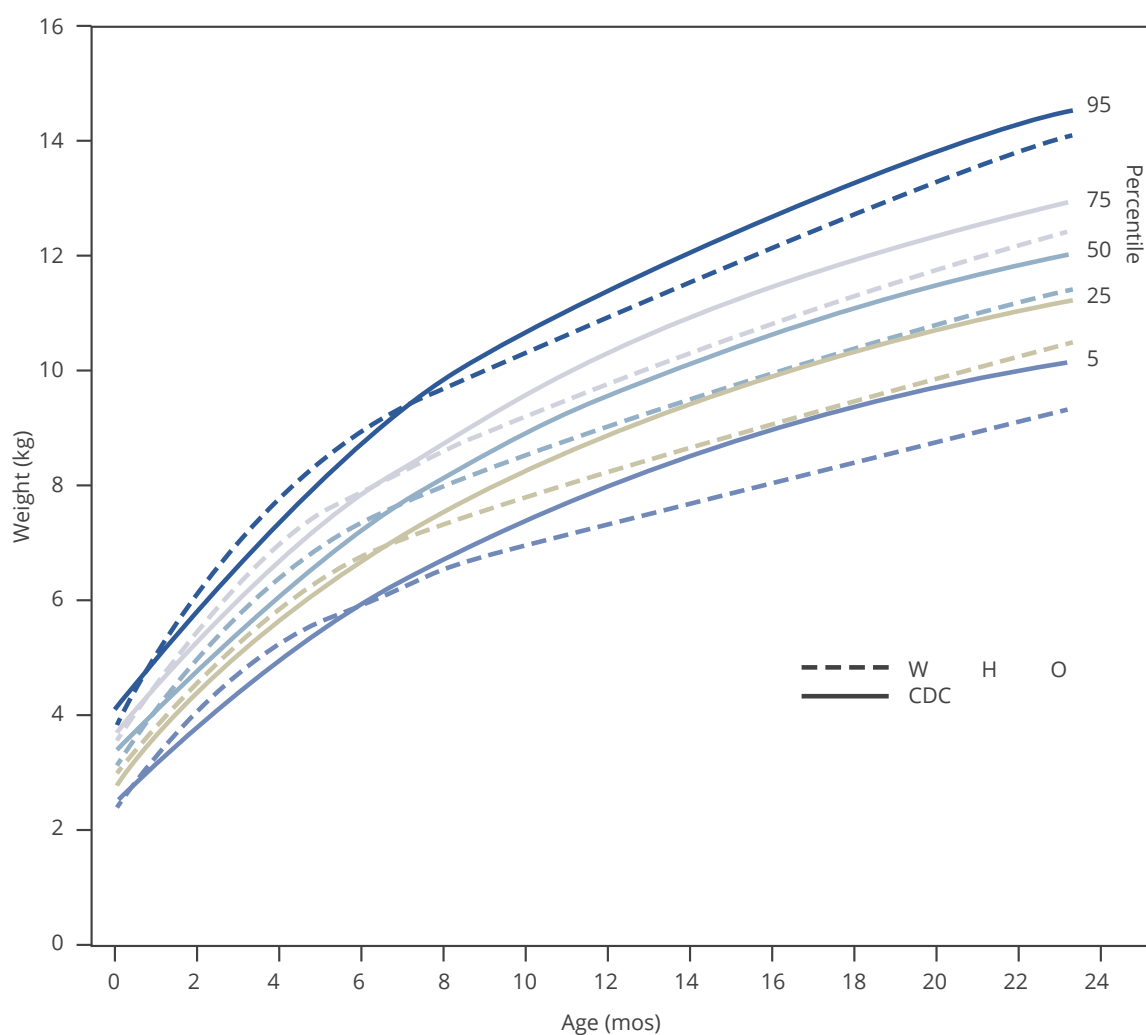


Figure 1- Comparison of World Health Organization (WHO) and Centers for Disease Control and Prevention (CDC) growth chart weight-for-age measurements for girls aged <24 months

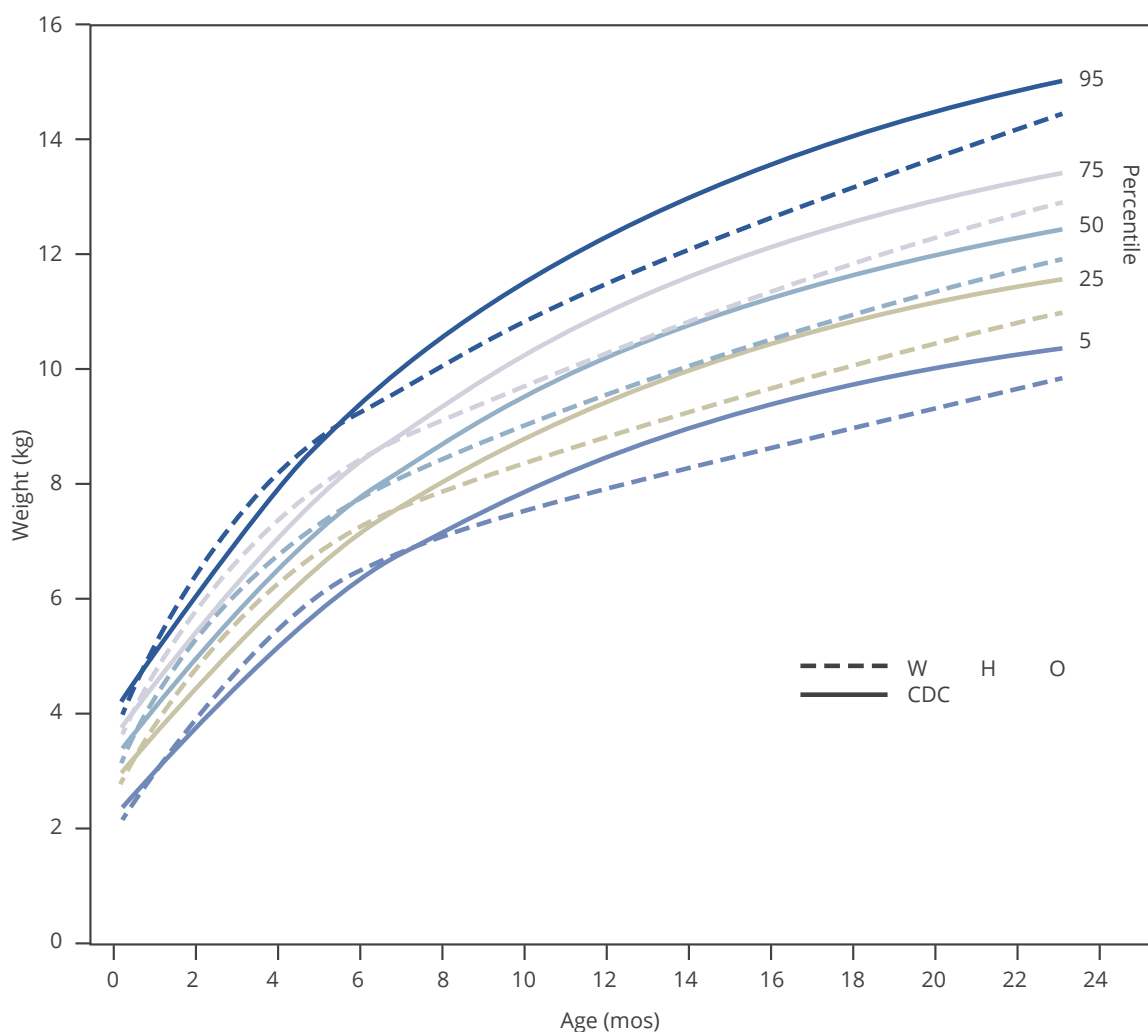


Figure 2- Comparison of World Health Organization (WHO) and Centers for Disease Control and Prevention (CDC) growth chart weight-for-age measurements for boys aged <24 months

