Universal Dietetic Patient Complexity Tool (UDPCT)
VALIDATED VERSION (V11)

Validated for use within all dietetic specialties and location (adults, paediatrics, inpatients, outpatients and mental health) to determine the complexity of patients for job planning and safe staffing (safety of caseload management with appropriate dietetic banding).

The tool determines patient complexity (not how complex the dietitian finds the assessment). See last page for user-guide.

Scoring matrix: 10 Domains (rows) and 3 Categories A-C (columns)

Complexity Domain	HIGH COMPELXITY NEEDS	MEDIUM COMPLEXITY NEEDS	LOW COMPLEXITY NEEDS
Dietetic Intervention	SCORE 12	SCORE 6	SCORE 3
Medical	SCORE 3	SCORE 2	SCORE 1
Screening/Growth	SCORE 3	SCORE 2	SCORE 1
Re-feeding Risk	SCORE 3	SCORE 2	SCORE 1
Biochemistry/Observations	SCORE 3	SCORE 2	SCORE 1
Social & Mental Capacity Act	SCORE 3	SCORE 2	SCORE 1
Psychological	SCORE 3	SCORE 2	SCORE 1
Communication/Education	SCORE 3	SCORE 2	SCORE 1
Behavioural	SCORE 3	SCORE 2	SCORE 1
Discharge/Handover Communication	SCORE 3	SCORE 2	SCORE 1

See last page for abbreviations.

Example: Only one score per domain even if more than one item occurring. See next page for items within domains.

Dietetic Intervention: NBM requiring NG straight forward set up (no tolerance issues) = **(6)**
Medical: = Type 2 diabetes, acute stroke admission under investigation **(3)**
Weight/Screening/Growth/functional: Malnutrition screening score 2 = **(2)**
Re-feeding: No risk = **(1)**
Biochemistry/ Haematology/ Electrolyte/Observations: High BG consistently above 10mmol/l on feed requiring dietitian-medical management liaison = **(3)**
MCA & Social: Family distress issues requiring frequent support or crisis intervention = **(3)**
Psychological Mental Health = No risk **(1)**
Communication & Education = Communication aids required **(3)**
Behavioural = No behavioural issues **(1)**
Discharge (D/C)/Handover (HO) = No Dietetic Planning Currently **(1)**

Total score = 24 medium complexity

Total Score Interpretation:

High complexity Scores of 27 + (>33 = Very High complexity)

Medium complexity Scores between 18- 26

Low complexity Scores between 12-17

DOMAIN	HIGH COMPLEXITY	MEDIUM COMPLEXITY	LOW COMPLEXITY
	Nutritional Intake SCORE 12: (only one score per domain)	**Nutritional Intake SCORE 6: (only one score per domain)**	**Nutritional Intake SCORE 3: (only one score per domain)**
Dietetic Intervention	• Lengthy discussions suitability PN/EN + tube type, joint assessment with Medic/Nutrition Specialist Nurse/Community Nurse/other HCP/IMCA/ e.g., difficult placement/PN line issues/frequent displacement/insertion/withdrawal decisions. • PN bespoke tailored/scratch bags or Unstable EN e.g., absorption issues or Extensive PN/EN regimen titration including difficulty weaning from PN/EN or transitioning onto Blended Diet or tailoring for multiple drug-nutrient interactions. • Requiring frequent changes to nutrition support plan e.g., Sedative ++ (Kcal)/ECMO/haemofilter requiring extra protein to meet requirements. • NaCl additions to feeds, drug/illness induced changes to BG requiring meds/feed adjustments (e.g., insulin/PERT). • Significant restrictions on nutrition support e.g., fluid, chyle leak, PO4/K+/NaCl or dysphagia IDDSI complications balancing intake with ONS. • Severely restricted dietary intake/binging/purging/aversions e.g., ARFID, severe aversion in pregnancy, extensive renal restrictions (K+/PO4), self-imposed severe restrictions/avoidance/fasting, restrictions due to multi-modality oncological treatments requiring symptom management. • Extensive exclusions/reintroductions e.g., multiple or severe allergy, FPIES, FODMAP, ketogenic. • Balance between diet & meds requiring detailed dietary education e.g., CHO counting + insulin (MDI or pump), ketogenic ratios, regular adjustments in medication for CKD-MBD management (e.g., calcimimetics, vit D analogues, phosphate/K+ binders/dialysate adjustment), PERT & dietary management, gastroparesis, high output stoma management, CGM or insulin pump download interpretation. • Bariatric/head and neck/GI surgery dietary management (extensive pre-op explanations & post operative complications symptom management including metabolic issues caused by dumping syndrome or medical device impacting swallow). • Extended scope practice e.g., prescribing micronutrients/nutrition related meds or Inserting NG/NJ tubes or insulin/CGM/insulin pump start.	• Routine EN or PN ('all in one/off-the-shelf' bags) set up or review (including tube use for flushes only). • ONS titration/weaning to meet requirements with no tolerance issues. • Tube issues e.g., blockage escalations, site infection. • IDDSI ONS px with no tolerance issues. • Single drug nutrient interaction(s) / requiring minor meds or feed amendments. • Routine PO4 binder management. • Multiple Vitamin/Mineral deficiency dietary correction advice. • Therapeutic diets e.g., liquid diets for IBD remission, lipid lowering, low CHO diets type 2 DM, basic level CHO counting, NAS, liver shrinkage pre-bariatric surgery, first line IBS, first line K+ restriction, relaxing dietary restriction education post new kidney transplant. • First line allergen/intolerance exclusion e.g., milk protein, gluten free, low lactose. • Fussy eating/correcting inappropriate weaning. • Dispelling alternative diets myths, taste change/mucositis/ neutropenic advice.	• Stable modified consistency/fluids advice. • Food fortification advice. • Healthy eating advice. • ONS and/or Fortification review – meeting requirements. • Singular Vit/Mineral deficiency dietary correction advice e.g., Iron, Vitamin D. • Dietetic involvement in arranging specialist equipment to aid feeding and or mealtime assistance.
	All sections below SCORE 3:	**All sections below SCORE 2:**	**All sections below SCORE 1:**
Medical	• Unstable medical/surgical condition/under investigation for diagnosis/Multi-Organ Failure.	• Multiple stable diagnosis	• Single stable diagnosis.
Weight/ Screening/ Growth/ Functional	• Malnutrition screening tool high risk score/ BMI ≤18.5-20 with >10% unintentional ongoing wt loss/ SGA = C/ Evidence of severe frailty/ sarcopenia. • Significantly poor performance in functional tests (e.g., Hand Grip Strength/Sit to Stand/Gait Speed tests). • Extreme prematurity/ no weight gain in children <2 years old or <10g/kg/d gain in premature infants. Discrepancy of ≥3 centiles height vs. weight paediatric growth chart threshold for concern for faltering growth. Significant clinical concern regarding crossing centiles of length/height/head circumference/muscle wasting. • Obese: BMI 35-39.9 with significant morbidities or BMI >40 with or without morbidities or >80 % excess weight loss within 1 year post Bariatric surgery. • Anthropometry calculations due to physiological changes e.g., multiple amputations, extensive burns.	• Malnutrition screening tool medium/moderate risk score/BMI 18.5-20 with 5-10% unintentional ongoing wt loss /SGA = B / Evidence of moderate frailty/ sarcopenia. • Discrepancy >2 centiles height vs. weight growth chart/ slight change in growth trajectory. • BMI 25-30 with co-morbidities or BMI 30-34.9 with or without morbidities. • >70 % excess weight loss 1 year post bariatric surgery. • Weight gain >10% on enteral nutrition support.	• Malnutrition screening tool low risk score, SGA = A. Evidence of mild or nil frailty/ sarcopenia. • BMI >18.5 with wt gain to healthy range. • BMI <30 without comorbidities. • Child growing as expected (tracking growth centiles).
Re-feeding Risk	**Extremely high risk:** BMI < 14kg/m^2 (<5th Centile) **AND** Negligible intake >15 days (2-7 days paediatrics age dependent). **High risk (≥1 of the following):** BMI < 16, Unintentional/acute weight loss >15% in 3-6 months, very little intake >10 days (>7 paediatrics), Low levels of K+/PO4/Mg prior to feeding, (paediatrics prolonged/severe vomiting &/or diarrohea >5 days or severe malabsorption/severe metabolic stress). ***(OR ≥2 of the following):*** BMI < 18.5kg/m^2 (<5th Centile), Unintentional weight loss >10% in 3-6 months, little or no intake >5 days, Alcohol/drug abuse (including insulin, chemotherapy, antacids, diuretics).	**At risk:** little or no intake for > 5 days.	No Risk.
Biochemistry/ Haematology/ Electrolyte/ Observations	• Repeated hypoglycaemia or BG consistently >10mmol / time in range <50% /HbA1c ≥86mmol/mol (>10%)/ erratic control. Ketones ≥ 1.5mmol/l (small-large) • Raised LFTs or deranged electrolytes secondary to PN. • High (>150) or Low (<128) Na requiring nutrition support/additions or Fluid balance issues/persistent pyrexia requiring fluid/feed adjustments. • Extensive interpretation due to disease/treatment / medication requiring dietetic management e.g., renal / ketogenic / metabolic management or IC (if ventilated). • Multiple electrolyte or nutritional deficiencies requiring supplementation/infusions and monitoring. • Extensive MDT co-ordination to obtain bloods/manage refeeding as an outpatient or in community. • Adults prolonged non-infective Type 7 stools/malabsorption indicators (orange/pale/floating) or Prolonged Type 1 with pain OR obstruction. • Children with significant stool losses with 1 or more of: high volume / high frequency / bloody / oily stools impacting fluid balance / electrolytes / skin integrity. • High stoma output >1500ml/d in adults. ≥20ml/kg/d in children or Faecal elastase <200ug/g or Calprotectin > 150µg/g. • Vomits (high volume &/or frequency impacting fluid balance / electrolytes or high aspirates (>500ml adults/clinically significant volume in children).	• BG time in range ≥50% but <80% / HbA1c 47-85mmol/mol (9.9-6.6%) / Ketones less than 0.6-1.5mmol/l (trace) requiring dietetic support/monitoring/reviewing BG patterns. • High/low PO4/Mg/K+ requiring monitoring & replacement. • High cholesterol or High blood pressure (requiring dietary advice). • Indirect Calorimetry (IC) (hood with room air). • Singular nutritional deficiencies requiring supplementation & monitoring. • Positive Tissue Transglutaminase (TTG) antibody or Endomysial antibodies. • Prolonged/intermittent constipation/bloating/wind/type 5/6 stool (adults). • Intermittent or occasional diarrhoea/constipation (children). • 1000-1500ml stoma output in adults. <20ml/kg/d with low urinary sodium in children. • Intermittent or occasional vomiting (adults & children).	• BG Time in range ≥80% HbA1c 48mmol/mol (6.5%) or below/no ketones - little or no dietetic support required to interpret patterns / downloads required. • No issues with biochemistry or No result to interpret. • Observations stable. • No Vomiting. • Normal Stool for patient /low stoma output. • FE & FCALP normal range.
Mental Capacity Act & Social	• Mental capacity assessments/consent issues (patient/parent or carer) &/or DoLs/PoVA applications/child protection register plans/ advocate/IMCA required. • Medico-legal issues e.g., court of protection applications or litigation issues or ethical dilemmas regarding nutrition provision. • Safeguarding/force feeding behavioral concerns requiring discussions, referrals, case management or family distress issues requiring frequent support/ crisis intervention OR Suspected/confirmed drug/alcohol misuse/domestic violence in the household or concerns about unstable home environment. • Lives alone with no support network/unable to access food/prepare own food/no package of care or Lives/attends multiple locations- school/respite/foster settings.	• Advance care planning/end of life conversations. • Discussions required on capacity and ability to consent. • Signposting/referrals for support services e.g., food bank referral, hot meals, charities.	• No consent issues / established method of obtaining consent. • Confirmed unable to consent/Acting in best interests.
Psychological Mental Health	• Unstable psychological /psychiatric needs – diagnosed or under investigation / suspected / suicidal thoughts /requires treatment under section (Mental Health Act) (patient, family member/parent/care giver/partner/household member).	• Stable psychological/psychiatric condition/low risk/requires monitoring e.g. general anxiety/low mood impacting on diet & wellbeing requiring support or onward referral for additional support/impacting on patient care (e.g., family/parent/care giver/partner/household member).	• No psychological / psychiatric concerns.
Communication & Education	• Communication aids or interpreters required. • Self-management education empowering patient/parent/carer/intense behavioural change therapy (BCT). • Difficulty with education –lengthy due to patient/parent/carer limited understanding of concept or resistance to change/poor engagement or distressed. • Lengthy MDT/multi-agency discussions/family meetings regarding best interest interventions/medical care/milestone development. • Learning Disability- extensive SEN/ID needs/major adjustments to communication or education format/ heavy input into Education Health and Care Plan (EHCP).	• Moderate communication issues with patient/parent/carer - able to communicate basic needs. • Best interest /milestone development discussions without conflict of agreement. • MDT discussions without conflict of agreement. • EHCP minor changes/ Moderate SEN/ID learning needs/ minor adjustments to communication style / education format.	• Minimal MDT Liaison or No communication barriers with patient/carers/parents/friends. • Patient information sheet given requiring minimal explanation. • No Best Interest discussions/low SEN/ID needs.
Behavioural	• Challenging behaviours e.g., poor engagement/resistance to change requiring extensive BCT, parent/child requiring interactive behavioural management programme • Risk of HCP harm (inc. assistance of Police/prison services/chaperone required) due to physical/verbal aggression, IV Drug user, alcohol dependency, self-harming (parent/child/adult patient or anyone else in the household), restraint of behaviour to comply with tube feeding if sectioned (eating disorder). • Severe s-t memory loss causing distress or severe gross motor movements, physical disability/wandering/repetitive movements e.g. stimming causing distress.	• Reasonable adjustments for behaviors/physical disabilities e.g., wheelchair/seating/scales. • Manipulative behaviour between different care givers or health care professionals. • S-t memory loss/physical movement/disability mildly impacting on treatment plan. • Requires constant supervision / assistance / feeding/ specialist aids to eat.	• No significant behavioural / environmental issues. • Eating independently/with prompting.
Discharge/HO	• HPN set up (any area) or HEF set up outside of normal discharge (d/c) area. • Detailed GP/MDT letters/lengthy community discussions between multiple providers/MDT/family meetings to agree or change PoC. • Lengthy or detailed HO/onward referral (hospital transfer/outside of area national or international D/C arrangements).	• HEF set up/modifications within normal d/c area. • Standard GP/MDT letters/community referrals or Routine HO/short D/C discussions (ward/hospital transfer/community provider/MDT liaison) or Minor adjustments to PoC.	• No dietetic discharge planning currently. • D/C from service - no onward referral/HO required.

Abbreviations

AFRID (Avoidant Restrictive Food Intake Disorder)
BCT (Behaviour Change Therapy)
BG (Blood Glucose)
BMI (Body Mass Index)
CBG (Continuous Blood Glucose)
CGM (Continuous Blood Glucose Monitor)
CHO (Carbon Hydrogen Oxygen = Carbohydrate)
D/C (Discharge)
DM (Diabetes Mellitus)
DoLS (Deprivation of Liberty Safeguarding)
ECMO (Extracorporeal Membrane Oxygenation) – life support
E.g. (Example)
EHCP (Education, Health and Care Plan)
EMI – Elderly Mentally Infirm
EN (Enteral Nutrition)
FCALP (FAECAL CALPROTECTIN)
FE (FAECAL ELASTASE)
FODMAP (Fermentable Oligosaccharides Disaccharide Monosaccharides and Polyols)
FPIES - Food Protein-Induced Enterocolitis
GP (General Practitioner)
HCP (Health Care professional)
HEF (Home Enteral Feeding
HO (Hand Over)
HPN (Home Parenteral Nutrition)
IBD (Inflammatory Bowel Disease)
IBS (Irritable Bowel Disease)
IC (Indirect Calorimetry)
ID (Intellectual disability)
IDDSI (International Dysphagia Diet Standardisation Initiative)
IMCA (Independent Mental Capacity Advocate)
IV (Intra Venous)
K+ (Potassium)
Kcal (Kilocalories)
LFTs (Liver Function Tests)
MDT (Multi-disciplinary Team)
Mg (Magnesium)
MND (Motor Neuron Disease)
NaCl (Sodium chloride)
NAS (No Added Salt)
NICE (National Institute Clinical Excellence)
ONS (Oral Nutrition Support)
PERT (Pancreatic Enzyme Replacement)
PINNT (Patients on Intravenous and Nasogastric Nutrition Treatment)
PN (Parenteral Nutrition)
PO4 (Phosphate)
PoC (Package of Care)
POVA (Protection of Vulnerable Adults)
Pts (Patients)
Px (Prescription)
SEN (Special Education Needs)
SGA (Subjective Global Assessment)
SLT (Speech & Language Therapist)
S-t (Short-term)
SWAN (Syndromes Without a Name) Charity
UK (United Kingdom)
Vs. (Verses)
Wt = weight

<u>User guide:</u> The tool is <u>NOT to be used to assess how difficult the dietitian finds the patient</u>. It <u>IS to be used to assess how complex the patient is</u> regardless of dietetic experience/specialism/pay band. UDPCT determines <u>patient complexity</u> (not how complex the dietitian finds the assessment).
Ensure all domains are scored. Only use one score per domain (even if more than one item occurring).

- UDPCT determines the complexity of the patient in present time (at the time of the assessment). Complexity can change over time, and some assessments/interventions can be more complex at different times of the patients' journey. E.g., a patient with fluctuating capacity can make simple decisions about some things whilst unable to make more complex decisions – this is assessed in the present moment in which the decision is required.

- Therefore, each time the dietitian assesses the patient they must re-score their complexity (a new patient's complexity can be different from a review, the initial complexity will guide how complex the patient is, but this is fluid and can vary with every review).

- Dietetic notes might not record information from all 10 UDPCT domains, therefore notes cannot be a reliable way to determine complexity, dietitians must assess the patient first and then score the complexity after assessment each time.

- <u>Please note that this is not an exhaustive list of all situations/conditions and what is specifically happening with your patient may not be referenced in the domains. In this situation you will need to use your judgement based on the given examples as to where your patient fits.</u>

<u>Job Planning/Caseload Management:</u> *UDPCT can be used for job planning and safe staffing (safety of caseload management with appropriate dietetic banding). See below example to safely divide up caseloads; a higher number of more complex patients can be allocated to caseloads of more experienced dietitians:*

Ref	N	1	2	3	L	M	H	UN
New ref	New (initial ax)	High priority	Med priority	Low priority	Low complexity	Med complexity	High complexity	Unmet need

Priority 1	High - <1 working day
Priority 2	High - <2 working day
Priority 3	High - <3 working day

seen

Jun-19						1st					7th					14th					28th						
Dietitian	Band/grade	Pt Name	MRN	Ward	Ref	M	T	W	T	F	M	T	W	T	F	M	T	W	T	F	M	T	W	T	F	R/V	Info
Example	x	x	x	x	01-Apr	N1M			1R																		New NGT, refeeder, asp pneumonia.
Example	x	x	x	x	01-Apr	Ref	UN	N1H			2R																NBM a/w OGD. Significant wt loss
Example	x	x	x	x	01-Apr	N2M			1R																		MUST=2. BMI 17. Eating ~50%. ? Wt loss
Example	x	x	x	x	02-Apr		Ref	N3M				3R															BMI 25. POI.
Example	x	x	x	x	02-Apr		N2M			2R																	MUST=2. >10% wt loss in 6/12.

The above spreadsheet pulls stats through onto the below spreadsheet for analysis of caseloads for job planning purposes.

	Number of pts					Priotity						Complexity								
Name	total no.	News	% new	reviews	% reviews	1	1%	2	2%	3	3%	L	%L	M	%M	H	%H	No of WD	Clinical days	AV no. on C Days
x	104	18	17	86	83	52	50.00	40	38.46	12	11.54	23	22	74	71	1	1	19	14.25	7
x	52	20	38	32	62	18	34.62	19	36.54	15	28.85	19	37	22	42	0	0	12	9.6	5
x	67	25	37	42	63	12	17.91	45	67.16	10	14.93	9	13	48	72	5	7	19	17.1	4
x	43	16	37	26	60	23	53.49	14	32.56	4	9.30	10	23	18	42	4	9	13	13	3
Totals	266	79		186		105		118		41		61		162		10				

	Contact type		Priority			Complexity				
Coding	N	R	1	2	3	L	M	H	No of WD	Clinical days
	New (initial ax)	review	High	med	Low	Low	Med	High	No of days worked	75% B7, 80% B6, 90% B5

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